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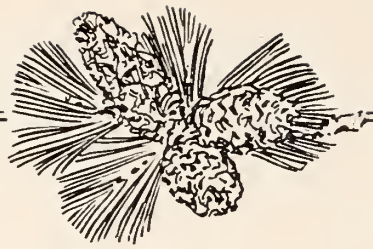

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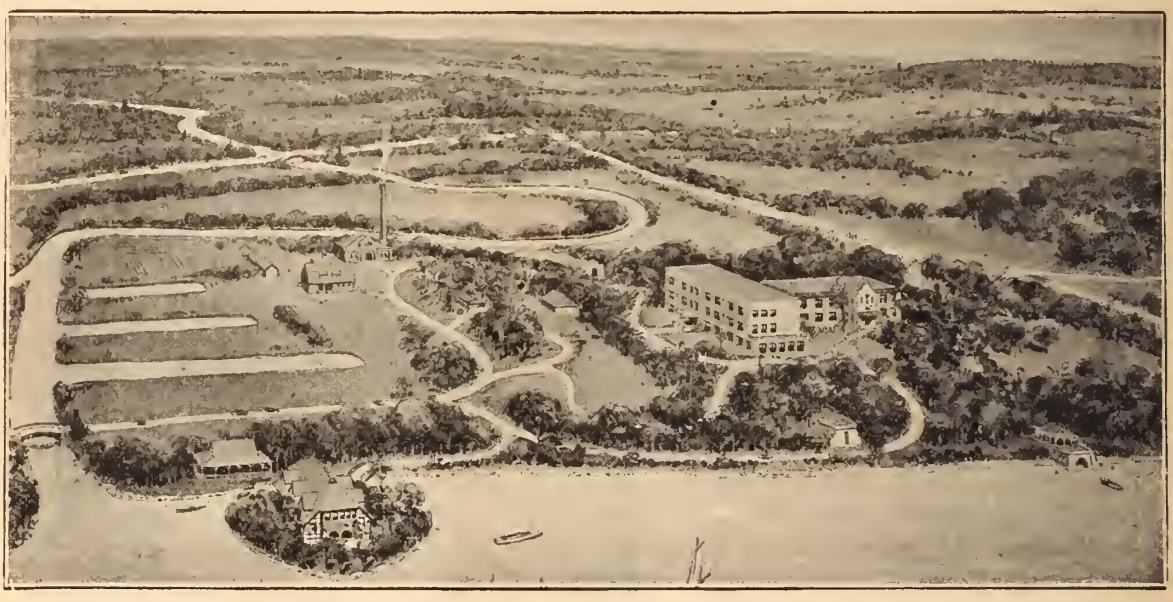

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Management of Disorders of the Menopause*

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Madsion

Modern medicine has no well defined program of therapy for the management of menopausal disorders. In spite of this age-old problem of the human race it appears to be considered one of the necessary evils which every woman must suffer. When complaints have been serious enough the patients have been treated as neurotic or have been given sedatives to help them endure the distracting phenomena. Within the last thirty years some clinicians have been convinced of success when using one or another preparation of animal ovarian material as replacement therapy. But even this was variable in its success, since different lots of the same preparation were obviously of differing potency. The unsatisfactory situation is reflected by very little teaching or text-book mention of the troublesome manifestations of the menopause, save for the outspoken involutional psychoses. Perhaps an additional reason for this neglect of a common clinical problem lies in the subjective nature of the disturbances, with the lack of demonstrable lesions for pathological study or of objective signs for measurement or demonstration. It must be recognized that the menopause has been responsible for symptoms which not infrequently have led to diagnoses of organic disease and to consequent improper treatment. For the accurate understanding of thyrotoxicosis, hypertensive disease, gall bladder and colon disturbances, as well as the neurasthenic states encountered in middle-aged women, the clinicians must recognize the numerous aspects in which the menopause may make itself felt. The diagnostic problems seem almost obvious when we consider the common menopausal symptoms.

The usual complaints of the woman in the climacteric include hot flashes, insomnia, paresthesias, emotional instability, and melancholy attitude, in addition to a changing rhythm and volume of the menses. Of course a careful pelvic examination is in order with every such patient, but the gynecological problems of this age need not be mentioned at this time. Out of these few general symptoms, a variety of clinical pictures may be constructed. The surprising fact is that some patients who are apparently suffering from thyroid disease[1] severe hypertension, or colitis are really demonstrating the variety of forms in which the climacteric may present itself. The key to this differentiation lies in the taking of the history. If one is thinking in terms of thyrotoxicosis, then a story of sensitiveness to heat, "nervousness", sweating, disturbed sleep, frequent weeping, and general malaise sound like good symptomatic evidence. The difficulty can be illustrated with a case history.

Mrs. A. G., aged 55, was referred for treatment because of suspected thyrotoxicosis. Goitre had been evident for 15 years; marked enlargement had occurred within the six months before she was seen. Symptoms included nervousness, tremor of the hands, sweating, loss of 25 pounds, poor appetite, weakness, and a warm feeling. She had dyspnea and palpitation on exertion. Edema had been noted for 10 years. The gastro-intestinal history was rather indefinite, but the dyspepsia suggested either a chronic gall bladder infection or a chronic colitis. Menstruation had stopped 5 years before, at the age of 50. Hot flashes were recognized, and anesthesias and paresthesias of the hands were experienced. The physical examination of this woman showed obesity in spite of the weight loss. There were no eye signs of a hyperactive thyroid. The goitre was nodular. Heart examination showed extrasystoles and a blood pressure of 140 systolic, 75 diastolic. The colon was tender. There was a tremor of the fingers. The feet were moist but cold. The basal metabolic rate was only 8 per cent above the normal. In spite of the very suggestive

* From the Department of Medicine and the Wisconsin General Hospital, University of Wisconsin, Madison. Read before the State Medical Society of Wisconsin, Milwaukee, September 16, 1932.

history and the opinion of the family physician this patient was not operated upon. She was relieved so largely by the use of ovarian follicle therapy that she refused surgical treatment. This relief included all the symptomatic evidence of thyrotoxicosis and of dyspepsia. The goitre was not a mechanical cause of dyspnea. Cosmetic and prophylactic considerations did not persuade this woman to allow a thyroidectomy.

It is not necessary to elaborate on the features of this case. Any clinician with experience will recognize the menopause when a patient in the fifth or sixth decade mentions failing menses, with hot flashes, paresthesias, insomnia, and emotional instability. But when the symptoms are suggestive of thyroid disease we are all too prone to decide at once that the thyroid gland is responsible for the entire picture. The presence of an adenoma, as in the case just described, may have nothing to do with the source of the patient's symptoms. If the possibility of a pseudo-thyrotoxic syndrome at the menopause is realized, needless and futile surgery may be avoided. The differentiation of true thyroid disease from such a temporary climacteric disturbance usually requires the basal metabolism test. But even here there is some difficulty, since a woman who is nervously unstable may show a slightly elevated rate at the first test. When the menopausal nature of a problem is suspected it is now simple to make a therapeutic trial of ovarian material, and to decide by the progress within a week whether the patient may be largely relieved by such medical means alone. The combination of the careful and unbiased history, the use of the basal metabolic rate, and the trial of substitution therapy for even a few days will make this differentiation sure enough for almost any case.

Table 1

Symptoms in 7 Cases Supposed to be Thyrotoxic Who Were Relieved by Treatment of Menopause

7 had goitre for years, recent increase in nervousness, increased heat sensitiveness.
6 had dyspnea, palpitation, and increased sweating.
5 had tremors, weight loss of 5 to 25 pounds. Menses irregular or absent for a few months.
4 had weakness and easy fatigue.

INVOLUTIONAL CHANGE

Another distressing aspect of the climacteric is the involutional change in the mental picture of some women. The outspoken cases come to the attention of the psychiatrist, and not a few are committed to institutions for care. But far more women are condemned to suffer milder forms of this trouble, and their families go through years of torture with them. There is still frequent failure by physicians to recognize the nature of these complaints. Citation of a case history will illustrate the problem, as well as the results of simple treatment.

Mrs. S. noted beginning irregularity of the menses at the age of 43. Her family became much concerned about her mental condition because of failing memory, continuous worrying, and despondency with suggestions of self-destruction. She was working as a telephone operator, and her changing mental attitude made it seem that she would have to stop the work which helped to support the family. Inquiry showed that she had noted vertigo, weakness, hot flashes, paresthesias, and was much troubled with insomnia which had not previously been a problem. The patient and the family were told that this was an involutional change due to the beginning menopause. She was given hypodermic medication with follicular hormone, and remained at work. In two months this was stopped. Relief which had come within the first week was satisfactory to patient and family. Menses became regular. The patient required no further help for a year. A second period of depression appeared, and was treated with similar material given by mouth. The patient was not seen and no psychotherapy was used. Ovarian material was sent through a member of the family, and the response was again prompt and complete, within a period of a few days. It is probable that further exacerbations will occur until the menstrual function is completely lost and the new and permanent stable condition established.

The variations in the mental disturbance characteristic of the climacteric are as numerous as those in the physical disturbances of the simple or the pseudo-thyrotoxic menopause patients. Common mental features are the morbid and ceaseless worrying, emotional instability usually manifested by weeping, despondency and fixed ideas of inadequacy for mental and physical tasks, and the thought of suicide. Self destruction seldom is spoken of directly, but hints about it are often dropped, and skillful questioning will frequently lead to a confession of the

Table 2

Features of the Involutional Syndrome

Continual worrying.
Emotional instability, especially weeping.
Ideas of inadequacy, physical and mental, self-depreciation, despondency about immediate or remote future.
Morbid introspection and self-accusation.
Contemplation of suicide.
May occur before, often during, and also after the physical menopause.

persistent idea of death or suicide. One of the amazing features of such a conversation with a woman who has suffered much of this in silence is the relief which is visible when she has talked about her thoughts and found that the physician understands the nature of her problem. The assurance of the dependence of this psychic change on the physical change which she recognizes is alone a sufficient help for many a woman to bear the burden safely. It is not to be understood that such psychotherapy stops these symptoms, but an intelligent woman can face her situation with more fortitude and avoid some of the morbid thinking when she realizes that the phenomena are temporary, and that they do not mean a permanent and a hopeless mental deterioration. It is too early to say that all involutional patients can be completely relieved. But experience with the milder types has shown such prompt and complete recovery of mental and emotional balance, that this use of substitution therapy with ovarian follicle hormone is most encouraging. Trials with a few cases committed to the State Hospital are under way at present.

Of course not every menopausal patient has all the above symptoms. The most frequent one is the hot flash, which may occur at intervals from a few minutes to several days. Occasionally women deny that they have these experiences but describe periodic chills. These may be similar phenomena with the emphasis placed on the cold feeling after the flush, when this is more uncomfortable. It is not uncommon to have visible flushing without any subjective realization of the process. Paresthesias of all sorts are reported in more than half of the women who are questioned. Insomnia is very frequent, but of course care must be taken not to confuse a preexistent insomnia with a recent wakefulness appearing during the menopause. Obesity is by no means a regular accompaniment of the menopause. Not more than half the women examined were obese, and some of these had been overweight long before the climacteric. Obesity beginning at this time has probably a real relation to some concurrent disturbance in the pituitary region, about which we cannot yet be too certain. The only satisfactory way to manage this obesity is by dietary control.

The cases in which there is a genuine difficulty of diagnosis between thyroid disease and menopausal disturbance are relatively uncommon. Nevertheless this problem needs to be kept in mind. The involutional type of mental depression is very common. At least half the women who have been studied have had some evidence of this sort of difficulty, although very few of them would ever have consulted a psychiatrist. The general practitioner of medicine will continue to see these women. When he understands the nature of the involutional mental process he will have the opportunity to relieve a great deal of the mental anguish incidental to this period of stress. A rational conversational approach is of paramount importance here. In addition there is much to be gained by ovarian therapy, and one can give assurance of marked benefit with adequate dosage after a matter of only a few days in milder cases. The vasomotor phenomena often vanish in two or three days following the use of any one of the active preparations[2].

PREPARATIONS AVAILABLE

There are several active ovarian hormone preparations available to the practitioner now. New materials will continue to appear for some time, as there are improvements in manufacture, and as other pharmaceutical houses enter the field. No final statement of preference should be made. At present there are only two American houses producing standardized ovarian hormone material, and there are two European standardized products imported into this country. With these materials avail-

Table 3

Standardized Ovarian Hormone Preparations

Amniotin. (Squibb) Hypodermically, 10 or 20 units per cc. Vaginal suppositories of 40 units, equal to about 15 units by hypodermic.

Theelin. (Parke Davis) Hypodermically, 50 units per cc. ampoule. Vaginal suppositories of 50 units, equal to 15 units by hypodermic.

Progynon. (Kahlbaum, imported by Schering) Tablets of 30 units, equal to about 6 units by hypodermic.

Menformon. Dutch preparation, units are not the same as for other preparations.

Theelol. (Parke Davis) Tablets for oral use, to be placed on the market soon. Dose ratio about 5 times hypodermic dose.

able it cannot be too strongly urged that all the unstandardized ovarian tablets and solutions should be abandoned. Although they may have some potency, they are not dependable, and may be not only misleading but a useless expense to the patient. Unless the physician is able to test the potency of the products, he must be conservative in accepting the recommendations of the producers of the many ovarian preparations which are already appearing.

There is widespread agreement that genuine potency exists in amniotin, produced by the Squibb laboratory, and in theelin, from Parke, Davis and Co. The German progynon, manufactured by Kahlbaum and imported by the Schering Corporation is likewise potent. The Dutch menformon is undoubtedly active, but unfortunately is standardized in mouse units, which is confusing for comparison with the rat units used in America and in most other countries. Menformon has no advantages over the American preparations, amniotin and theelin. The only advantage of the German progynon is that it may be obtained in tablet form, at a reasonable price for an effective dose. This handicap will soon be overcome since both the American manufacturers will soon be prepared to release for general sale materials for oral therapy. Extensive experimental trials of theelol, in 0.2 mg. tablets for oral use, have convinced us of the efficacy and reliability of this form of therapy. Such tablets are approximately equivalent to 20 units of theelin or amniotin given hypodermically.

The advantages of amniotin (the first American preparation) include the fact that it is dispensed in rubber capped vials of 50 or 100 units. This makes practicable the use of various doses at the discretion of the physician. Theelin is dispensed in all-glass ampules, and it is therefore difficult to use doses less than the 50 units in an ampule without waste or danger from infecting the unused portion in the opened glass container. The use of doses larger than 25 units at one time, or than 50 units in one day has never been found necessary for the control of the menopausal symptoms. For small doses amniotin is therefore preferred. Unfortunately the price of amniotin is so much higher that for doses over 15 units it is cheaper to waste some of the theelin because of the price difference.*

The vaginal suppositories of amniotin and of theelin are effective in many cases, but the number of units required is about three times that found effective by hypodermic injection. The prices of these suppositories are such that it costs no more to use amniotin one way than the other, but theelin suppositories are three times as expensive as the same effective dose by injection. The suppositories are of transitory interest only, for oral therapy will undoubtedly replace their use entirely. Hypodermic medication may have a field in some cases, although it is difficult to say just which these will prove to be.

Progynon tablets are standardized by hypodermic methods, and the 30 units mentioned on the labels correspond to about one-fifth as much when the tablet is taken by mouth. There is little doubt that these tablets are clinically useful. Occasionally they have been reported to cause slight nausea. For that reason we have not pushed the dosage above three tablets daily. This would correspond to only moderate doses of the hypodermic materials, but it is adequate for the maintenance of many patients. The cost is almost the same as for the comparable doze of theelin. For mild menopausal symptoms this is certainly the method of choice at present.

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* Recent increase in concentration and reduction in price make amniotin the least expensive form of therapy available (December, 1932).

Tablets of theelol are now in clinical trial, by the courtesy of the Parke, Davis and Co. laboratories. These, given in 0.2 mg. doses are about the equivalent of 20 units hypodermically, and hence make adequate treatment for severe cases possible. They have not caused nausea. Prices have not been quoted and the date for release on the market is not yet announced. This form of therapy is the most immediately promising for general use. Theelol will soon be released in 0.1 mg. or 50 cnit capsules.**

DOSAGE

A final word of caution should be given as to the size of doses. The use of any of these materials less frequently than once daily has seldom been satisfactory. Doses greater than 25 units have caused unpleasant transitory symptoms. Continuous overdosage may cause return of the menstrual flow or a menorrhagia. The follicular hormone is the material which causes endometrial hyperplasia. It is therefore to be used with caution in all cases excepting the menopause. It may be used with confidence for the relief of symptoms of the menopause, spontaneous or artificial. The doses necessary after castration by surgery or by radiation seem to be higher than in spontaneous menopause cases. But a fair average dose of any of the preparations mentioned is 20 units, given once or twice daily. From this level increases or decreases may be made at intervals of a few days until the minimum maintenance dose is found. The goal may be stated as freedom from all but very occasional hot flashes, absence of paresthesias, and a return to the usual ability to sleep and to the previous state of mental and emotional composure. It is fair to give a woman suffering with these manifestations of the menopause the assurance that she may have practically complete relief if this is worth the cost to her, which at this writing amounts to from 10 to 60 cents daily. The rapidly increasing use of the hormone preparations will probably reduce this cost very soon.

** Theelol in capsules and amniotin in oil solution for oral therapy have been placed on the market and are now known to be dependable. These are the most convenient forms of follicular harmone therapy at present.

SUMMARY

An effective therapeutic program for relief of distressing manifestations of the menopause is emerging from the current successes in the manufacture of ovarian hormone preparations of reliable and standardized potency.

The types of clinical picture for which the climacteric may be responsible fall into three main classifications: (1) the "simple" menopausal cases; (2) the pseudo-thyrotoxic, and those simulating other forms of organic disease; and (3) the involutional mental. In the second of these groups, a clinical trial of one of the ovarian preparations may determine the differential diagnosis.

The types of results which can be hoped for from the newer ovarian therapy are discussed and illustrated from case material.

The various forms in which the reliable ovarian preparations are available are detailed and compared in regard to administration, dosages and costs.

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MEDICAL RESERVE SCHOOL

From February 12 to 25, 1933, there will be a training period for Medical Department Reserve Officers of the Army and Navy, made possible at the University of Washington Medical School, St. Louis, Missouri, by the courtesy and enthusiasm of the faculty of this school in cooperation with the Medical Departments of the Army and Navy.

The program of the clinics will be under the direct supervision of the faculty of the Washington University. The military instruction, which for the first time includes instruction with reference to the medical service of the Navy, will be under the direct supervision of Colonel George A. Skinner, Medical Corps, United States Army, Corps Area Surgeon, assisted by Lieutenant Commander Reuben H. Hunt, Medical Corps, United States Navy.

Applications for attendance should be forwarded to the Surgeon, Seventh Corps Area, Omaha, Nebraska.

Tribromethanol (Avertin) as An Anaesthetic in Eye Surgery*

By FREDERICK A. DAVIS, M. D.
Madison

A general anaesthetic for eye surgery is rarely used for various reasons. First, many eye operations are satisfactorily performed by the instillation of local anaesthetics such as cocaine, or, more recently, the injection of weak solutions of cocaine or novocaine into the conjunctiva, the muscles, or the lids. Second, the use of ether, chloroform, nitrous oxide, or ethylene by inhalation usually causes congestion of the tissues about the eye, coughing or straining, and nausea and vomiting. In some eye operations this may produce no damage to the operated eye, but in intra-ocular operations a general anaesthetic is at times followed by hemorrhage, breaking open of the wound, and subsequent loss of the eye. General anaesthetics are, therefore, rarely if ever used. The hazards attending the use of a local anaesthetic in a highly nervous or uncontrollable patient are well known to the ophthalmologist. The dread of operation is almost universal and, therefore, any agent that can safely remove this and also largely eliminate the usual hazards of general anaesthetics must prove welcome to those engaged in eye surgery.

The dangers of post-operative bronchopneumonia are always serious after ether, particularly in the aged, and this also is a serious contra-indication to the use of general anaesthetics in many of our patients. During the past two years we have used avertin (tribromethanol) in the Department of Ophthalmology of the University of Wisconsin General Hospital where a general anaesthetic was definitely indicated. More recently, since our experience with the drug has increased, we have been using it routinely whenever there was doubt that we would receive perfect co-operation from the patient.

The use of avertin as an anaesthetic agent is increasing in popularity both in this country and abroad. Numerous articles regarding its use have appeared, especially from leading anaesthetists. Waters and Muehlberger (1) have published one of the most comprehensive articles that has appeared in this country. Recently Dandy (2) published a brief paper in the A. M. A. Journal in which he highly praises its use in brain surgery and states he "has found no conditions that contra-indicate avertin when a general anaesthetic of fairly long duration is needed." Most authors report favorably concerning it, and when properly administered it appears to be a safe anaesthetic. Very few articles have appeared concerning its use in eye surgery. Dr. Wilmer (3) presented the first paper concerning its use in ophthalmology in this country in June, 1930, at the meeting of the American Ophthalmological Society, in the discussion of which I gave a preliminary report of my experience with the drug. At the last meeting of the American Ophthalmological Society (June, 1931) I (4) presented a paper concerning our experience with the drug at the University of Wisconsin Eye Clinic based upon the use of the anaesthetic in something over 100 eye operations. Ninety case records were thoroughly reviewed and the findings tabulated. The ages of patients operated varied from six months to eighty-seven years. Those interested may refer to this communication for details concerning this series. Morgan and Lees (5) of Guys Hospital, London, recently reported favorably on the use of the drug in fifty eye operations. Since my last communication we have performed an additional thirty-five eye operations under avertin anaesthesia.

OPERATION UNDER AVERTIN

Operations upon the eye under any form of general anaesthesia present various problems which need not be enumerated here. Under avertin anaesthesia the eye is usually quiet and perfectly motionless. The tissues, particularly the conjunctiva, are paler than normal, and when anaesthesia is pro-

* Presented before 90th Anniversary Meeting, State Medical Society of Wisconsin. Revised to publication date.

found, bleeding is much reduced if not entirely absent. At times the eye is rotated slightly upward though often its position is perfect, looking directly forward. The pupil is slightly contracted but reacts to light. There is a very noticeable reduction in the tone of the extraocular muscles, which is a part of the general relaxation in the muscular tone, so that fixation of the eye may be more difficult. It wobbles at times and double fixation may be necessary when making a cataract section. This is accomplished by an extra fixation below, which is held by the assistant, or a suture may be used in the superior rectus to depress the globe slightly. Double fixation presents the disadvantage of two contacts with the globe, one of which the operator cannot control. Ewing's double fixation forceps may be used. After brief practice one grows accustomed to changes in technique necessitated by general anaesthesia.

Intraocular tension is frequently much reduced. I first pointed out this observation in 1930 and have since confirmed the findings on numerous occasions. The tension was taken in forty-seven of our first series and in thirty-eight of these was found to have dropped from 2 to 60 mm., the average fall being 13 mm. There was no change in tension in five cases. A rise in tension in four cases was recorded, the elevation being from 2 to 13 mm. Those cases showing a rise in tension usually had some respiratory embarrassment and this usually produced a rise in blood pressure as well. The fall in intraocular tension occurred in eyes with normal tension as well as those in which the pressure was high. After making this observation we have tried the use of avertin in cases with high intraocular tension and have been able to reduce the tension from 60 mm. to 0. One striking case may be cited: J. K., a young adult, thirty-three years of age, had a bilateral congenital partial subluxation of both lenses. He had suffered a sudden further luxation of the lens into the anterior chamber of one eye. The globe was very hard, tension 60, and the eye was much inflamed and tender. Under avertin, with preliminary morphine and scopolamine, the tension fell from 60 to 0; the tension of the fellow eye from 20 to 0. The usual section with Graefe knife was difficult due to the lowered tension. The lens was removed with a loupe with very little loss of vitreous. I believe this eye would have been lost under cocaine anaesthesia alone, and very likely under ether, as well. The anaesthetic proved efficacious in six other cases of glaucoma with moderate and high tension.

After I noted the lowering of the intraocular pressure in a number of cases, Dr. Seevers, of the Department of Pharmacology, undertook a series of experiments on rabbits and dogs, with a view to determining the change in intraocular and intracranial pressure after the administration of tribromethanol. A brief summary of these findings was given recently before the April meeting of the American Pharmacological Society in Montreal by Dr. Seevers. (6) In a small series of experiments he found that a "3 per cent aqueous solution of tribromethanol in anaesthetic doses (0.35 gm. per kg.) intraperitoneally in the rabbit, produces a marked decrease in intraocular tension as measured either by direct canulization or tonometer. Morphine, scopolamine, paraldehyde, urethane, and amytal in comparable doses, produced no significant drop. Venous pressure in the iliac and subclavian veins by direct method, intraocular and intracranial pressures by direct method, are markedly diminished in the dog, following an anaesthetic dose (0.15 gm. per kg.) intraperitoneally. Arterial pressure showed a less marked drop but pulse pressure was considerably diminished."

The lowering of intraocular pressure produced by avertin is probably dependent upon several factors. The most important, according to Seevers, is the lowering of systemic venous pressure as a result of peripheral dilatation of the blood vessels of the muscular and splanchnic areas, coupled with the very pronounced diminution of respiratory excursions. That the leveling out or diminution of respiratory excursions plays an important part through lowering of venous pressure is suggested by the work of Meyer and Middleton (7). They showed that increased muscular effort and altered

respiratory function in the induction of ordinary inhalation anaesthesia, such as nitrous oxide, ethylene, and ether, markedly increased venous pressure. The reverse conditions, viz., lessened muscular and depressed respiratory effort prevails on inductions with avertin, thus lowering venous pressure. The work of Smith and Forbes (8) concerning intraocular pressure also strongly suggests that the lowered venous pressure produced by avertin reduces intraocular pressure. They also state that "Thomas Henderson and Leonard Hill recorded intraocular and intracranial pressures simultaneously in seven experiments and that under all experimental conditions the pressures were identical and varied directly with the systemic venous pressure." We recorded venous pressure in three cases and in each instance it was lowered. The marked lowering of the tone of the recti muscles may also contribute to the reduction of intraocular pressure and is suggested by the experiments of Duke–Elder (9) with other drugs.

The intraocular pressure seemed to vary greatly with the depth of the anaesthesia, and often with the fall of blood pressure. When the patient was profoundly narcotized and the blood pressure low, intraocular pressure was also low. If breathing was in any way obstructed due to falling back of the jaw, or if an air-way had not been introduced, the resulting anoxemia and respiratory embarrassment always caused a rise in blood pressure, and the intraocular pressure usually rose as well.

The lowered intraocular pressure after the globe is opened at first proved disconcerting. The globe at times becomes cadaver-like, it is so soft, with the cornea wrinkling or sinking inward after a cataract or keratome section. Slight pressure with a strabismus hook will usually aid in restoring sufficient tension to assist in extraction. The lens and vitreous body often appear to sink backward. This does not occur in all cases, however. It occurred in young adults as well as in the aged, though less frequently in the former. Delivery of the lens was always accomplished in the usual manner in uncomplicated cataracts. We have performed thirty-five cataract extractions under avertin anaesthesia.

The anaesthetic appears especially indicated in complicated cataract since loss of vitreous can be minimized. It proved excellent for acute or chronic glaucoma with high tension, enucleations, lid operations, extirpation of lacrymal sac, etc. Supplementary injections of adrenalin, however, are sometimes needed where the skin is incised. It is also satisfactory for squint operations in young subjects where local anaesthesia with cocaine cannot be used. The lowered muscle tone affords easy access to a large section of muscle where resections are being performed.

One of the greatest advantages of avertin anaesthesia is the elimination of the element of haste, particularly in cataract work. The young, inexperienced operators, especially the house surgeons and the younger assistants, approach an operation with less fear and trembling when avertin is employed. Ample time is provided for planning and execution of the operation. It is also a great comfort to know that there will be no squeezing or movement of the eye.

ADMINISTRATION

The drug is usually administered by rectum in a sterile water or normal salt solution at body temperature, the dose being 0.1 gm. per kgm. of body weight (or 1½ cc. of a 3 per cent solution per pound of body weight) as recommended by the manufacturers. It is introduced with a large glass syringe fairly quickly through a fine French catheter. In a few instances intravenous injections were used, the doses being 1 3 the rectal dose, but this method is satisfactory only for a very brief operation lasting no longer than five to ten minutes.

The anaesthesia, and the pre- and post-operative care in all of our patients were supervised by Dr. Waters and his staff, to whom I am indebted for co-operation and advice.

Most of the patients received a preliminary sedative of morphine, gr. 1/6, and scopolamine, gr. 1/150, usually one and three-fourths hours pre-operative. About

one-fourth of our cases received no preliminary sedatives. Children received small doses of morphine and infants were usually given no sedative. The preliminary sedative is important, especially in very strong, vigorous subjects, such as laborers with alcoholic tendencies, since avertin is not a profound anaesthetic when used alone. Many anaesthetists regard it as a basal anaesthetic, supplementing it with nitrous oxide or other inhalation anaesthesia. For eye work, when supplemented by local instillation of a few drops of cocaine, 4%, it has proven adequate without supplementary general anaesthesia in more than 70 per cent of our cases. Nitrous oxide was required in some of our cases, especially for children who are less susceptible to avertin anaesthesia and so should receive somewhat larger doses.

A simple cleansing enema is given about three hours pre-operative. The injection of avertin into the rectum may be carried out in the patient's room, if desired, when the patient is unaware the anaesthetic is being administered. Within five to fifteen minutes the patient falls into a deep, natural-like sleep, and usually is ready for operation within twenty minutes. There is no struggling, coughing, gagging, or any unpleasant sensation whatever. Usually the patient remains perfectly quiet and motionless throughout the operation. Our operations have varied from one minute to one hour and ten minutes, the average being twenty-nine minutes. The patient breathes very quietly, so much so that respirations are at times scarcely perceptible. The respiratory rate varies but little from normal, the average increase being only three per minute. Depression of respiration is perhaps the greatest hazard connected with the anaesthetic, but the maintaining of a free air-way usually accomplished by a metal air-way, and the free use of oxygen throughout and after the operation, largely eliminates this danger, as pointed out and stressed by Dr. Waters. (1) This minimizes the danger of respiratory failure which has been recorded by various authors.

The blood pressure usually falls shortly after the administration and at times this has been as much as 84 mm. of mercury. This fall, however, does not appear to affect the patient unfavorably. The average fall in our series was 17 mm. systolic. The color remains good, breathing continues regular and free, and at no time have we required any stimulation with epinephrine or ephedrine, which has been used by others. The blood pressure usually rises within a short time, approaching normal or remaining only moderately lower throughout the duration of the anaesthesia, though it may remain low for some hours after operation.

Venous pressure was recorded in a few cases by the indirect method and showed a slight drop (2.8 points). The period of surgical narcosis is difficult to estimate accurately since the average duration of our operations was short (about thirty minutes). Using the first voluntary movement recorded by the attending nurse, the average period was four hours. The period of secondary sleep, however, varied from four to twenty hours. The majority of the patients slept well all night and had to be aroused the next morning (our patients were operated in the early afternoon), but some were restless. This long period of sleep proved most advantageous, especially in cataract extractions, since the dreaded and restless first night after operation is often spent in quiet sleep. On the other hand this long period of narcosis and secondary sleep requires greater supervision and care by a trained nurse or attendant.

The intravenous method varies considerably from the rectal method. The patient quickly falls into a deep sleep, often within one or two minutes, and remains so about fifteen to twenty minutes. They awaken or come out from the influence of the anaesthetic almost as quickly as they go under, though they may afterward doze and feel sleepy for several hours. The very rapid induction and transitory action of the drug by this method makes it adaptable for only the briefest procedures.

Seventy-five per cent of our cases had a very quiet awakening and 25 per cent were classed as restless, many of the latter being among our earlier cases. Upon being awakened many of the patients demanded food. Very few were nauseated or vomited and

most of those were in young children who had received rather large doses of morphine before operation. Only six adults out of the ninety cases vomited and all of these had received sodium amytal by mouth before operation, and one an early morphine injection, post-operative, which may have contributed to the vomiting. The vomiting recorded usually occurred on an average of nine hours post-operative. Many of these attacks were very slight, the patient spitting up only a small amount. It is my impression that avertin, if used alone, rarely produces vomiting and it occurs infrequently even if morphine has been used as a preliminary sedative. It appears that the prolonged sleep following avertin administration carries the patient past the period of nausea which so frequently follows morphine administration, or it may in some way counteract this action. This is important in cataract cases for whom we usually consider morphine positively contra-indicated.

From the patient's point of view nothing could be more ideal than the use of avertin anaesthesia. The induction is perfect—there is complete amnesia of the entire procedure, and they have been most enthusiastic in their praise of it.

We have noted no untoward effects, such ar irritation or hemorrhage from the bowel, rectal casts, or kidney disturbance, with but one exception—a recent case—a man seventy-four years of age had haematuria for a few days. He had shown shreds and a trace of albumin, however, before operation. In two of our early cases some respiratory embarrassment occurred in the ward, due to improper handling of the air-way. Headache and abdominal disturbance occur at times. There were no deaths.

The drug is not fool-proof by any means, as deaths have been recorded. With care, however, in preparation, careful administration, and post-operative supervision it appears that it is equally as safe as other general anaesthetics. Much of the mortality has been due to over-dosage, overheating of the drug in preparation, and improper post-operative care. In very weak and emaciated subjects the dose should be reduced accordingly.

Naturally only an experienced anaesthetist should administer the drug, but from my limited observation I can see no reason for any capable anaesthetist failing to quickly acquire the technic and experience.

Modern anaesthetists lay great stress on improvement of methods of induction, the allaying of fear, avoidance of struggle, coughing, gagging, vomiting, the excitement stage of ether, and other anaesthetics. Tribromethanol with one stroke banishes all of these. To put it briefly, induction is practically perfect. The method of administration, viz., the fine French cathether inserted into the rectum, a small amount of warm fluid, less irritating than water, followed by drowsiness and deep sleep within five or ten minutes appears nearer to an ideal than has yet been approached by any other general anaesthetic.

Tribromethanol eliminates many of the disagreeable features and dangers attendant upon intraocular surgery. Those in charge of the large, free clinics who must seek the co-operation, in a most hazardous and delicate procedure, of an ignorant foreign element, usually blind, often deaf, frequently stupid or stubborn, require no vivid picture to appreciate the potential value of avertin as an anaesthetic in eye surgery. Nor does the surgeon who must operate upon the timid, frail, nervous, anxious individual who is overly eager to co-operate but utterly incapable of doing so, for tribromethanol speedily anaesthetizes both types, and there are neither questions asked nor directions given. This picture may be overdrawn, but I believe ophthalmologists will welcome avertin as a valuable adjunct in certain types of cases, after giving it a fair trial.

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Roentgenological Findings in Non-Tuberculous Lesions of the Hip*

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There are three diseases of the hip occurring between the ages of three and sixteen not due to tuberculosis, but which have symptoms and physical signs very similar to those of tuberculosis of the hip.

These diseases are osteochondritis deformans juvenilis, or Legg–Calve–Perthes disease, acute transient epiphysitis, and separation of the upper femoral epiphysis.

They are all first detected by a limp, pain in the hip or knee, and with efforts of the patient to protect the joint. They are usually found in healthy appearing, active and robust children.

Perthes' disease usually occurs between the ages of three and twelve. The first symptom is a limp which may or may not be accompanied by pain. Pain, if present, is in the knee, hip, or both. History of trauma may be elicited but is not always definite. Early roentgen and physical examination will probably be negative, but after a few weeks there will be gluteal atrophy with perhaps some muscle spasm, pain and tenderness and the roentgenogram will then show rarified areas in the epiphyseal head. Later the head becomes flattened, the femoral neck thickened and shortened and the normal oblique angle of the neck with the shaft becomes more nearly a right angle.

The cause is not definitely determined although a vast amount of investigation has been done in very recent years.

Similar conditions have been found in other epiphyses, most common of which are Schlatter–Osgood's disease of upper tibial epiphysis, Köhler's tarsal scaphoiditis, Kienböch's disease of the carpal lunate, Scheuermann's disease of the dorsal spine, infraction of head of the 2nd metatarsal, and in fact osteochondritis is a disease common to all epiphyses and has been found in practically every epiphysis in the human skeleton.

Each center of ossification appears at a definite age, has a definite time at which it becomes united and has a definite time in which its activity of development is greatest. The time of the appearance, greatest activity and union is different for each center of ossification but is practically the same in like centers in all individuals.

Osteochondritis involves the epiphyses at the time of their greatest developmental activity and therefore we find it occurring in different locations at definite age periods.

Among the probable causes of osteochondritis are congenital or acquired disturbances of development, infection and trauma.

Koehler reports results of histological examination of tissue in Perthes' disease by W. Wurzburg which indicated that the condition is an inflammatory one, polynuclear leukocytes, eosinophiles, plasma cells and round cells having been found by him.

Phemister has studied the condition from a bacteriological point of view. Cultures were taken from two cases each of Perthes' disease, Köhler's tarsal scaphoiditis and Kienböch's disease of the carpal lunate. Streptococci grew on cultures of one Perthes', one scaphoiditis and two Kienböch's. The others were negative.

Osteochondritis is a self limiting disease

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and heals when ossification is complete, but in order to prevent deformity, secure comfort, and promote rapid recovery, the parts should be given physiological rest. In the hip, rest with moderate abduction for four to six weeks usually suffices.

Acute transient epiphysitis of the upper femoral epiphysis occurs in children under ten years of age. It usually appears in active, robust children and there is little or no prodromal stage. The symptoms localize rather promptly to the hip, there is muscle spasm, and the child attempts to guard the joint. There may be fullness about the joint, depending upon the amount of exudate. Some complain but slightly of pain and limp but little, others are quite sick and unable to stand on the affected leg.

The roentgen examination in early cases may not show any bone changes, but in a short time there will be found areas of bone destruction near the epiphyseal line usually on the diaphyseal side but it may be located on the epiphyseal side.

The cause of this condition appears to be infection plus trauma but there is usually no definite severe injury.

Treatment is rest in bed with traction on the affected side, removal of foci of infection and the treatment is continued for several weeks to several months or until all joint symptoms disappear.

Miller in a recent article reported his observation of 77 cases of acute transient epiphysitis occurring over a period of eight years at the North Carolina Orthopedic Hospital. The age limit of admission to this hospital is fourteen years. These 77 cases comprise 28% of all hip joint diseases admitted during that time.

Unlike Perthes' disease this condition does not as a rule cause deformity or limitation of joint motion.

Fracture of the neck of the femur in early adolescence is infrequent, epiphyseal fracture-dislocation of the upper end of the femur occurs only when there has been a severe injury.

Epiphyseal separation of the upper femoral epiphysis, however, occurs quite frequently and with a vague history of slight or moderate trauma only. This condition occurs at the age of adolescence in robust boys and girls. In fact those affected are apt to be overweight.

These patients come to us on account of a limp and pain in the knee or hip. There is limitation of motion especially in abduction and the foot is everted. The roentgenogram will show a partial separation of the epiphysis, the degree of separation depending on the length of time the condition has existed.

The immediate cause is trauma, but the history does not reveal any more trauma than most young adults experience frequently, therefore further explanation seems necessary. If this condition were due to trauma alone, certainly many more children would be afflicted.

One explanation is that the periosteum of the neck of the femur is thick during childhood and atrophies during puberty, leaving a weakened place at the epiphyseal line, which when subjected to moderate trauma and over extension produces a partial separation.

If seen early, manipulation with the leg fixed in abduction and the foot inverted will give good results. If the condition has existed for some time, manipulation will not restore proper relations and operation should be done, replacing the parts and maintaining fixation until healed.

It is not my purpose in this paper to go into detail as to the etiology of these conditions but rather to direct your attention to the fact that there are many patients having hip joint diseases not due to tuberculosis, arthritis or septic joint. Osteochondritis, acute transient epiphysitis and epiphyseal separation are not dangerous to life, none of them suppurate, and they are not due to syphilis.

Early recognition by careful physical and roentgen examination is desirable, for by early treatment much of the shortening and limitation of motion which results in untreated cases can be avoided.

CONCLUSIONS

(1) About 50% of all hip diseases occurring up to 16 years of age are due to diseases other than tuberculosis.

(2) In all patients with symptoms referable to the hip, or who give a history of injury, however slight, roentgen examination should be made early and checked with subsequent x-ray examination at intervals because the final diagnosis and consequent method and length of treatment depends upon the findings of the x-ray examinations.

Psychology in the Practice of Medicine*

By G. R. DUER, M. D.
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There are many practical problems in the practice of medicine demanding our attention. Among them are problems of preventive medicine, of hospital management, of the determination of disability in industrial cases, of group practice, of over specialization and under-specialization, of medical economics, of providing adequate medical care for all classes without pauperizing any of them, of insuring the poor and middle classes against the greatest calamity that can occur in a family, that of serious illness, just as our homes are now insured against fire, and many others. In this paper, however, we shall confine our study to the practical application of simple principles of psychology to the everyday practice of medicine, either as general practitioner or as a specialist.

Professor Ladd's definition of psychology is "the description and explanation of states of consciousness as such". The human body is a wonderful machine, very complex in its make-up and in its working. This is especially true of the central nervous system. These machines are all similar, but no two exactly alike. Physicians spend a great deal of time studying their anatomy and physiology, and a minimum of time studying psychological states. They should have equal consideration.

The infant enters the world with certain instincts and this elaborate machine. Its central nervous system mechanism is affected by in-coming nerve currents from outside stimuli through the sense organs. This is the beginning of all our states of consciousness. These sensations produce permanent impressions on the brain, and result in out-going stimuli producing bodily reactions. The working of the central nervous system becomes extremely complex with the increase in sensations recorded and the formation of pathways through the nerve centers, and the stream of consciousness results. Simple ideas of sensation through association lead to the higher states of mind. Consciousness is always changing. Habits are formed through repeated in-coming currents forming a new pathway of discharge. In this way we are able to perform certain acts without conscious attention. We are doing this every moment of the day. We are in fact, in the main, great bundles of habits. These are formed in early life, very few after thirty years of age. It has been aptly said "You can't teach an old dog any new tricks." In these early years we should, to use the words of Professor James, "make our nervous system our ally instead of our enemy, make automatic and habitual, as early as possible, as many useful actions as we can."

There are mechanical conditions upon which thought depends, and which govern association of ideas. When two elementary brain processes have been active together, one of them, on recurring, tends to bring up the other. Frequency, recency, vividness, and emotional congruity are the factors which determine what ideas will be associated. Memory is a matter of habit and association, and can be easily developed by proper training.

Many physicians who treat physical illnesses well fall down entirely when patients present symptoms due to psychic causes, and a majority of patients in general practice have at least part of their symptoms due to such causes. It is a mistake to disregard such a patient and dismiss him with the statement "There is nothing the matter

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with you. You are just nervous." If he is not treated fairly by the medical profession, he invariably goes to the quacks where he is given bountiful consideration, and then we have something else to complain about. If an individual physician does not care to treat this type of case, he should, in fairness to the patient and to the profession to which he belongs, refer the case to someone who does this work well. We must recognize that these cases are ill, that they deserve our attention just as much as a case of organic disease, and that we can do a great deal to put them back into good health, if we try. A functional disturbance of the working of the cerebrospinal system is just as real as inflammation of the gall bladder. They are comparable to an improperly adjusted carbureter and broken spring in the carbureter. Either one gives trouble. Most of the ordinary, unhealthy psychological states are best handled by the family physician, who usually has already information about the patient that will be helpful in treatment. Cases of marked psychasthenia and insanity are of course best treated by a psychiatrist. Every internist should be a specialist in the treatment of this type of cases, since he sees them every day.

A word of caution may not be amiss here regarding the diagnosis of nervousness and neurasthenia. Such patients should always have a complete physical examination. A search for focal infection is particularly indicated. Many a nervous patient has been cured by the elimination of some obscure focus of infection.

TYPES OF PATIENTS

Psychologically considered there are three types of patients, the phlegmatic on the one extreme, the neurasthenic on the other, with the normal occupying the middle ground. These differences are in temperament which the patient inherits. The phlegmatic type minimizes, while the neurasthenic type exaggerates any symptoms they may have. The exaggeration of ordinary or pain sensations or the misinterpretation of sensations is very real to the patient. The following case will illustrate: Miss A, stenographer, 25 years of age, complained of a dull aching in the left chest of a month's duration. She also felt a tightness in her throat, and felt afraid at times although she had no idea what she was afraid of. Study of the case revealed the fact that she had had a quarrel with her sweetheart just before the onset of this illness. She was soon relieved of her symptoms when the quarrel was made up. Conditions that would have no effect upon the phlegmatic may produce in the neurasthenic symptoms severe enough to put them to bed. These facts must be considered and evaluated in the treatment of such cases.

An emotion is a tendency to feel characteristically under certain conditions of environment. Anger, fear, love, hate, joy, grief, shame, pride, are examples. What really happens is this: Given a certain situation in our environment, as for example the sight of a bear in the woods, the preception of this situation through our sense organs produces certain bodily changes, and our feeling of these changes is the emotion, in this case fear. Here these bodily changes would include widely opened eyes, thumping heart, pale and cold skin from vasomotor constriction of small arteries of the skin, hair stands erect, muscles quiver, epigastric sensations, sometimes nausea.

Many patients are sick because of fear and worry which are closely associated. As a rule they have no idea as to the cause of their illness. The symptoms are frequently epigastric or abdominal, sometimes referred to the chest or other locations. It may be difficult for the physician to locate the source of the trouble. His examinations may cause the patient to fear serious organic lesions, and thus produce a vicious circle making him worse and worse. I recall a case in point complaining of abdominal pain. After careful examination I was unable to find any cause for such pain. A few days later the patient's mother came to the office and incidentally mentioned the fact that her son was having family trouble, and that his wife was applying for a divorce. There was the diagnosis.

The emotions, especially that of fear, should be thoroughly understood by every physician. Few of us realize what is going

on in the mind of the patient when he enters the office. If we knew it would help us immensely in the diagnosis and treatment of the case. We can, however, if we are careful students of psychology, make a pretty close estimate of the fear present, and conduct our examination in such a way as to dispel such fear. This is especially true in the case of children or surgical patients. With children it is best to listen to the history of the case as told by the parents and observe the child at a distance without its being apparent that you are paying any attention to him. The situation is new to the child and it is very important that you do not frighten him at the onset. You can later gain his confidence and interest by showing him something that children like, and often get him to talk to you about his playthings or pets. The examination is then done without fear or disturbance of any kind. A layman once volunteered the information to me that he would never go to Dr. X, a very capable man, because he "scared his patients to death." Surgeons particularly must remember that what seems to them a trivial and simple operation may appear quite different to the patient.

PROFESSIONAL ATTITUDE

Our professional attitude should be such that it makes a good impression on the patient and wins his confidence. It takes years of experience to develop the proper technique. Every physician should have this point in mind as he goes about his work, for you are greatly handicapped in the treatment of a case if you do not have the patient's confidence. Carefulness and thoroughness in examination is important in this connection. Many doctors talk too much. Think it over. A few do not talk enough. Patients have a right to know something about your findings in their case. Your answers should not be in technical terms such as you would use in speaking to another physician. This merely makes the patient think you are trying to show off, and lowers you in his estimation.

It is not uncommon for a patient to go from one doctor to another because he loses confidence in his physician. In chronic ailments this may not be the fault of the doctor, but in many cases it is. Whenever we lose a case in this way I think we should ask ourselves why. A careful analysis of the situation may prevent similar trouble in the future. Example: Young Dr. X, who was just out of school and had completed some intensive training in diagnosis, was called to see a patient acutely ill with nausea, vomiting, and headache. He took plenty of time for a careful examination. Then he went into the next room and announced to the family, "I don't know what is the matter with this fellow. Give him these tablets, and if he isn't better tomorrow let me know." Needless to say the family lost confidence in the doctor, and called someone else. Now young Dr. X made the mistake of failing to tell them some of the positive findings in his examination. What he meant to say was that he could not make a complete diagnosis at his first visit. One of the leading diagnosticians of America once made the statement to a group of doctors, "I seldom make a diagnosis the first time I see the patient." Dr. X used the wrong words, and created a very bad impression. The second doctor knew no more about the case, but held it, and the people were satisfied. The second mistake of Dr. X was in not returning to see the case, without waiting to be called.

In the treatment of conditions due to psychic causes, sedative medication is usually needed at least at first. This should be accompanied by advice as to periods of rest, relaxation and play, change of occupation and environment. We should help our patients to form right habits in health matters. By our conversation we should strive to remove worry, fear, and dread. For the dreamy apathetic patient we should urge action and accomplishment. For the overactive we should urge relaxation and dreaming. Cooperation between the doctor and the social service worker in a community can bring good results in many of these cases. Cheerfulness in the sick room, hospital and office is very necessary. Psychotherapy in the form of suggestion should of course be used. It is common knowledge that if a thing is told to us often enough and forcefully enough, we tend to believe it. A

discussion of the specific methods would furnish material for another paper.

Repeated orders to the patient concerning treatment are necessary in heart cases, tuberculosis, hypertension, and many chronic diseases. This is due to the fact that no one likes to be restrained, and restraint in such cases is necessary. Patience is required on the part of the doctor in going over these details of treatment every time he sees the patient. In most cases, however, he will finally succeed in getting his orders obeyed.

Advice to patients concerning habits, occupations, play periods, vacations, hobbies, mental plans and programs to prevent worry, and health education, is often worth more than a barrel of medicine. Have you been taking time to go over these things with your patients?

It is appalling to note the number of people who need medical attention and do not go to a doctor. This is often due to ignorance. Health education as now carried out by Hygeia, by health officers, by talks to lay audiences, by the radio, by the newspapers, etc., will be of great benefit in bringing the patient to the doctor when he needs treatment. But these health facts must be repeated many times. Otherwise they will be forgotten and have little effect. The American Legion has the idea when it places signs "PROTECT——CHILDREN" with the name of the city between the two words, at the outskirts of our cities. Every motorist reads it as he enters the city, and it has its good effect. Facts concerning tuberculosis have been presented to the public so often that now everybody is on the lookout for early cases, and knows the need for fresh air, rest, sunlight and good, nourishing food. Similar facts concerning other phases of health work should be repeatedly presented until all will have an opportunity to learn the danger signals of disease.

In closing I wish to call your attention to the fact that we are all striving to learn more and more about the science of medicine. In so doing may I urge you not to neglect the art of the practice of medicine, the art of handling patients through the use of simple principles of psychology?

Squamous Cell Carcinoma of the Gall Bladder*

By S. B. PESSIN, M. D., and
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Madison

Carcinoma of the gall bladder is by no means a rare disease; however, a squamous cell carcinoma of that organ belongs to the category of infrequent pathological conditions.

Our case is not only a typical example of gall bladder malignancy, but it is also an exemplary reproduction of a metaplastic process that occurs in certain neoplasms.

CASE REPORT

The patient, M. G., 71 years of age, complained of pain in the abdomen, particularly in the right upper quadrant, pain in the back, indigestion, nausea and a feeling of vomiting. She stated that recently she had been conscious of a mass in the right upper quadrant.

She has had attacks of indigestion for a number of years. Her present illness began about a month previous to hospital admission. At that time she began to complain of severe backaches and epigastric, dull, steady, aching type of pain resulting after intake of food. Progressive weakness developed and the patient began to lose weight. Gastric distress was accompanied by belching, nausea, a feeling of vomiting and regurgitation of bile stained mucus.

Except for attacks of indigestion, her past history and her family history were essentially negative.

The physical examination revealed a poorly nourished, senile, slightly jaundiced, white female. The lungs were emphysematous and a systolic murmur was heard in the mitral area. The liver was greatly enlarged and a firm, tender, palpable mass was located in the right hypochondrium. Deep palpation elicited generalized abdominal tenderness. The clinical diagnosis was carcinoma of the gall bladder or the head of the pancreas. An x-ray interpretation of deformity of the pyloric portion of the stomach due to an organic lesion was reported.

Jaundice gradually deepened and an exploratory laparotomy was performed on the fourth day after admission. A large mass that was adherent to the liver, the pyloric portion of the stomach, duodenum and the hepatic flexure of the colon, and which

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incorporated the gall bladder, was found. The liver surface showed protruding metastatic neoplastic nodules. The post-operative diagnosis was inoperable carcinoma of the gall bladder.

The patient's temperature began to rise on the second post-operative day and there were evidences of pulmonary involvement. The patient died on the fifth post-operative day.

Post Mortem Examination: The body was that of a rather emaciated, jaundiced, senile, white female. A mass could be palpated in the right abdominal quadrant. There was a comparatively recent healing clean surgical wound.

The abdominal cavity contained approximately 500 c.c. of greenish, yellowish, serous fluid.

Both lungs were adherent to the thoracic parieties and contained interlobar adhesions. The surfaces made by sectioning both upper lobes were dry and pale. The lung tissue of both lower lobes was edematous, congested and contained numerous consolidated areas. The heart was of normal dimensions. The myocardium was yellowish-brown and tore with ease. The coronary arteries contained many atheromatous areas and a few calcified plaques.

A large nodular mass was adherent to the liver, pyloric portion of the stomach, duodenum and the hepatic flexure of the colon. This mass partly incorporated a small irregular nodular gall bladder. The gall bladder contained a small amount of golden, mucoid, partly inspissated bile and a cholesterol calculus. The stone occupied the fundic portion. The walls of the gall bladder were tightly drawn over the stone (Fig. 1) and were somewhat constricted proximally. The gall stone measured two centimeters in diameter. Its surface was very rough and was coated in places with bile pigment. The gall bladder wall was greatly thickened throughout. The portion surrounding the calculus contained a nodule two centimeters in diameter and two smaller nodules opposite the large one located in the wall that occupied the sulcus of the liver. The smaller nodules extended into the liver parenchyma. The mucous membrane of the remaining gall bladder was pale and slightly granular. The periportal lymph nodes were massive; some had undergone central necrosis. They compressed and obstructed the cystic and the hepatic ducts. A probe passed through the ampulla and the greater portion of the common bile duct. The liver was massive; it weighed 2300 grams. The surface was studded with numerous various-sized, greyish-white, elevated nodules, some of which were large, flat and umbilicated and had undergone central necrosis. The head of the pancreas and the contiguous portion of the duodenum were partly imbedded in the mass of neoplastic lymph nodes. The head of the pancreas was larger than usual and showed a sharp demarcation from the body. This demarcation was due to the extensive metastatic involvement of that portion. The pancreatic architecture was entirely destroyed. The tissue was yellowish-white with

Fig. 1. Fundus of the gall bladder with the largest primary neoplastic nodule and the cholesterol calculus in situ.

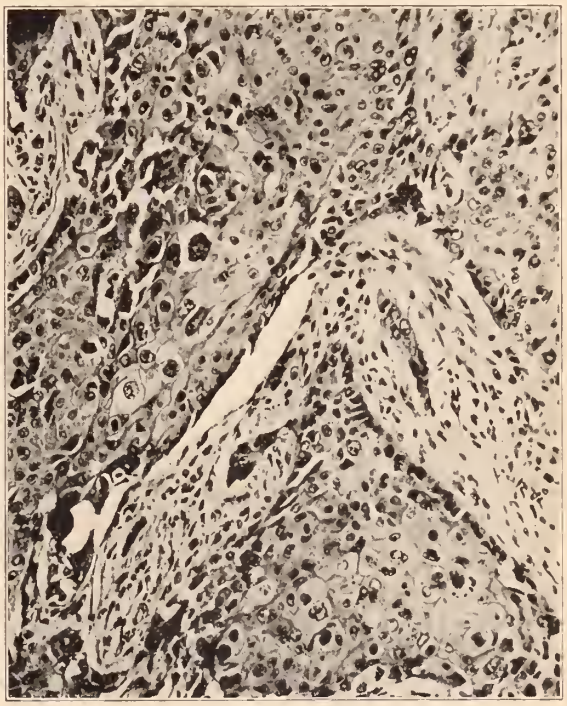

Fig. 2. Squamous cell carcinoma of the gall bladder. Unusual marked cellular pleomorphism is well demonstrated in this photomicrograph. An interesting amitotic figure is located at the bottom along the left border of the triangular-shaped epithelial sheet.

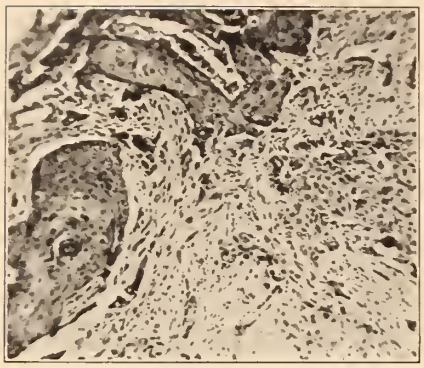

Fig. 3. Low power photomicrograph of a keratohyalinized sphere.

livid areas. It was very firm in consistency and cut with marked resistance.

The anatomical diagnosis was as follows: Carcinoma of the gall bladder with metastasis into the liver, pancreas and regional lymph nodes; cholemia, bronchopneumonia; moderate generalized arteriosclerosis and coronary sclerosis; brown atrophy of the myocardium; chronic fibrous pleurisy; substantial emphysema; renal arteriosclerosis; cholelithiasis and healing surgical wound.

Microscopic Examination: The nodular portions of the gall bladder wall were composed of connective tissue within which there were islands of squamous cells, some of which were of finger-like process formation. The centers of some of the squamous cell masses contained hyalinized and keratohyalinized spheres. (Fig. III) None of the sections revealed an adenomatous architecture; there was not even a suggestion towards glandular formation. The outstanding feature was the pleomorphism of the cells. (Fig. II) Although many of the cell masses contained large uniform cells, yet there were many areas, particularly small areas, that contained various-sized and variously-shaped cells. There were many atypical mitotic figures. The large polyhedral squamous cells contained large oval or round nuclei and very distinct hyperchromatic nucleoli. The spongioplasm was composed of a rather thick network. No definitely visible prickle connections were seen. The outside cellular membranes of some of the cells were at times very thick and seemed to be arranged in layers. The smaller cells contained many various-sized metaplasmic granules and large hyperchromatic nuclei. Some of the nuclei contained two or even three nucleoli. A few giant cells containing three to six nuclei were occasionally encountered.

The neoplastic tissue of the liver showed indefinite glandular formation; the growth was rather medullary. In the pancreas and lymph nodes there were areas in which the cells tended towards glandular alignment. Extensive fibrosis was present in the pancreas.

FREQUENCY AND HISTOLOGICAL TYPES

In the records of von Berenscy and von Wolff, (1), carcinoma of the gall bladder occurred four times more frequently in females than in males; in 19,908 necropsies, 2.77 per cent occurred in males and 10.18 per cent in females. From the literature and the United States Mortality Statistics (2), one may safely conclude that carcinoma of the gall bladder occurs in 5 to 10 persons per 100,000.

The histological types of neoplasms of the gall bladder recorded in literature are adenocarcinoma (medullary or papillary), squamous cell carcinoma, lymphosarcoma, (Iwasaki 3,—Goldstein 4,); adenomyoma (Southerland 5); myosarcoma (Landsteiner 6–7); fibroma (Fog 8); sarcoma (Griffen and Segall 9), (Nevyandonski 10) and (Carson and Smith 11); and carcinoid (Joel 14). One of the writers has encountered nine neoplasms of the gall bladder; two of these were cystadenomas. Cystadenomas are very rare benign tumors of the gall bladder.

The exact number of squamous cell carcinomas reported in literature is not known. Roessiger (13) in 1930 stated that about thirty have been reported. Rolleston (14) reviewed 22 cases; Nicholson (15), 16 cases, to which he added three of his own. It is difficult to collect the exact number but we have concluded that thirty-five have been reported in the literature.

ETIOLOGY

The etiological factors of squamous cell carcinoma are perhaps the same as for other types of tumors of that organ. Chronic inflammation and chronic irritation produced by the presence of calculi and embryonic rests are the considered factors.

Very little is known concerning embryonic misplacements in the gall bladder. This may be judged by the limited and contradicting material that literature offers. We wish merely to mention this factor because discussions excluding embryonic etiology omit thereby a well-earned tribute to Cohnheim.

Calculi, particularly with roughened surfaces, undoubtedly produce constant irritation which leads to atypical transformation

of the cells of the mucosa. Musser (16) found that 69% of the gall bladder malignancies contained stones. Futterer (17) reported 70%; Zenker (18) 85%; Deaver (19) 89%; Judd and Baumgartner (20) 94% and Janowski (21) 100%. Candler, quoted by Fawcett and Rippman (22), contended that the connection of gall bladder cancers with stones has been overestimated. Candler investigated 2,228 necropsies and found 315 gall stones of which two were associated with carcinomas. He also stated that the figures quoted by various writers are not representative of the general population because they are based upon hospital cases. Fawcett defends Candler's statement and emphasizes that hospital statistics have a tone of exaggeration when applied as a general estimate of the relationship of gall bladders with stones that are eventually followed by neoplasms.

Lutton's view, cited by Ames (23), that stones formed as a result of stagnation and inspissation of the bile resulting from neoplastic obstruction, has been disregarded. Rolleston and McNee found only one case with calculi in 25 cases of metastatic carcinoma of the gall bladder. Fawcett, however, has some rather plausible contentions in which he explains that the metastatic involvement does not have the same relationship to the mucosa as the primary lesion, since it is usually located in the outside layers and does not suffer destructive changes. Fawcett points out another factor which we believe has considerable weight. He states, "again, the duration of life after secondary deposit has taken place is too short to allow of formation of stones."

Experimental evidence is wanting; nevertheless, Leitch (24), by introducing pebbles and gall stones into gall bladders of guinea pigs, demonstrated remarkable atypical epithelial changes. Some of his animals developed extensive metastasis into the liver.

Our pendulum has swung over to the side of calculus etiology; however, we have not lost sight of Fawcett's logical conclusions. Graham (25) has recently sounded a warning to the gall bladder surgeon. He stresses that the surgeon should recognize the stone early, operate, and thus remove the cancerous focus.

Several writers have reported carcinomas following cholecystotomies for the removal of gall stones. In reviewing 85 gall bladder malignancies, Magaun and Renshaw (26) found five previously performed cholecystotomies.

It is known that cholelithiasis occurs three times more frequently in the females than in the males. Statistics also show that gall bladder malignancies are from three to four times more frequent in the females.

We have found that gall stones were always present with squamous cell carcinomas. A few of the writers failed to mention their presence; however, we have found that none have stressed the absence of stones. We believe that this type of neoplasm is constantly associated with calculi and that the calculus, by producing chronic irritation, is the etiological factor that causes the formation of squamous cell carcinomas of the gall bladder.

GENESIS OF SQUAMOUS CELL CARCINOMA

The formation of squamous cell carcinomas in tissues where normally squamous epithelium does not exist, has stimulated many controversial, "hair-splitting" discrepancies. Years of study have decorated the atypical cell, destined as a unit power of neoplasm, with terms having "plasia" as their suffix.

The term metaplasia, Virchow 1871 (27), has the distinction of the most frequent usage. Ewing (28) contends that the term shears the "malignant attributes" from the cell. By the term metaplasia, Virchow meant a transformation or a change of the cellular character. We fail to understand why "malignant attributes" are lost when we speak of a metaplastic process. We believe that metaplasia is a signal of neoplasia and therefore also a signal of malignancy.

Ribbert (29) described metaplasia as a process in which fully differentiated cells lose their morphological qualities and in their place acquire properties which ordinarily would have developed only in other cells. Hansemann (30) believed that a distinct differentiation where the cells acquired

an independent capacity of existence could not be spoken of as metaplasia. He, therefore, announced the term anaplasia to designate a true reversion of cells towards primitivity and self-existence. Other terms such as pseudometaplasia (Lubarsch 31), prosoplasia (Hansemann) and kataplasia (Beneke 32) possess delicate significant distinctions.

This terminological maze can sometimes be demonstrated in a single pleomorphic cellular neoplasm. The study of the various cells, the various mitotic and amitotic figures and the cellular arrangements of the primary and the secondary lesions of our case prompted us to seek various explanations. Space does not permit full discussion of the pleomorphological distinctions which the above terms lend to certain neoplasms. Suffice it to say that they are all borderline terms, for after giving a title of alloplasia, Lubarsch finally almost dismisses the subject with the expression of "proliferation with transdifferentiation."

But the early authors did not stress the potentialities of basal cells as had been emphasized by Stoeckenius (33) who studied the basal cells in naevi and Roessiger who carefully studied the basal cells in twenty-one gall bladders. Roessiger has summarized Krompecher (34) as follows:

1. At the base of the cylindrical epithelium of the normal gall bladder, aside from the known wandering cells, undifferentiated cells are found which are to be designated as basal cells in the sense of Krompecher.

2. The pleuripotent basal cells are credited with the capacity of forming cylindrical epithelium as well as pavement epithelium.

3. Inflammation or calculus formation, as a regenerative stimulus, induce only a mild proliferation of the basal cells in the gall bladder and only rarely lead to the formation of pavement epithelium.

4. Usually only a "cancer stimulus" is capable of inducing a stronger proliferation of the basal cells and a differentiation in a foreign site. The basal cells as such may here show a cancerous proliferation, giving rise to the various forms of basal cell cancers, or they proliferate with partial or total differentiation into pavement epithelium with the production of pavement epithelial carcinomas of the gall bladder; or they proliferate with partial or total complete differentiation into cylindrical epithelium or pavement epithelium, resulting in mixed cancers of the gall bladder.

We have carefully examined numerous inflammatory gall bladders with and without cholelithiasis and we have arrived at similar conclusions as Rabinovich and Keefer (35). The normal gall bladder mucosa is lined with tall columnar epithelium. For the purpose of more surface space the mucous membrane is arranged with villous projections which may be noticed microscopically. Mucous glands are rarely found in the fundus; however, they occur rather frequently in the neck of the gall bladder. The tall columns are often branched and at times their tips are clubbed. Acute and chronic inflammations cause the galaxy of columns and branches to become greatly altered. The villi become swollen, edematous and their epithelial lining exfoliates. Epithelial detachments are mechanically or chemotactically pushed into the deeper strata of the wall. Here they align themselves into indefinite acinar formation. The crypts between the bases of the villi become pinched and sink into the deeper layers of the wall. We have seen these sinking crypts between split muscle layers, and at times reach almost to the serosa. The proliferated cells and the sunken crypts assume a duct-like appearance and are known as Aschoff–Rokitansky sinuses. The ducts at times contain more than one layer of epithelium. These structures may be recognized as the precursors of adenocarcinomas and squamous cell carcinomas.

A FEW CLINICAL CONSIDERATIONS

The clinical aspects of carcinoma of the gall bladder have been carefully considered in the excellent papers of Judd, Smithies, Fawcett and Rippman. The reader will profit by consulting these papers.

Judd contends that although most of the writers believe the majority of gall bladder cancer patients have rather vague, concealed and often irrelevant histories, yet he believes that the careful historian can obtain sug-

gestive information. Judd has classified his cases into three groups.

Group 1. 70%. History of repeated attacks of gall bladder colic over a period of several years. Gradual change to more frequent pain in the epigastrium or right upper quadrant, vomiting, anorexia, weakness and loss of weight.

Group 2. 22%. Mild symptoms referable to gall bladder disease indicated by intolerance for food, gastric distress after eating, belching, constipation, sour eructations, occasional slight pain and tenderness over the gall bladder area not associated with weakness, loss of weight nor evident loss of appetite.

Group 3. 9%. No symptomatic gall bladder trouble prior to terminal stage in which a rather rapid onset of pain occurs accompanied with anorexia, weakness and rapid loss of weight.

In Smithies series, preoperative diagnoses in early cases were not made. He states that it is difficult to diagnose malignant conditions of the gall bladder early enough to obtain favorable results.

Late symptoms are constant pain, vomiting, anemia, tumor mass, jaundice and rapid loss of weight.

The sequence of a carcinoma of the gall bladder has certain salient features. At the beginning the neoplasm is a firm, circumscribed, whitish or yellowish-white, sometimes brownish nodule. Infiltration becomes evident when the gall bladder either becomes thickened, contracted or nodular. Metastasis first occurs in the periportal lymph nodes which often become so enlarged that they obstruct the ducts. Metastases then pour into the liver either by means of the lymphatics or by contiguity. Adhesions are constantly taking place and the neoplasm may become plastered to the transverse colon, duodenum and pyloric portion of the stomach. The neoplasm often undergoes central necrosis and rarely perforates into the peritoneal cavity. Occasionally it may ulcerate and perforate a viscus. Metastasis to remote tissues is very rare.

CONCLUSIONS

1. The onset course and vague history of our patient typifies Judd's cases of group three. We believe it is a classical example of that group.

2. The various explanations considered in this paper are not sufficient to prove the etiology and the genesis of the squamous cell carcinoma of the gall bladder. The conditions that cause cellular metaplasia in the gall bladder have not been demonstrated experimentally. We believe that the conditions exist in the type of stimulus (irritation), the primitive cell, and the chemical environment of the atypical cell.

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EDITORIALS

THE DIAGNOSIS OF PREGNANCY

THE diagnosis of pregnancy in the early weeks is a matter of real importance in medicine. The social significance of this information need not be elaborated. The differentiation of pregnancy from other causes of amenorrhea and the separation of pelvic inflammatory disease from extra-uterine pregnancy constitute serious problems in differential diagnosis. The development of a dependable laboratory method for early determination of pregnancy is therefore a most welcome addition to the equipment at the disposal of the physician. The experience with several suggested methods in the last few years has given ground for placing an unusually high degree of confidence in the results of proper animal testing. The original technique of Ascheim and Zondek, using several immature mice, is being largely replaced with procedures based on the work of Friedman using a single rabbit. This expedites the work and makes it less expensive. The results are equally dependable.

The importance of such work has led to very widespread trial of such a diagnostic service by many laboratories. The reported results vary somewhat in the percentage of accuracy, but all agree that the error is not more than a very few cases out of any large series. The study of these erroneous results is of importance in the ultimate understanding of the biological processes involved in the test and in the phases of sex physiology involved. The types of error include occasional negative diagnoses in the very first weeks of pregnancy and also positive diagnoses when there is no pregnancy, but some other endocrine disturbances associated with anomalies of menstrual rhythm. Failure to diagnose pregnancy in the first two or three weeks is not surprising, and seldom a serious drawback. On the contrary a false positive diagnosis may be a grave handicap to the physician and patient. The occurrence of frequent errors of this type would lead to a lack of confidence in the tests.

The diagnosis of pregnancy is based on changes in the ovaries of an animal injected with urine from the pregnant woman. The changes include a stimulation of Graafian follicle development, formation of hemorrhagic follicles, ovulation, and the production of corpora lutea. It is now known that some of these changes may be produced by urine from women who have other causes for menstrual disturbances, including cystic ovary disease. The presence of ovulation points on the surface of the ovary of the rabbit seems to be the one dependable feature which is due only to pregnancy. This evidence of ovulation is not as readily seen as are some of the other features of a positive test. It seems that positive tests should not be re-

ported without this one most dependable criterion of pregnancy.

Failure to get positive tests after the first weeks may also occur if the animals are not of proper age, are not housed and fed properly, or are not in heat at the time of the test. False positive tests occur if the animals have not been isolated to prevent one doe from mounting another. Those who are most familiar with such animal work are confident that a dependable diagnostic use of these reactions from injection of urine requires great care and considerable judgment. There is at present a tendency to believe that anyone may inject urine into a rabbit doe, do a laparotomy at the appropriate time, and easily read the results in terms of a diagnosis for the patient. Errors are occurring from this attempt to use an exacting new technique without adequate training or experience is reading the results. The pregnancy diagnosis by injection of urine into animals is very likely to fall into disrepute if its difficulties as well as its advantages are not appreciated. Before the clinician places his confidence in the work of any one who attempts to give such diagnostic service, it will be well if he assures himself that the laboratory staff is properly trained and experienced to render such a service and merit the dependence he desires to place on the report of the test. Training, experience and judgment are important for accurate diagnosis of pregnancy from the animal inoculation with urine. E.L.S.

TUBERCULOSIS IN CHILDHOOD

IN A recent article* Myers discusses some of the results of a ten-year study at the Lymanhurst School for tuberculous children. The purpose of this particular study has been to develop the true life history of tuberculous infection. It is his opinion that the complete picture of tuberculosis has never been developed, and that systematic observation, of a group of children through the successive decades of life, is the only means of elucidating the true situation. The present paper deals with the first ten years of this project.

The author states that, in their opinion, in the diagnosis of tuberculosis in childhood, the tuberculin test and x-ray film examination are of most value. With reference to the tuberculin test, the statement is made, "We have come to look upon it as the most specific test in the field of medicine." The importance of a proper technique is stressed, and in their opinion the intracutaneous method or Mantoux test should be used, because of its increased sensitivity, and it also provides for a quantitative measurement of the dose of tuberculin.

In the study of suspected tuberculous infection, they regard the tuberculin test as the most delicate method of detection, or as they state, "A very fine tuberculosis screen." This test very distinctly indicates those infected with tuberculosis. "If the tuberculin test is negative to a full milligram of tuberculin, one need go no further as far as tuberculosis is concerned, except in rare cases. If it is positive, one should then seek the location of the disease."

They consider the x-ray film as a less delicate aid in the detection of tuberculous infection. They have been able to find tuberculous lesions in only about twenty to twenty-five per cent of the children who react positively to the tuberculin test. While the x-ray film is not as sensitive a guide to infection, yet they state that its use has aided in the detection of more foci of tuberculosis than all other methods of examination combined. "Indeed it is the only phase of the examination which locates the childhood type of tuberculosis in any considerable number of cases."

Some very interesting statements are made with reference to the effect of first infection, with tubercle bacilli, upon subsequent tuberculous disease. He points out that it is commonly asserted that childhood infection produces a certain degree of immunity against tuberculosis, and a belief is quite widespread in the minds of tuberculosis workers that it is good to have a positive tuberculin reaction by the time one reaches adult life, because it has been felt that individuals who have escaped early im-

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* Ten years at the Lymanhurst School for Tuberculous Children, Annals of Internal Medicine, Nov., 1932.

munizing infection, if infected, would succumb rapidly to the disease. This is a very important question to consider, since recent statistical studies with the tuberculin reaction show a decidedly lower percentage of positive reactors than many have assumed to be the case. If more children are escaping childhood infection, does this mean that the hazard from tuberculous infection in a later period of their life will be greatly increased? Several cases are cited in which no evidence of tuberculous infection was found until early adult life, and contrary to past impressions, the lesions observed were no different in their evolution than those that developed in individuals who had evidently had tuberculous infection before. "In our opinion the longer the first infection type of tuberculosis can be prevented in the human body, the better. The ultimate goal should be to reduce the possibility of exposures so that the span of life may be lived without the first infection type of tuberculosis appearing in the bodies of most people."

Regarding the treatment of the childhood type of tuberculosis, he comments upon the natural tendency of the disease to respond favorably to treatment. Important factors in the individual case are: protection from further exposure to tubercle bacilli, adequate diet, rest, and medical and nursing supervision, preferably in special schools for tuberculous children.

Whether or not his position meets with individual acceptance among tuberculosis authorities, it is worthy of note to contrast his position with that of those workers interested in the development of childhood immunity by use of the Calmette vaccine. The method of study instituted by Myers gives one a feeling that whatever results are obtained will be adequately controlled and suitable for critical analysis. J.H.

Marquette University School of Medicine Dedicates New Building On Wednesday, January 4th at Milwaukee

New Medical School Building of Marquette Dedicated in January.

The new Medical School building of Marquette University School of Medicine was dedicated at Milwaukee with morning and evening exercises on January 4th. The morning exercises were held in Gesu Church and the evening exercises at the University gymnasium.

Dr. William Gerry Morgan of Washington, D. C., past president of the American Medical Association and Dean of Georgetown University School of Medicine; Dr. Richard E. Scammon, Dean of Medical Sciences at the University of Minnesota School of Medicine, and His Excellency, the Right Reverend Samuel A. Stritch, Archbishop of Milwaukee, were those who presented addresses.

THE PRESIDENT'S PAGE

Reginald H. Jackson

REDUCTION OF DUES

"These are the times that try men's souls."

WHILE it would be only natural that in a time of continuing economic depression a considerable amount of impulsive, unsound and hasty thinking should arise and lead to the utterance of that type of criticism best described by the word "knocking", I have been greatly surprised to find, in correspondence with some 200 members in regard to delinquent dues, an utter lack of criticism based on the assumption that the Society dues were out of proportion to the direct and potential benefits to be derived therefrom. In practically every instance where membership has been dropped or dues were in arrears a splendid letter of encouragement has been received with a sincere regret that the impossibility of making actual cash collections forced a temporary resignation of membership.

I believe that in a crisis such as confronts our profession, the above mentioned reason is the only legitimate excuse which can be accepted for failure to maintain or apply for membership as a unit of organized medicine. While much of the benefit is indirect and intangible it accrues to us in accumulative measure in direct proportion to our numerical strength and resources.

Our imperative need today is an undistorted sense of values, constructive thought, logical reasoning and sound judgment combined with common sense and TEAM WORK.

When the budget committee recently met there was a unanimity of thought along these lines resulting after prolonged and mature deliberation in the rearrangement of the items with a requisite curtailment in salaries and estimated expenditures sufficient to permit a 20 per cent reduction in membership dues for 1933.

Personally, I feel that this considerate action of the budget committee, in the face of the critical situations which may confront us, should stimulate each and every member to a renewed loyalty and devotion to organized medicine and result in a determination to maintain his membership inviolate. Unquestionably larger financial returns would have been insured by leaving the dues as authorized by the House of Delegates but by maintaining the membership roll as of today the budget will be balanced. Once more I beseech your intense and loyal support to this end. United we stand. Divided we fall.

P. S. It is comforting to know that if an emergency arises which warrants it, there is a sufficient surplus accumulated through past years to properly meet it. Happy New Year.

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Polk	G. B. Noyes, Centuria	Geo. B. Larson, Frederic.
Portage	H. M. Coon, Stevens Point	E. E. Kidder, Stevens Point.
Price–Taylor	E. A. Riley, Park Falls	E. B. Elvis, Medford.
Racine	W. C. Roth, Racine	Susan Jones, Racine.
Richland	W. C. Edwards, Richland Center	G. Benson, Richland Center.
Rock	G. S. Metcalf, Janesville	E. C. Hartman, Janesville.
Rusk	J. M. Lundmark, Ladysmith	M. L. Whalen, Bruce.
Sauk	Roger Cahoon, Baraboo	A. C. Edwards, Baraboo.
Shawano	C. E. Stubenvoll, Shawano	L. W. Peterson, Shawano.
Sheboygan	H. F. Deicher, Plymouth	A. C. Radloff, Plymouth.
Trempealeau–Jackson–Buffalo	R. R. Richards, Blair	R. L. MacCornack, Whitehall.
Vernon	W. M. Trowbridge, Viroqua	Wm. H. Remer, Chaseburg
Walworth	S. G. Meany, East Troy	H. J. Kenney, Delavan.
Washington–Ozaukee	O. J. Hurth, Cedarburg	P. M. Kauth, West Bend
Waukesha	Margaret Caldwell, Waukesha	J. F. Wilkinson, Oconomowoc.
Waupaca	R. K. Irvine, Manawa	F. J. Pfeifer, New London.
Winnebago	G. E. Forkin, Menasha	M. C. Haines, Oshkosh.
Wood	F. X. Pomainville, Wisconsin Rapids	W. G. Sexton, Marshfield.

SOCIETY PROCEEDINGS

BARRON–WASHBURN–SAWYER–BURNETT

Members of the Society met on December 20th for the annual election of officers. Following are their names: President, Dr. H. H. Schlomovitz, Barron; Vice-president, Dr. R. W. Adams, Chetek; Secretary-Treasurer, Dr. A. D. Galloway, Barron; Delegate, Dr. D. L. Dawson, Rice Lake; Alternate, Dr. J. H. Wallis, Rice Lake; Censor, Dr. H. H. Ainsworth of Birchwood.

On the question regarding the Workmen's Compensation Act, the vote stood one vote for question number one and fifteen votes for question number two.

The evening was spent discussing the report of the Committee on the Costs of Medical Care.

A. D. G.

BROWN–KEWAUNEE

The annual meeting of the Brown–Kewaunee County Medical Society was held on December 13th in the Fern room of the Columbus Community Club, Green Bay.

Election of officers were as follows: Dr. E. G. Nadeau, Green Bay, President; Dr. F. J. Wochos, Kewaunee, Vice-president; Dr. O. A. Stiennon, Green Bay, Secretary-Treasurer.

The Society had as its guests Mr. James Hughes, Congressman-elect; Mr. Robert Lynch, Assemblyman-elect; Mr. E. F. Brunnette, State Senator-elect; Mr. W. J. Sweeney, Assemblyman-elect from the second district, and Mr. John Howland, past Post Commander of the American Legion. All gave short talks. W.E.M.

DODGE

The Dodge County Medical Society met December first at the City Hall in Beaver Dam. The mayors of the cities and the village and township officers were our guests. The topic of discussion was "Medical Care of the Indigent." The speakers were Drs. J. B. MacLaren, V. F. Marshall, J. L. Benton and C. D. Neidhold of Appleton who described the Outagamie County plan.

The meeting was very successful and the discussion was extensive and the plan well received.

On December 8th, the second meeting of the Society was held at the Lutheran Deaconess Hospital in Beaver Dam, at which time the Outagamie County plan was discussed and finally accepted as a nucleus for the medical care of the indigent in Dodge County.

A Public Relations Committee was appointed, consisting of Dr. A. W. Hammond, Beaver Dam, chairman; Dr. J. H. Karsten, Horicon, secretary, and W. G. Riopelle, Beaver Dam. This committee was given full power to initiate this plan and appoint further committees as needed. A.W.H.

DOUGLAS

The annual meeting of the Douglas County Medical Society was held at the Androy Hotel, Superior, Wisconsin, on December 6th.

Dinner was served at 6:30 P. M. to forty-two members and guests of the Society after which the election of officers took place and the following were declared elected:

Dr. C. H. Christiansen, President; Dr. P. G. McGill, Vice President; Dr. G. J. Hathaway, Secretary-Treasurer.

Dr. C. H. Mason was re-elected on the Board of Censors; his term will expire in 1935.

Dr. T. J. O'Leary was re-elected delegate.

Following the election a musical program arranged by Dr. R. K. Lohmiller was enjoyed. C.H.C.

FOND DU LAC

A meeting of the Fond du Lac County Medical Society was held in the auditorium of St. Agnes' School of Nursing, Fond du Lac, on December 14th. The meeting was well attended.

The program consisted of two excellent papers. The first speaker was Dr. Andre Crotti, Columbus, Ohio, who spoke on "Diseases of the Thyroid and Thymus Glands." Dr. Crotti also read a paper on "The Etiology of Goiter," which was illustrated with lantern slides.

The second speaker was Dr. Harry E. Mock, Chicago. His subject was "The Treatment of Skull Fractures and the Concomitant Injuries."

Both papers were enjoyed by all present. J.C.D.

LANGLADE

The Langlade County Medical Society held its annual meeting at the Butterfield Hotel, Antigo, on December 7th.

Following a duck dinner, the meeting was called to order by the President, Dr. C. E. Zellmer. Mr. Lewis Paul, director of the poor relief work in Marathon County, discussed the methods used in that county in the care of the indigent. A resolution was passed that the Society would conform to the same regulations in caring for the poor of Langlade County. The chairman of the County Board of Langlade County and the Director of Poor Relief for the County then discussed at some length with the members of the Society matters relating to a better understanding between the town authorities and the attending physicians.

The election of officers for the year 1933 were as follows: President, Dr. L. A. Steffen, Antigo; Dr. P. J. Dailey, Elcho, Vice-president; Secretary-Treasurer, Dr. J. C. Wright, Antigo. Dr. Wright was also chosen as delegate to the annual meeting of the State Medical Society.

This was an especially good meeting and it is hoped will bring a better understanding between the town authorities and the physicians in the care of the indigent.

Physicians present were the following: Drs. C. E. Zellmer, J. W. Lambert, M. J. Donohue, E. F. Dorzeski, L. A. Steffen, E. G. Bloor, M. A. Flatley, E. A. McKenna and J. C. Wright, all of Antigo, and Dr. P. J. Dailey of Elcho. J. C. W.

MANITOWOC

Zero weather did not cool the enthusiasm of the members of the Manitowoc County Medical Society and their guests, the County Dental Society, and all felt repaid after having heard Dr. M. N. Federspiel of Milwaukee give his able, illustrated talk on "Diseases of and Deformities of the Mouth, Nose and Face."

Assemblyman Ray Scheuer and Francis Yindra, from the first and second districts of the County, were also guests of the Society. Both assemblymen expressed their appreciation of the opportunity to meet with the physicians.

At this meeting, Dr. A. Belson of St. Nazianz was admitted to membership in the Society. Following the meeting a buffet lunch was served to the members.

The Society held its first chest clinic at Valders on December 14th and was in charge of Dr. J. H. May of Maribel.

Future clinics and examiners follow: January 11th, Manitowoc, Dr. A. Zlatnik; February 8th, Cleveland, Dr. J. M. Kelley; March 8th, Reedsville, Dr. T. H. Rees; April 12th, Mishicot, Dr. W. A. Rauch; June 14th, Kiel, Dr. F. Turgasen; September 13th, Maribel, Dr. E. C. Cary; October 11th, St. Nazianz, Dr. C. Wall. E.C.C.

MILWAUKEE

The annual dinner meeting of The Medical Society of Milwaukee County, was held at the Hotel Pfister on December 8th. At this meeting Dr. James C. Sargent was elected President of the Society. Dr. Sargent, in his acceptance address, commented on the past activities and future plans of the Society, referring, particularly, to the program for the distribution of medical services, which had been developed by the special committee of which Dr. Sargent is chairman.

Dr. Paul M. Currer, retiring President, was presented with a gavel in recognition of his services during the past year.

Reports of the board of directors and committees were presented to all present. A facsimile of the minutes of the first meeting of the Society, held on May 5, 1846, which appeared on the cover of the report, added particular interest to the copies.

Dr. Olin West, Secretary of the American Medical Association, was the speaker of the evening. His subject was "Current Medical Problems."

One hundred and sixteen were present at the dinner, and over two hundred and fifty attended the meeting which immediately followed the dinner.

At a meeting of the Nominating Committee, held on November 29th, the following members were appointed to offices in the Society for the year 1933:

President-elect, Dr. Charles Fidler; Secretary, Dr. George W. Neilson; Treasurer, Dr. Harvey E. Webb; Censor (two-year term), Dr. George H. Fellman; Member, Board of Directors, Dr. P. M. Currer.

Delegates, 1933–34, Drs. E. W. Miller, H. W. Powers, H. J. Gramling, J. C. Sargent, Oscar Lotz, George W. Neilson.

Alternates, 1933–34, Drs. R. E. Fitzgerald, F. D. Murphy, H. C. Schumm, A. R. Langjahr, J. W. Smith, Edward Jackson.

Members of the Nominating Committee are:

Dr. E. L. Tharinger, Chairman; Drs. U. A. Schlueter, S. L. Kryzysko, D. E. W. Wenstrand, Edith McCann, William A. Ryan, A. J. Patek, Mark Bach, George W. Neilson.

OUTAGAMIE

Dr. G. T. Hegner, Appleton, was elected President of the Outagamie County Medical Society at a meeting held on December 15th at the Conway Hotel. Dr. W. J. Frawley, Appleton, was reelected vice president and Dr. R. V. Landis of Appleton, Secretary and Treasurer.

The Rev. Arthur H. Lord, pastor of St. James church, Milwaukee, addressed the physicians, their wives and friends who attended the meeting. He discussed religion, what it meant to him, and pointed out the opportunity physicians have of aiding their patients morally as well as physically.

Musical number by the local quartet concluded the meeting.

PORTAGE

At a meeting of the Portage County Medical Society held on December 12th at St. Michael's Hospital, the following were elected officers:

President, Dr. H. M. Coon, Stevens Point; Vice-president, Dr. G. W. Reis, Junction City; Secretary-Treasurer, Dr. E. E. Kidder, Stevens Point; Delegate, Dr. H. P. Benn, Stevens Point; Alternate, Dr. E. Kidder, Stevens Point; Censor for three years, Dr. F. A. Marrs, Stevens Point. E.E.K.

RACINE

The regular meeting of the Racine County Medical Society was held Thursday, December 15th, at eight o'clock.

Two speakers addressed the Society. Dr. S. J. Pearlman of Chicago spoke on "Types of Mastoiditis and Their Diagnosis," and Dr. S. J. Salinger, Chicago, discussed "Emergencies Within the Realm of the Ear, Nose and Throat."

Dr. W. C. Roth was chosen President to assume office the first of next year, while Dr. J. F. Henken was selected as President-elect, to take office in 1934 and Dr. R. C. Thackeray was named as vice-president. Dr. Susan Jones was re-elected for her twenty-sixth term as secretary-treasurer. Dr. W. C. Hanson was selected as censor. Dr. H. B. Keland was chosen delegate and Dr. T. C. Henningsen, al-

ternate, to the annual meeting of the State Medical Society. S.J.

RUSK

An organization meeting of the Rusk County Medical Society was held in November, 1932, at St. Mary's Hospital, Ladysmith, to which a charter had been granted at the special meeting of the Council on November 13th. The following were elected to hold office for the year 1933:

President, Dr. L. M. Lundmark, Ladysmith; Vice-president, Dr. Woodruff Smith, Ladysmith; Secretary-Treasurer, Dr. M. L. Whalen, Bruce; Board of Censors, Dr. Pearce Prentiss, Bruce, three years; Dr. J. C. Baker, Hawkins, two years; Dr. W. F. O'Connor, Ladysmith, one year; Delegate, Dr. L. M. Lundmark; Alternate, Dr. M. L. Whalen.

SHEBOYGAN

The annual meeting of the Sheboygan County Medical Society was held at Rocky Knoll Sanatorium on December 15th. After a six-thirty o'clock dinner, the following program was given:

"Fundamentals of the Radiological Diagnosis of Chest Diseases" by Dr. S. A. Morton, Milwaukee.

"Pulmonary Tuberculosis as Seen in X-Ray Films" by Dr. A. A. Pleyte, Milwaukee.

The following officers were elected for 1933: President, Dr. A. W. Sieker, Plymouth; Vice-president, Dr. C. C. Stein, Kohler; Secretary, Dr. A. C. Radloff, Plymouth; Censors, Dr. H. F. Diecher, Plymouth; Dr. G. H. Stannard, Sheboygan; Delegate, Dr. C. J. Weber, Sheboygan; Alternate, Dr. Wm. G. Meier, Sheboygan. A.C.R.

WALWORTH

The Walworth County Medical Society met on December 13th at Walworth County Hospital. A banquet was served at seven o'clock.

This was a meeting with the finance committee of the county board to figure out some plan for the medical care of the indigent sick. A committee was appointed to confer with the county board committee.

Officers for the coming year were elected as follows: Dr. S. G. Meany, East Troy, President; Dr. V. S. Downs, Lake Geneva, vice-president and Dr. H. J. Kenney, Delavan, Secretary.

WAUKESHA

A meeting of the Waukesha County Medical Society was held on December 7th.

The majority and minority reports of the Committee on the Costs of Medical Care were discussed and it was moved by Dr. A. W. Rogers, seconded by Dr. W. B. Campbell that: "We, the members of the Waukesha County Medical Society, Wisconsin, do heartily endorse the action of the American Medical Association with respect to its attitude toward the minority report of the Committee on the Costs of Medical Care."

The floor was taken by several of our members who voiced the opinion that now as never before united activity on the part of the personnel of organized medical groups was necessary to ward off the efforts of various organized groups of the laity, supposedly interested in public health, to dictate and arrange the manner and method of distribution of the services of medical science.

There was a distinct resentment of the assumption on the part of these organized groups that they are better able to deal with this problem than the medical profession itself.

The officers elected for the year 1933 are as follows: President, Dr. Margaret Caldwell, Waukesha; Vice-president, Dr. Martin Werra, Waukesha; Secretary-Treasurer, Dr. J. F. Wilkinson, Oconomowoc; Delegate, Dr. H. T. Barnes, Delafield; Alternate, Dr. H. A. Peters, Oconomowoc, and Censors, Drs. W. S. Wing, Oconomowoc, J. B. Noble, Waukesha, and H. T. Barnes. J.F.W.

MILWAUKEE ACADEMY OF MEDICINE

Members of the Milwaukee Academy of Medicine met on December 20th. The following program was given:

"Agranulocytosis with Vesical Involvement" by Dr. Ralph G. Mills, Fond du Lac.

"Iodine Reaction in Exophthalmic Goiter" by Dr. W. O. Thompson, assistant clinical professor of medicine, Rush Medical College, Chicago.

MILWAUKEE OTO-OPHTHALMIC

The December 1932 meeting of the Milwaukee Oto-Ophthalmic Society was held at the Wisconsin Club on Tuesday, the 27th, following a dinner at 6:30 P. M.

The scientific program was presented as follows:

1. "Lateral Sinus Thrombosis. Operation and Recovery." Case Report. Dr. J. E. Mulsow.
2. "Intra-Ocular Foreign Body." Case Report. Dr. E. R. Ryan.
3. "Proprietary Medicines." Dr. W. G. Merrill, Wisconsin Rapids.

NINTH COUNCILOR

The winter meeting of the Ninth Councilor District Medical Society was held at Wisconsin Rapids on the evening of December 14th, beginning with a dinner at six o'clock at the Hotel Witter. After the dinner, the following program was given:

"Tumors of Bone" by Dr. R. P. Potter of Marshfield.

"What the General Practitioner Should Know About Neurology" by Dr. Hans Reese, Madison.

"The Report of the Committee on the Costs of Medical Care" by Dr. O. A. Fiedler, Sheboygan, Past President of the State Medical Society.

THIRD COUNCILOR DISTRICT

The annual meeting of the Third Councilor District of the State Medical Society of Wisconsin was held at the Memorial Union building, Madison, on the evening of December 14th.

Following the dinner at six-thirty o'clock, the speaker of the evening, Dr. Evarts A. Graham, Ma-

linckrodt Professor of Surgery, Washington University School of Medicine, St. Louis, gave his address. His subject was "Surgery in the Hypoglycemic State Due to Islet Tumors of the Pancreas and to Other Conditions." The address was accompanied by a demonstration of cases.

Officers elected for 1933 are: Dr. A. J. Batty, Portage, President; Dr. William B. Gnagi, Monroe, Secretary.

UNIVERSITY OF WISCONSIN

Dr. Evarts A. Graham, professor of surgery at Washington University School of Medicine, St. Louis, gave a lecture on "The Hepatic Factor in the Mortality After Operations on the Biliary Tract" on Thursday, December 15th, in the Service Memorial Institutes building. This lecture was held under the auspices of the University of Wisconsin Medical Society.

THE WOMAN'S AUXILIARY

MRS. FRED A. NAUSE, JR., Sheboygan, *President*
MRS. EBEN J. CAREY, Milwaukee, *President-elect*
MRS. WALTER FORD, Sheboygan, *Secretary*
MISS RUTH BUELLESBACH, Madison, *Executive Secretary*
MRS. R. G. ARVESON, Frederic, *Treasurer*
MRS. JAMES C. SARGENT, Milwaukee, *Press and Publicity Chairman*
MRS. JAMES F. PERCY, Los Angeles, Calif., *National President*
MRS. ROCK SLEYSTER, Wauwatosa, *National Convention Chairman*

National Convention, Milwaukee, June 1933

Milwaukee County Auxiliary Pays Tribute to Mrs. Freeman*

By MRS. J. C. SARGENT
President Woman's Auxiliary to The Medical Society of Milwaukee County

It was with an overwhelming realization of inestimable loss that all auxiliary members throughout the United States received the news of the death of our National President, Mrs. Walter Jackson Freeman. Probably in no other auxiliary outside of Pennsylvania, her own home state, is that loss felt as keenly as in Wisconsin, and in Milwaukee County in particular. Knowing her as we did, through our short but priceless acquaintance in September, all of us were of the feeling that much of the success of our national meeting here in June, 1933, would center around this able, enthusiastic, loving woman. No under taking seemed too good for her, and no detail too trivial for her interested and sound judgment.

She once described the ideal national auxiliary president as "a really super-human combination of wisdom, tact, discrimination, forbearance, and above all, *imagination*, housed in a brain and body as strong as granite, as elastic as a spring, and as efficient as a robot,"—continuing modestly to tell of her awareness of her own "inability to measure up to these requirements."

It would indeed be very difficult to find a woman who would "measure up to these requirements" more fully than did Mrs. Freeman, for rarely do we find a woman so thoroughly fitted for her office. * * *

In a note to Dr. Sleyster, following Mrs. Freeman's death, her son, Dr. Walter Jackson Freeman, Jr., paid a beautiful tribute to his mother. He wrote, "My mother had the happy faculty of making friends in middle age. That, coupled with great executive ability, made her a power in the Auxiliary to which she really devoted much of the last years of her life. There is a plan afoot to erect a tablet to her memory in the headquarters of the American Medical Association. I hope the Board of Trustees will see fit to accept this tribute from the various State Auxiliaries.

"Her death is a matter of sorrow, but the way she accepted her fate was an inspiration to those of us who stood by. At the end of one consultation, she waved to the physicians, saying, 'Morituri salutamus'. May such fortitude be mine when my turn comes."

The Milwaukee County Auxiliary grieves deeply over the loss of this remarkable leader, and thinking of her and her wishes for us, we pledge our sinsere and activie loyalty to her very capable successor, Mrs. James F. Percy.

MILWAUKEE COUNTY

Ninety members attended the first annual meeting of the Woman's Auxiliary to the Medical Society of Milwaukee County, held at the Y. W. C. A., December 8th. Dr. Olin West, Secretary of the American Medical Association, spoke on the report of the Committee on Costs of Medical Care and the ways and means by which the Woman's Auxiliary could be of assistance to the Medical Society.

After Dr. West's speech the retiring President, Mrs. James C. Sargent, was presented with a bouquet of roses, the presentation being made by Mrs. James C. Hackett:

"Dear Madam President, there must come to you on this beautiful winter day a feeling of satisfaction as ever obtains from the accomplishment of worthy effort well done. You have been our chosen leader in the organization of wives, mothers and daughters

* The Milwaukee Medical Times, December, 1932.

of the members of the Medical Society of Milwaukee County.

"Pioneer effort is always the most difficult feature. It presupposes in its leader unsual qualities of vision, loyalty to a great cause, tact, and unselfish and consistent devotion. These, Mrs. Sargent, you possess to a marked degree. We all realize it and fain would give expression to it in language, but words fail us to assure you of our grateful appreciation of your invaluable service, so we say it with flowers.

"Pray accept these few red roses, whose message is one of love. Each petal is emblematic of an individual. May there come always to you in the future as you behold similar blossoms, the perfume of gratitude and appreciation from this Charter group which you helped to call into being."

The following officers were elected to serve for the year 1933: Mrs. J. Gurney Taylor, president-elect; Mrs. Dirk J. Bruins, vice-president; Mrs. Edwin J. Habbe, secretary and Mrs. Simpson J. Markson, treasurer.

A gavel was presented to the Milwaukee auxiliary by Mrs. James C. Sargent. Mrs. Rock Sleyster, incoming president, accepted the gavel in the name of the Auxiliary.

MILWAUKEE EXTENDS INVITATION

The Milwaukee County auxiliary is desirous to have the members of the Woman's Auxiliary to the State Society know that they are most welcome to attend our meetings. If you are in Milwaukee on the second Friday of any month, come and join us at our luncheon meeting. Our president, Mrs. Rock Sleyster, (Blumond 0221) will be most happy to make a reservation for you.

POLK COUNTY

The members of the Polk County auxiliary enjoyed a dinner meeting at St. Croix Falls on Thursday evening, December 15th.

RACINE COUNTY AUXILIARY ORGANIZED

The Woman's Auxiliary to the Racine County Medical Society held its first meeting on the seventh of December. There were twenty-seven present including Mrs. E. J. Carey, President-elect of the State Auxiliary, and Dr. C. O. Schaefer, President of the Racine County Medical Society. Dr. Schaefer extended his greetings to the new organization.

The following were elected officers in the newly-created organization: president, Mrs. Edward C. Pfeifer; president-elect, Mrs. Louis Fazen; vice-president, Mrs. Richard W. McCracken; Secretary, Mrs. Edwin J. Schneller, and treasurer, Mrs. George H. Jamieson.

ROCK COUNTY

Sixty-six members of the Rock County Medical society and the Woman's auxiliary joined for a Thanksgiving party in the Blarney Stone, Beloit-Clinton highway, in November. Dinner followed by a program which comprised "The Old Lady Shows Her Medals, J. M. Barrie; play, read by Mrs. Wayne A. Munn; sleight-of-hand exhibition, Mr. McEvoy, Beloit; group of vocal solos, Dr. T. J. Snodgrass as accompanist. Contract and auction bridge were played and prizes were awarded.

Officers will be elected the fourth Tuesday in January.

SHEBOYGAN COUNTY

The Woman's Auxiliary to the Sheboygan County Medical Society held a luncheon meeting on Wednesday afternoon, December seventh, at the Dresden at Plymouth. Mrs. Frederick A. Leighton of Sheboygan Falls read a paper and lead a discussion on "Hygeia".

During the business session Mrs. Theodore Gunther was reelected president, Mrs. Henry F. Deicher of Plymouth was chosen vice-president and Mrs. Clarence Sonnenburg was re-elected secretary and treasurer.

WINNEBAGO COUNTY

The auxiliary of the Winnebago County Medical Society held a luncheon meeting at the Sign of the Fox at Neenah on November twenty-eighth. After the luncheon, a number of business matters were discussed followed by election of officers. Those chosen to serve in executive capacities include: President, Mrs. F. Gregory Connell, Oshkosh; vice-president, Mrs. George Pratt, Neenah; secretary, Mrs. John F. Schneider, Oshkosh; and treasurer, Mrs. John M. Hogan, Oshkosh. Following the business session, a social hour was enjoyed.

NEWS ITEMS AND PERSONALS

Dr. Kenneth J. Smith of Chicago has become associated with the Hansberry Clinic at Hillsboro and has taken over the surgical work of that institution.

Dr. Smith has been a member of the faculty of Northwestern University Medical School.

The other members of the Clinic are Drs. J. S. and P. H. Hansberry.

—△—

Dr. W. E. Mueller, Secretary of the Brown–Kewaunee County Medical Society, Green Bay, who has been ill with an infection of the nose has fully recovered and resumed his practice.

—△—

Dr. Herman Ranke, professor of Egyptology, Heidelberg University, Germany, and Carl Schurz professor of history, University of Wisconsin, gave a lecture on "Surgery In Ancient Egypt" on December 16th in the auditorium of the Service Memorial Institutes building. This was the sixth annual address under the William Snow Miller Lectureship, es-

tablished in 1928 by the Phi Beta Pi medical fraternity.

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The American Board of Otolaryngology will hold an examination in Milwaukee, June 12th, 1933, during the meeting of the American Medical Association. Prospective applicants for certificate should address the Secretary, Dr. W. P. Wherry, 1500 Medical Arts Building, Omaha, Nebraska, for proper application blanks.

—△—

Dr. Nelson A. Bonner, formerly of Beaver Dam, is taking postgraduate work in gynecology and obstetrics at the Graduate School of the University of Pennsylvania, Philadelphia.

—△—

Dr. August Sauthoff, Mendota, in a recent address before the Gyro Club of Madison, described his trip through Palestine last spring.

—△—

Dr. Frank E. Newlove of Stoughton has moved to Lone Rock in Richland County.

—△—

Dr. W. D. Stovall, Madison, spoke on the subject of diseases before a meeting of the Parent-Teachers Association of Beaver Dam in November.

—△—

Dr. E. M. Poser of Columbus announced his association the latter part of November with Dr. Clement F. Cheli of Madison.

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Drs. F. Gregory Connell of Oshkosh and Ralph M. Carter, Green Bay, were speakers on the program present before the Menominee County Medical Society (Michigan) on November 22nd. Dr. Connell spoke on "Jejunal Ulcer" with lantern slides, while Dr. Carter presented a paper on "Fractures" also accompanied by lantern slides.

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Dr. Ralph G. Mills of Fond du Lac was elected president of the Kiwanis Club at the annual election. At this meeting, Dr. Mills related his experiences in the Orient.

—△—

The automobile of Dr. S. G. Meany of East Troy which was stolen on the evening of December 5th was found the next day three miles east of there on the Milwaukee road, stripped of its tires and accessories.

—△—

At a district conference for health officers and county board members of Wood and Portage Counties held in Marshfield on December 7th, Dr. Walter G. Sexton of Marshfield gave an address on "The Challenge to Modern Medicine".

—△—

Dr. W. M. Sonnenburg, Sheboygan, was re-elected county physician and examiner of the blind, for the year 1933.

—△—

Dr. Ira H. Lockwood, roentgenologist of Research Hospital, Kansas City, gave a lecture on "A Roentgen Study of the Mammary Gland" before the Alpha Omega Alpha and Sigma Sigma honorary medical societies on December 6th in the Service Memorial Institutes building, Madison.

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Upwards of one hundred surgeons from western United States attended the forty-second annual meeting of the Western Surgical Association held in Madison at the Loraine Hotel, December 9th and 10th. Arrangements for the meeting were in charge of Dr. Arnold S. Jackson, Madison.

Speakers on the program from Wisconsin included Dr. William J. Carson of Milwaukee, who read a report on his experimental study of ascending urinary infection; Dr. F. Gregory Connell, Oshkosh, gave an address on "Post-Operative Ulcers of the Stomach", with lantern slides.

Other speakers on the program included the following: Dr. John Staige Davis, Baltimore; Dr. Kellogg Speed, Chicago; Dr. A. W. Adson, Rochester; Dr. Davis Strauss, Chicago; Dr. George Thompson, Los Angeles; Dr. Herman Kretschmer, Chicago, and Dr. Gilbert Cottam, Minneapolis.

Surgeons from Wisconsin who registered at this meeting were: Dr. Reginald H. Jackson, Madison; Dr. Erwin R. Schmidt, Madison; Dr. Joseph F. Smith, Wausau; Dr. Arnold S. Jackson, Madison; Dr. Carl S. Williamson of Green Bay, and Dr. B. C. Meacher of Portage.

At the annual dinner, the surgeons were welcomed to Madison by Chief Justice Marvin B. Rosenberry of the Wisconsin Supreme Court. Other speakers were Dr. J. C. Elsom, Madison, who told of various health hobbies, and Col. J. W. Jackson, spoke on "The Vanishing Cowboy." Dr. F. Gregory Connell acted as toastmaster.

Officers elected for the year 1933 are the following: Dr. Samuel C. Plummer, Chicago, President; Dr. Peter A. Bendixen, Davenport, Iowa, first vice-president; Dr. Arnold S. Jackson, Madison, second vice-president; Dr. Frank T. Teachenor, Kansas City, Mo., secretary; Dr. Thomas S. Orr, Kansas City, treasurer and Dr. Carl E. Black, Jacksonville, Ill., recorder.

The 43rd annual meeting will be held in Cincinnati in December, 1933.

—△—

Dr. J. B. MacLaren, Appleton, was the principal speaker at the meeting of the volunteer social workers class held in Appleton in December. Dr. MacLaren discussed the care of the indigent.

—△—

Dr. Charlotte Calvert, Madison, spoke before a meeting of the Catholic Women's Club of Madison. Her topic was "The Pre-School Child."

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Dr. A. E. Bachhuber, formerly of Mayville, has opened an office in the Sullivan building in Kaukauna. Dr. Bachhuber returned from Europe two months ago, where he had been taking postgraduate work in Vienna.

Dr. J. D. Glynn, a graduate of Loyola University Medical School, 1932, has become associated with Dr. S. W. Doolittle of Lancaster.

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Dr. G. J. Flanagan of Kaukauna was a speaker before a meeting of the staff of St. Elizabeth Hospital at Appleton.

—△—

Dr. H. P. Greeley, Madison, addressed the members of the Beloit Rotary Club in December on the subject of "Heart Diseases." He also addressed a meeting of the Lions Club of Madison on "Obesity."

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The American Association for the Study of Goiter, for the fourth time, offers $300 as a first award, and two honorable mentions for the best three essays based upon original research work on any phase of goiter presented at their annual meeting in Memphis, Tenn., May 15, 16 and 17, 1933. Competing manuscripts must be in English and submitted to the corresponding secretary, Dr. J. R. Yung, 670 Cherry St., Terre Haute, Ind., not later than April 1, 1933. Manuscripts arriving after this date will be held for the next year or returned at the author's request.

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A banquet honoring Dr. C. W. Henney of Portage, congressman-elect, was held in Portage in December. Speakers included Governor-elect Schmedeman; Senator-elect Duffy, Fond du Lac; Mrs. Gertrude Bowler, chairman of the National Ladies Democratic Committee, and Attorney Daniel Grady of Portage.

—△—

Dr. F. A. Southwick of Stevens Point was reelected chairman of the Portage County chapter of the American Red Cross and Dr. W. W. Gregory, also of Stevens Point, was chosen vice chairman.

—△—

MILWAUKEE

Wednesday, December 21st, has been chosen as the date of the wedding of Miss Jane Elizabeth Brooks, daughter of Mr. and Mrs. Raymond E. Brooks and Harold Edwin Holbrook, Jr., son of Dr. and Mrs. Harold Edwin Holbrook.

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Dr. Samuel Plahner addressed the Milwaukee Woman's Club on "Juvenile Criminology" on December 5th.

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Dr. Karl E. Schlaepfer is seriously ill in the Deaconess Hospital. Dr. Schlaepfer's illness has been complicated by pleurisy and a touch of pneumonia.

—△—

Dr. Max Cutler, director of the Tumor Clinic of Michael Reese Hospital, Chicago, lectured at Mt. Sinai Hospital, December 15th, on "Fundamental Considerations in Radium Therapy."

—△—

The following health talks, sponsored by the State Board of Health and delivered by Mr. Theodore Wiprud, executive secretary of The Medical Society of Milwaukee County, were delivered during the month of December over the Milwaukee Journal Radio Station WTMJ:

December 2,—"How Do You Sleep?"
December 9,—"The Blood Pressure Racket."
December 16,—"The Staff of Life."
December 23,—"Colds."
December 30,—"Sweets for Children."

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The following members of the Speakers' Bureau, sponsored by the educational committee of the Society, have been invited to address lay groups recently:

Speaker	*Group*	*Subject*
Dr. J. L. Garvey	P. T. A., Franklin School	"The Nervous System"
Dr. Wm. A. Ryan	Women's City Club	"Facts About Menopause"
Dr. W. P. Blount	Milwaukee Catholic Home for the Aged	"Facts and Fallacies About Our Feet"
Dr. Harvey E. Webb	P. T. A., St. Matthew's School	"Normal Living"

Dr. R. E. Bushong, has been appointed superintendent of the Lima State Hospital for the Criminal Insane, Lima, Ohio.

Dr. Bushong is a graduate of the Ohio State University, and prior to coming to Milwaukee in 1926, he was associated with the Toledo, Ohio, and Athens, Ohio, State Hospital for the Insane.

Dr. Bushong will assume his duties shortly after the first of the year.

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Dr. Norbert Enzer, spoke before the Jewish Center Round Table Group on December 23rd, on "Hospital and Community."

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Dr. Helen Jane Zillmer addressed the Fernwood School Parent-Teacher Association on "Physical Factors Influencing the Behavior of Children," at their meeting on December 21st.

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Dr. R. G. Sayle returned to Milwaukee about December 15th from a seven-week hunting trip in South Dakota and in Illinois.

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Dr. and Mrs. Dean Echols, of Ann Arbor, Michigan, spent the Christmas holidays with their families. Dr. Echols is the son of Dr. and Mrs. Chester M. Echols, and Mrs. Echols is the daughter of Dr. and Mrs. O. H. Foerster.

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Dr. E. L. Miloslavich addressed the Kiwanis Club of Racine on December 1st on the subject of "Scientific Aspects of Modern Criminology."

"Scientific Investigation of Homicide Cases" was the subject of Dr. Miloslavich's talk given before the Whitefish Bay Men's Club on December 9th. On December 13th, Dr. Miloslavich appeared before the Milwaukee Odontological Society. His subject on that day was "Relation Between Pathology and Criminology."

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The final lecture of a series of twelve on psychology, given by Dr. Edward N. Schoolman, Chicago,

psychiatrist, was delivered on December 20th, at the Jewish Center. Dr. Schoolman's subject was "The Psychology of Revolt."

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Construction work on Stark Hospital, a part of the Milwaukee Children's Hospital, has been completed. The hospital was provided for by a trust fund of $125,000 left by Mr. Charles G. Stark, who died in 1908. Mrs. Stark, who died in 1927, left an additional $63,000 for the maintenance of the hospital.

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Mrs. Paulina Scollard, wife of Dr. John T. Scollard, died at her home, 3044 N. Summit Avenue, December the 18th, after a year's illness. She was seventy-four years of age.

Mrs. Scollard had resided in Milwaukee for forty-six years, coming here from her home in Kewaunee, Wisconsin, at the time her husband began his practice of medicine. Dr. and Mrs. Scollard celebrated their golden wedding anniversary in August.

Besides her husband, Mrs. Scollard is survived by a daughter, Mrs. Verna S. Gleason, a grandson, and two sisters.

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The following specialists have been chosen as instructors for the Postgraduate Course in Eye, Ear, Nose, and Throat, to be sponsored by the educational committee of The Medical Society of Milwaukee County during the month of January:

Ear: Dr. W. E. Grove and Dr. H. B. Hitz; Nose and Throat: Dr. S. G. Higgins and Dr. C. J. Coffey; Eye: Dr. C. S. Beebe and Dr. G. I. Hogue.

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The following health talks, sponsored by the State Board of Health and delivered by Mr. Theodore Wiprud, Executive Secretary of The Medical Society of Milwaukee County, will be broadcast over The Milwaukee Journal Station, WTMJ, during the month of January:

January 6—Winter Sports.
January 13—Our Health During the Depression.
January 20—The Children Are Cross.
January 27—Headache.

These talks will be on the air from 4:00 to 4:15 P. M.

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Dr. H. B. Podlasky, who was injured in a fall on December 11th, is confined to the Mt. Sinai Hospital. We are informed that Dr. Podlasky will be required to stay in the hospital for several weeks.

BIRTHS

A daughter to Dr. and Mrs. A. C. Hansen, Milwaukee, on November 7th.

A daughter to Dr. and Mrs. J. F. Haug, Milwaukee, on November 14th.

A son to Dr. and Mrs. E. L. Bernhard, Milwaukee, on November 12th.

A son to Dr. and Mrs. Ralph E. Campbell, Madison, December 15th.

A son to Dr. and Mrs. Millard Tufts, Milwaukee, on December 14th.

MARRIAGES

Dr. Nat Goldberg, Milwaukee, to Miss Shirley Rozran, Milwaukee, January first.

DEATHS

Dr. J. W. Monsted, New London, died on November 29th at his home.

Dr. Monsted was born in Hartland, February 26, 1870. He was a graduate of Detroit College of Medicine and Surgery in 1894. He practiced in Dodge County for a number of years and in 1910 came to New London to establish his practice.

Dr. Monsted was a former member of the Waupaca County Medical Society, the State Medical Society, and the American Medical Association.

He is survived by his widow, two sons and one daughter.

Dr. James Hittner, Seymour, died on November 14th at his home following a short illness.

He was born in Cincinnati in the year 1866 and was a graduate of the College of Physicians and Surgeons of Keokuk in 1890. He had practiced medicine in Seymour for forty-five years.

He is survived by his widow, one son and one daughter.

Dr. J. H. Huennekins, Milwaukee, who practiced medicine on Milwaukee's south side for about forty years, died early in December, at the age of seventy-six years.

Dr. Huennekins was born in Franklin and came to Milwaukee when a child and resided here continuously up to the time of his death.

He was a former member of the Medical Society of Milwaukee County the State Medical Society, and the American Medical Association.

Dr. George J. Jurss, Milwaukee, died at his home on December 18th after several months' illness.

Dr. Jurss was born in Milwaukee on August 18, 1862. His preliminary education was obtained in the public schools of Milwaukee, and he received his medical training at the Rush Medical College from which he was graduated in 1885.

Dr. Jurss had practiced pediatrics in Milwaukee since 1886. He was a former clinical instructor in pediatrics at Marquette University and for many years was a member of the faculty of the old Milwaukee College of Physicians and Surgeons.

He was a member of the Medical Society of Milwaukee County, the State Medical Society, and was a fellow of the American Medical Association.

He is survived by his widow, one son, Dr. C. D. Jurss, and one daughter, Miss Priscilla.

Dr. Otto J. Wolfgram, Milwaukee, died suddenly on December 15th of a heart attack while attempt-

ing to start his automobile in front of his home, 3021 S. Nevada St.

Dr. Wolfgram was born in the year 1875 and was a graduate of St. Louis University School of Medicine in the year 1906. He had practiced in Coloma, and Lyons and then moved to Milwaukee. He was a former member of the Walworth County Medical Society, the State Medical Society, and the American Medical Association.

He is survived by his widow.

Dr. John H. Frank, Milwaukee, died at his home, 3722 N. Palmer St., on December 14th.

Dr. Frank was born in Milwaukee on July 17, 1870. He attended the German and English Academy where he obtained his preliminary education, later going to the Milwaukee Medical College now the Marquette University School of Medicine from which he was graduated in 1902. Since the year of his graduation Dr. Frank practiced medicine in Milwaukee continuously until about three months prior to his death when he was forced to give up his practice because of ill health.

Dr. Frank had been a member of the Medical Society of Milwaukee County for twenty-seven years when he resigned in 1931.

He is survived by his widow and one son.

SOCIETY RECORDS

New Members

Clifford A. Olson, Hammond.
Michael Shutkin, 606 W. Wis. Ave., Milwaukee.
C. R. Marquardt, 324 E. Wis. Ave., Milwaukee.
Edw. D. Schwade, 2675 N. Holton St., Milwaukee.
John A. Enright, 1250 W. Grant St., Milwaukee.
Frank E. Newlove, Lone Rock.

Changes in Address

W. Homer Krehl, Wisconsin Dells to 104 King St., Madison.

Geo. A. Larsen, Hayward to Box 903, Harlingen, Texas.

Correction

The address of Dr. Arthur Kovacs remains as 161 W. Wisconsin Ave., Milwaukee; not at Waukesha as previously reported.

Comments of The Wisconsin Press on Final Report, Committee on Costs of Medical Care

WRONG DIAGNOSIS?

The place of the old familiar "family doctor" in the general scheme of things would seem, offhand, to be almost beyond the reach of change. But the final report of the Committee on the Costs of Medical Care, recently submitted, makes suggestions which might eventually replace the family doctor with something like the "family health and disease prevention center"—if you can swallow so cumbersome a title.

Surveying the whole field of medicine in the United States, the committee recommends that medical service be furnished largely by organized groups of physicians, dentists and nurses, set up around a hospital or clinic. Costs should be placed on a group basis, with tax funds used where necessary. Public health service should be extended, and the medical profession should devote increased attention to the prevention of disease.

In all of this, obviously, there is something very like an approach to state medicine; and it is a little bit hard to see just what place would be left for the old-style general practitioner, who knows the names, case histories, dispositions and family skeletons of his patients and who is to them a sort of combination of healer and old family friend.

Indeed, the American Medical Association has already criticized the plan as an approach to socialized medicine. Spokesmen for the association have said that the proposal would "substitute mass production for private practice," to the harm of doctor and patient alike.

Back of it all, of course, there lies a fundamental economic problem. Many, many people cannot afford the medical care they need; at the same time many, many physicians are not making a living wage. This report seeks to find a way out of these difficulties.

But it is just possible that the real cure lies deeper than a mere reorganization of the medical profession. The wage-earner's inability to pay for the care he needs, and the doctor's inability to get the income he deserves—aren't these a part of a larger problem whose solution depends on a restoration of economic health to the whole community?

In the long run, what we need to aim at is a

Madison State Journal

Jackson Sees Medical Plan as Inadequate

Mass Production, Standardization Mean Faulty Service, Stand

That mass production and standardization for the cure of medicine's economic ills will be accompanied by a wholly inadequate medical service for the ills of the sick, was the response today of Dr. Reginald N. Jackson, president of the State Medical Society

Stevens Point Journal

DOCTOR OBJECTS TO NEW METHOD OF MEDICAL CARE

Says Mass Production Will Cause Wholly Inadequate Medical Care

Madison, Wis., Nov. 30—That mass production and standardization for the cure of medicine's economic ills will be accompanied by a wholly inadequate medical service for the ills of the sick, was the response today of Dr. Reginald H. Jackson, president of the State

Milwaukee Journal

Dues Payment Is Basis of Idea

Proposal for Group Insurance, to Provide Doctors' Fees, May Get a Trial Here

A plan for medical care being studied by a committee of the Milwaukee County Medical Society for probable inauguration here was printed Tuesday by the national committee on the costs of medical care as "one of the most significant proposals for solving medical problems in the United States.

Manitowoc Times

DOCTORS HERE DO NOT AGREE WITH SCHEME

Oppose Socialized Medicine As Uneconomical, Open To Racketeering

Manitowoc doctors do not agree with the majority report of the national conference on the costs of medical care which was made before the New York Academy of Medicine this week and may or

Madison Capital Times

Scheme Is Impractical, They Claim

Convo Visitors Here Object to State Control of Profession

By CLYDE GER
(Of The Capital Times Staff)

Hostility to the majority report of the Committee on Costs of Medical Care, which in effect proposed socialization of medicine, was expressed here yesterday by members of the medical

restoration of prosperity on a broader and firmer base than we have ever had it before.

—*Beloit News — Marshfield News — Manitowoc Times and Fond du Lac Commonwealth-Reporter.*

A PLAN FOR BETTER HEALTH SERVICE

When a nationally known group, such as the Committee on Costs of Medical Care, after a study of five years recommends a plan for better health service, it deserves the fullest attention. The committee, through twenty-six separate inquiries into medical costs, has presumably covered the field more thoroughly than was ever done before.

The committee's proposal is for the organization of community health centers, grouped around hospitals and including physicians, dentists, nurses, pharmacists and other associated personnel. The public would be served on a group payment basis, through the collection of yearly fees, or by taxation, or by a combination of these two methods.

Such a plan might work vast changes in the status of the medical profession, even though there continued alongside it the private practice we have today. It is natural that many doctors, viewing the matter professionally, should be alarmed. So we have a minority report which, summed up, is the reverse statement of this so-called socialization of medicine, with things to continue pretty much as they are, except for such adjustments as can be made without disturbing the private physician.

The doctors claim they were outvoted on the committee by the public health officials, the economists, social authorities and other laymen. There is something to that. But the statistics gathered by the committee show that out of every dollar of the three and a half billions spent for medical care each year, less than 30 cents goes to the physicians in private practice. The hospitals, dentists, pharmacists and nurses also constitute large factors. Or, if mere numbers of persons are considered, the physicians are a minority among those who serve our health needs. The viewpoint of the doctors alone is at best a minority view.

Certain benefits from these medical centers are at once apparent. There would be a saving in costs to most families, especially those that may be hard hit by illness. There would be created an opportunity we have never had of making available to all patients the best treatment that science has disclosed. The correlation between public health service and private practice and the extension of public health service could be promoted.

And yet, this proposal is based on some considerations that have not been proved. It is assumed that the individual relationship between the patient and the doctor of his choice could be preserved. Is that true? Could we still have the family physician relationship, confidence and faith? Also it is assumed that this socialization would not disturb the high quality of those entering the medical profession? Again, is that true?

A purely negative attitude by physicians toward this report will not avail. We have progressed too far in the extension of public health, industrial medicine, group medicine, to go back now. The demand for lowered costs is imperative and must be met. Also, we shall not be satisfied with a system that makes all of science available to some groups and not to others.

The doctors can be helpful. Their viewpoint should be considered. Also, there should be further analysis of some of the assumptions pointed out above. But as a people who regard health as the most vital factor in their lives, we are not going back to the old way. There is going to be progress along the line here proposed, or along some line that is pretty closely related to this proposal.

—*Milwaukee Journal.*

CASE FOR DOCTORS

Whether the American people get good medical care depends, in the last analysis, on whether they have sufficient good sense to demand it.

That seems to be the point of the latest report made by the Committee on the Costs of Medical Care. The report points out that the nation is suffering from a shortage of competent doctors, dentists and hospital facilities; but it adds that it would be unwise to increase the supply until the general public knows enough to insist on first-rate attention and is willing to pay for it, as that would simply increase unemployment among medical practitioners.

The problem, then, seems to depend on the patients themselves. Medical science can not, in the long run, serve them any better than they want to be served. They can not get the best until they insist on it.

—*Fond du Lac Commonwealth-Reporter.*

A NEW DEAL FOR MEDICINE

In a recently published report of its five year survey of American medicine, its problem and practices, the Committee on the Costs of Medical Care arrives at some significant conclusions. The committee finds that thousands of doctors are unable to make a living wage while on the other hand thousands of patients cannot afford the medical care which they badly need. As a solution of the problem, the committee recommends medical service by organized groups of physicians, nurses, and other caretakers of the people's health, payment for same to be made in whole or in part through insurance or taxation, or both.

* * *

The proposal is a startling one to those who think of medicine in terms of the old fashioned family doctor, but it is not new. Public and semi-public clinics are already a fact in this country. They represent an adaptation of the present economic scheme of things to a profession that has traditionally clung to its individualism. Public health and pathology among the workers and underprivileged classes seem to demand such a set-up, and most of the cities of the nation have taken steps in this direction. But the surface has only been scratched. Untold thou-

Madison Capital Times

U. S. Yearly Doctor Bill Is 3 Billion

THE NATION'S MEDICAL ARMY

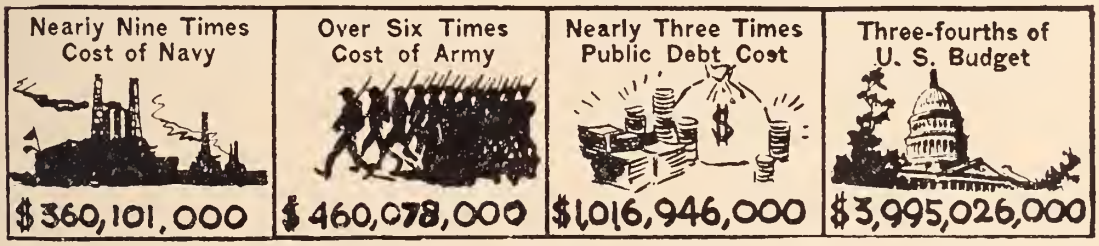
142,000 Physicians
62,400 Dentists
213,000 Nurses
132,000 Pharmacists
20,200 Optometrists
47,000 Midwives

AVERAGE FAMILY ILLNESS COST

Average annual cost of medical care per family ranges from $71 to $311, depending on income.

Average person is disabled by illness from 1 to 2 days a year.

HOW IT COMPARES WITH OTHER ANNUAL EXPENDITURES



Some more national publicity showing costs of illness as "doctor bill."

sands still go without adequate medical attention because they can not afford the private practitioner and hesitate to seek treatment at the public clinic.

It will be said that the recommendations of the Committee on the Costs of Medical care amount to socialized medicine, a matter of putting the state into the doctor business. The American Medical association attacks the plan on those grounds. But what of it? Wouldn't it be better that the doctors of the nation lose a bit of their "rugged individualism" than to have 21,000 of their number unable to earn a living income and untold thousands of patients waste in health for want of proper attention by physicians?

The watchword of the profession of medicine should be the rendering of the greatest possible health service to the greatest number. It required no five-year committee investigation to disclose that, under the present economic scheme of things, this has not been done. True, the medical profession has thousands of members who have unselfishly given themselves for the advancement of their science and the good that they could do. But, handicapped by economic necessity, their good work has been limited. A new set-up that would remove this factor and provide modern organization to deal with a modern health problem would be a great stride forward toward breaking the stalemate that confronts the field of medicine today.

* * *

The committee finds that the cost of medical care in the United States amounts to the staggering sum of $3,000,000,000 a year,—three-fourths of the annual federal budget, three times the public debt costs, four times the cost of our army and navy. Were only a part of this vast fund available for the

establishment of public health clinics, tax or insurance supported, a tremendous improvement in public health could surely be achieved. It will be argued that the raising of such a sum would impose an additional burden on an already tax ridden nation. Indeed it would, but would not the average citizen rather pay a moderately increased tax bill for medical care that now costs the stricken individual hundreds and even thousands of dollars yearly?

The conclusions of the Committee on the Costs of Medical care cannot lightly be dismissed. Whether the medical profession desires it or not, some such program must be forthcoming if the twin problems of the medical profession itself and of the public health are to be satisfactorily solved. State medicine has come in Germany, we are told, and is a pronounced success. It is time that medicine in America, too, must have a new deal.

—*Madison Capital Times.*

BUT WHAT WOULD THE DOCTORS DO?

The executive secretary of the American Medical Association, Dr. Olin West, is not impressive when he flays unreservedly the report of the Committee on Costs of Medical Care. He says medicine is about to be socialized and thrown into the hands of politicians.

It is not difficult to understand the viewpoint of the medical practitioner—that medicine is individualistic depending on the personal relation between the patient and the doctor. And, we think, this is the viewpoint of the public. This individualistic connection should not be destroyed.

But the times and the discoveries of science combine to demand some adjustments. The building of hospitals is an adjustment. Medicine is less individualistic with each hospital that is erected. It grows less individualistic with the extensions of public health service. The use of costly apparatus for scientific treatments makes combinations necessary. Extension of medical service into industry, either under the direction of the state or through private enterprise, works in the same direction.

Now what are the doctors going to do? Are they going to continue to cry individualism as the flood rolls along and they are helpless or are they going to try to direct the stream? The proposal of the investigating committee to build health centers around the hospitals is not so radical. **It is only the next logical step after building a hospital at all.** Properly directed and controlled, it might be the means of preventing the socialization of medicine in the European sense rather than making socialization a certainty. Have the doctors thought about that?

We are not yet accepting this suggestion for the health centers. There ought to be more light on the question whether the individual relation between the health center doctor and his patients can be maintained. This is something that must not be sacrificed. But just to harp on the old type of individualism that is gone and will not return is not helpful.

Some of the Milwaukee county doctors make the same mistake when they jump in to demand a cut in the health department budget for what appears to be purely professional reasons. The health department budget will have to be trimmed some—because the taxpayers must have relief. **But it need not be cut merely because the doctors oppose some of the departmental activities.** Out of the medical dollar spent in this country, public health gets only 3.3 cents. That is a small slice when you see it chalked off on the circle. It does not yet endanger the doctors' fees very much.

—*Milwaukee Journal.*

Council Reduces Dues of State Society For 1933

Reduction of dues for the calendar year of 1933 from $15 to $12 was announced by the Council on December 30th. The announcement was contained in a letter from headquarters sent to each member. The letter follows:

Appreciative of the economic stress which has affected all, the Council wishes me to advise you that dues of your State Society have been reduced from $15 to $12 for the year 1933.

This twenty per cent reduction is made at a time when the institution of medicine is said to be facing a crisis. The Council feels, however, that money alone will not see us through this period. It is a time when your officers need the active support of every member if we are not to succumb to that disintegrating force that elsewhere has wrecked the profession of medicine by placing the wheel in the hands of untrained and incapable pilots.

Lay organizations throughout the state are being solicited to hold conferences to support recommendations for at least partial socialization of medicine. The public is being asked to accept untried remedies in hopes that they will relieve symptoms of the underlying broad economic disease. The profession of medicine does not oppose change. On the contrary it has been continuously progressive in the development of scientific knowledge and in the development of methods for its helpful application. It has a record of service with constantly increasing efficiency that is outstanding in the world today. So do we presently ask that those who advocate radical departure from present methods of treatment provide some assurance that their drugs not only have promise but that they will not affect the patient adversely.

During the coming year watch for legislative bulletins. Read your Wisconsin Medical Journal for discussions of the present trends. Without your support your Society will lose.

New System For Care of Indigent Proposed at Governor's Budget Hearing by State Medical Society; Opposed by Dr. Bardeen

That public patients at the State of Wisconsin General Hospital should be the direct financial obligation of the referring county as a means of promoting the public health service throughout the state and ending a period of "continued over-centralization at the State Hospital", was the proposal of the State Medical Society of Wisconsin. The presentation to Governor Schmedeman of the Society's position was made by Mr. J. G. Crownhart, Secretary of the State Medical Society, at the University Budget Hearing on Tuesday, December 13th. The position of the Society was said to be unsound by Dean C. R. Bardeen of the Medical School in a subsequent discussion.

In a statement headed "Economies Possible Through Return To Original Policies Advocated For Wisconsin General Hospital", Mr. Crownhart declared that the savings effective to the state would be from $200,000 to $300,000 a year. The complete statement and subsequent discussion follows:

"In appearing before you today as the Secretary of the State Medical Society, I do so by the unanimous vote of the legislative body of the Society for the purpose of suggesting a better plan for the care of a large proportion of the indigent now sent as public patients to the State of Wisconsin General Hospital at Madison. It is our conclusion from long and continuous studies that the plan we suggest will result in savings to the General Fund of the state of at least $200,000 and possibly $300,000 a year. It will result in material savings to many of the counties of the state and in but few, if any, will any increase in costs result. Coincident, it will continue to provide that degree of care for the indigent sick which the statutes contemplate as that which shall always be rendered by the humane people of a great commonwealth.

"This is not the first time that the State Medical Society of Wisconsin has appeared before legislative bodies. It was the first to suggest institutional treatment for the feebleminded and insane; as early as 1875 it proposed the plans which resulted in the establishment of our great State Board of Health; in 1895 it suggested the means of protecting the credulous sick from those who would prey upon them by fraud, deceit and quackery; and it was this Society who proposed the so-called lye bill which has wiped out of the state those very serious accidents to small children from the household use of that corrosive which previously had been sold without warning of the great damage it could do when lye solutions were mistaken by children for drinking water.

"In the ten years that I have been Secretary of this Society it has been tremendously concerned with a problem that has many faces and no single solution,—the problem of distribution of medical services throughout Wisconsin that its people, no matter what may be their financial status, shall have an adequate and scientific service in extent sufficient to meet their needs, in location within proper distances, and in price at a cost they may reasonably afford.

"We are concerned with the care of the indigent and as best evidence of the degree of that concern may I state that careful and accurate surveys indicate that the physicians of Wisconsin will have given over $10,000,000 in services this calendar year for which they will receive not one penny of reimbursement from individuals, communities or state. This is a sum greater than that raised by the special income tax legislation at the recent session and several times the total of that raised by all the community chests in the state, and the medical profession has been doing this in similar degree throughout the ages.

"We are told that fifteen per cent of the people of this state are now classed as being indigent. We are as much concerned, however, in that larger class which alone approximates possibly sixty to seventy per cent of our people,—those who are endeavoring to maintain an independent financial status in life and frequently are undergoing tremendous hardships that this may be accomplished. It is the problem of rendering an adequate medical service to this group that is the present foremost concern of medicine as an institution. And in our efforts to render that service, I am proud of the record that medicine has made in achievements written indelibly in the personal sacrifice of its individual servants. It is a record of continuous progress that cannot be approached elsewhere.

UNDER-PRIVILEGED BECOME PRIVILEGED

"In our present concern for that five to fifteen per cent that are indigent, it would be rather easy to overlook the far greater problem involved in rendering service to the sixty to seventy per cent of the people who are endeavoring to maintain their independent status. Indeed, I might suggest that public attention so exclusively has been devoted to the indigent, whom we are pleased to call the underprivileged, that they have become in fact the privileged.

"The State of Wisconsin General Hospital was erected in 1925 and to quote Dr. Bardeen in his prepared statement of November 24, 1919, advocating establishment of the institution, its purpose was to

provide a medical teaching center and 'from the standpoint of state service * * * designed to provide for patients of limited means,

"'(1) living in communities which have *inadequate local hospital* facilities for the usual hospital care, or

"'(2) living in communities which have good hospital facilities for ordinary cases but *lacking in special facilities* needed by the patients in question, and

"'(3) patients who need highly specialized study and treatment which from its nature could not well be provided in more than one or two places in the state (crippled children).'

"Dr. Bardeen further stated his position in a special leaflet by the assertion that 'it is proposed to make all possible practical use of other hospital facilities within the state in establishing such a course (medicine) and thus on the one hand to limit hospital centralization at the University to indispensable needs and on the other hand to encourage the development of the highest type of hospital service and medical care throughout the state.'

"Now that is clear language unmistakable in intent. It was the representation upon which the Wisconsin legislature devoted over a million dollars to build and equip the State of Wisconsin General Hospital.

"It was opened in 1925. In 1929, some 2,816 individual cases of public patients received care at joint state and county expense. By the fiscal year of 1931–32, however, all crippled children had been taken out of the hospital,—a new hospital had been erected for them. Yet the number of individuals admitted to other treatment in that year had increased over two years earlier by 70% or to the total of 4,584. Large numbers of these cases came back one, two, three and some even ten times or more within the year. Their re-entries are not given in the figures I have quoted.

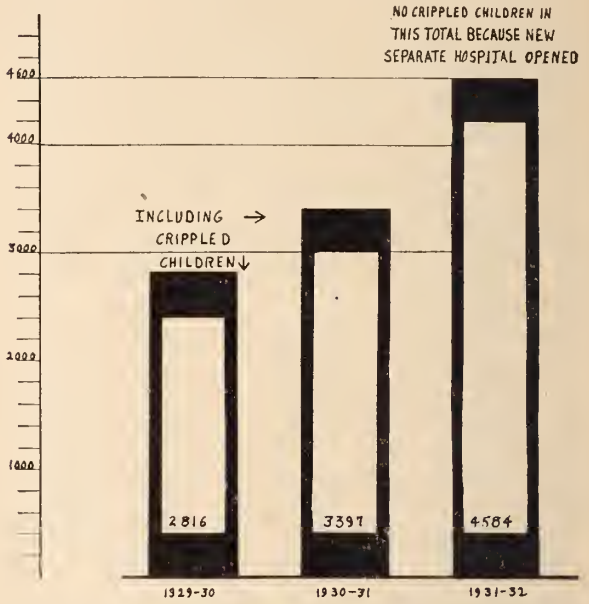
"It is true that in 1931 the legislature at our suggestion, given in hopes that it would remedy the situation, changed the law to provide for local care where the Judge was satisfied that the *cost to the county* would not be more than that involved in sending the case to Madison. But the legislature also provided that even though the Judge thought adequate care could be obtained at home and at a lesser cost, if the indigent patient said that he wanted to go to Madison, the Judge must send him to this now great centralized institution. I repeat that the under-privileged became the privileged and at a tremendous cost to the counties and the state.

INCREASED COSTS

"In 1925–26 the cost to the counties for their share at $2.38 per day per patient, including crippled children, was $149,791.91. In the fiscal year of 1931–32 this cost had risen to $306,615.27 and that figure does not include the care of crippled children for whom the counties paid an additional $75,000.

NUMBER OF INDIVIDUALS CARED FOR AT STATE OF WISCONSIN GENERAL HOSPITAL

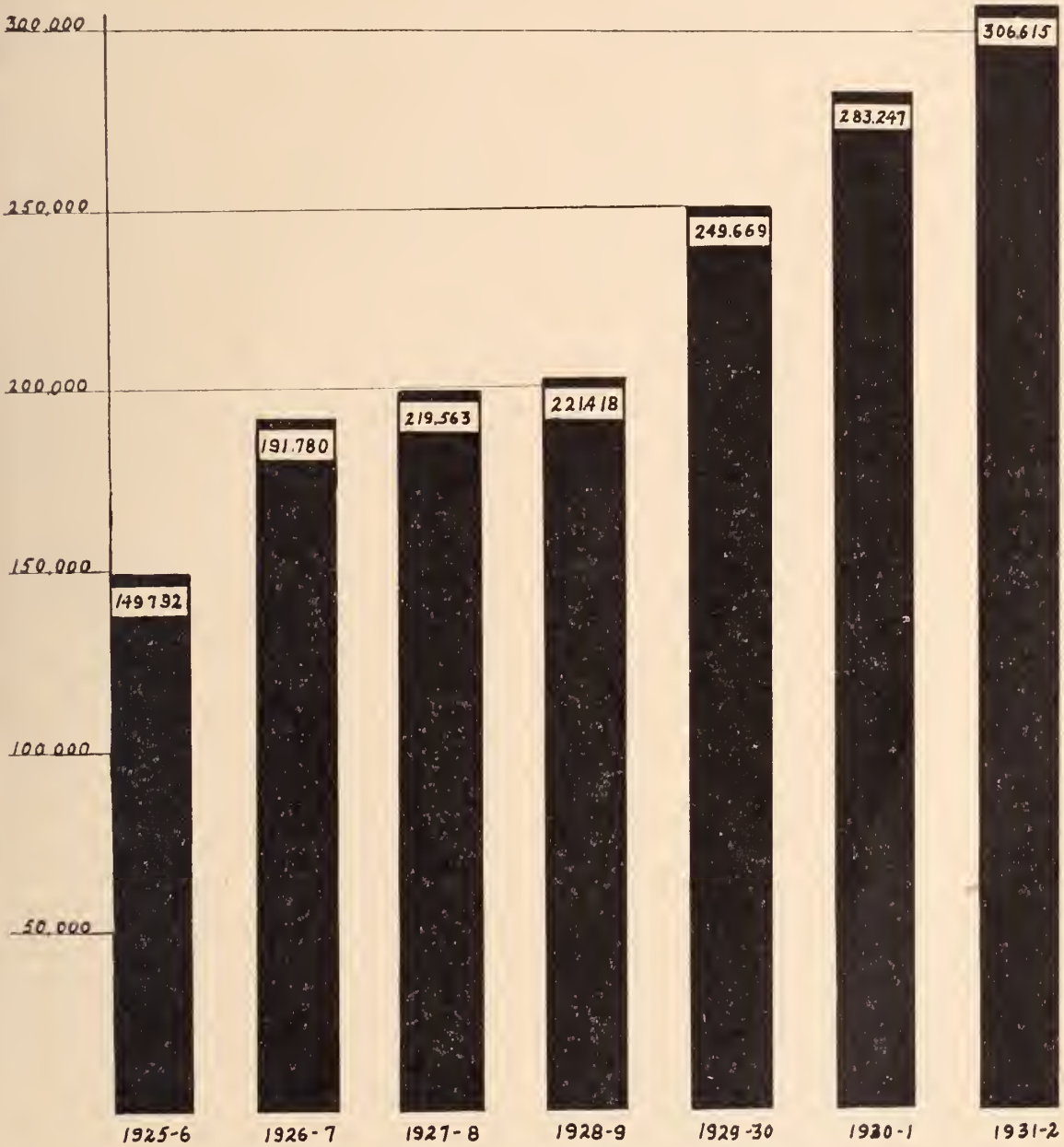
Chart shows the mounting numbers of individuals admitted for treatment during the last three years. Figures for 1929–30 and 1930–31 include crippled children. Figure for 1931–32 is exclusive of crippled children. Increase in last year 70% over previous year. This chart does not show the number of times that patients returned for treatment within a given year—only the number of separate persons who entered the hospital.



"When we figure the county cost at what the state charges for most cases,—$2.38 per day, we are far from an accurate total. There is the cost of transportation to and from Madison borne either by the indigent or wholly by the county. There is the added cost inherent to the system in which a patient at Madison cannot be discharged until reasonably well recovered while a patient at home can be discharged far earlier and a follow-up of house calls instituted at a much lesser expense. I am told that an average of two days elapses from the time that the physician says that a patient can be discharged at the State Hospital and the time that the patient actually leaves. This, I say, is inherent to the system for time must be given someone to arrange for transportation and notify someone somewhere what train the patient is coming on that he or she may not be left on some cold station platform. But it is expensive. There is the cost of a guardian to and from Madison when that is required because the patient is a child. Indeed, patients have been brought from La Crosse and near Oshkosh over a hundred miles to Madison in cars at county expense with a county highway policeman at the wheel driving better than a mile a minute and with the county nurse sitting beside the patient. That is at some expense especially when we consider that facilities to treat the patient in each of these cases existed at home or within ten miles.

STATE COLLECTIONS FROM COUNTIES

Chart shows amounts charged counties for care of patients at State of Wisconsin General Hospital at $2.38 per patient day for the large proportion of pat ents. The total for 1931–32 *does not include* care of crippled children for whom the state charged an additional $75,828.55. Note the continued increased costs. Cost of caring for crippled children included in all years except 1931–32 when new separate hospital was opened.



• LOCAL HOSPITALS SUFFER

"Now it is interesting to note that fully half of these indigent patients do not come from the two classes of cases mentioned earlier by Dean Bardeen as warranting state care. They do not come from places where there are no hospital facilities. Neither do they come from places where the hospital facilities are inadequate. You will note that in the fiscal year of 1931–32 some 752 individual patients came from Dane County where in Madison we have St. Mary's, Madison General, and Methodist Hospitals; 145 came from Jefferson County where they have hospitals at Watertown and Fort Atkinson; 163 came from Kenosha County and none will say that the city of Kenosha has not hospital facilities; 326 came from Racine where there is a new hospital

erected at a cost of over $5,000 a bed; 256 came from Rock County where there are excellent accommodations in the Beloit Municipal Hospital and the Mercy Hospital at Janesville; 243 came from Wood County with its outstanding medical and hospital facilities, and 140 came from Portage County despite the hospitals at Stevens Point. Well over half of the patients, not including crippled children, came from counties containing large hospital and medical centers.

"Now let us see what this is doing to the hospitals in Wisconsin. We have 117 private hospitals in Wisconsin and all but a very, very few are out and out charitable institutions and all are rendering a fine and high type of community service. Not one of them is operating at a profit. These hospitals represent an investment of upwards of 26 millions of dollars on which 14 millions of dollars is outstanding as unpaid at the present time. They are filled to less than fifty per cent of capacity. If they are not to care for the indigent of the community the time is rapidly approaching, and at hand for some right now, when they will not exist to care for anyone. They want to provide a reasonable service for those who must pay their own way. If they may not care for the indigent, they are denied the opportunity to spread their overhead and as result may be forced to resort to what they did resort to in Madison,—ask for one week's cash in advance or close their doors. And let me suggest that the state has no substitute to offer the people whose emergency treatment must be in a local hospital. Nothing will be so costly in life itself as to so centralize the care of the indigent as to exclude the possibility of local service for the non-indigent.

"The public resents hospitals on a cash basis but let the public resentment be to the system of state centralized care that has so largely made such steps necessary,—not to the hospital people who give of their very lives in the public service. Even in the prosperous year of 1928 the physician general practitioners of Wisconsin did not receive more than $3,000 net a year after ten years of practice and six years of training. Nurses in 1928 did not receive over $1200 a year average and certainly no one will ever suggest that the hospital superintendents are receiving more than wholly inadequate sums for the work they can and are performing.

"Without any express legislation of which I am aware, the Wisconsin General Hospital has now extended until it comprehends the Bradley Memorial Hospital, an old home or two and an old drug store. Suggestions have been made that it should also comprehend both a new cancer hospital and a psychiatric hospital.

"The medical profession has not been slow to suggest anything that will better the public health in Wisconsin for, let me assure you, anything that will benefit the public health will benefit the medical profession. Nor is there anything that will truly benefit the profession that will not benefit the public. Physicians ever have been the first to suggest the engineering principles upon which a safe and sound structure of public health may be erected in this state.

OVER-CENTRALIZATION COSTLY

"So do we suggest to you now that this over-centralization has become the very antithesis of those principles upon which the state hospital was erected. So do we say that it has become a needlessly costly institution which, because it has been furnished with free light, heat and water by the University proper, has no real accounting basis. So do we say that its accounting system which, in the words of the Business Manager of the University, in a letter to me dated Dec. 9, 1932, is so set up that 'information is not available to show the expenditures for state–county patients, part-pay patients, etc.', is no guide for the proper expenditures of tax money. If they do not know what it costs for state–county patients, we can only assume that they fix the charges by guess. No private hospital of like size could exist on such a basis. And, finally, in the words of its Superintendent in a letter to the County Judges dated December 2, 1931, we call attention to the fact that the so-called state share 'comes in the main from taxes upon general utilities and from income taxes and similar sources, which while not a direct charge against the county, adds to the total taxation.'

PROPOSAL OF SOCIETY

"It is our belief that the indigent of the state will receive a proper and adequate service and the medical service to the great proportion of the people of Wisconsin will be more adequate and at a lesser cost, if a revision be now made which will undo this expensive over-centralization and again place the hospital on the original foundation of its proponents. To accomplish this purpose, with large attendant savings, it is our proposal that:

1. The law be amended to require that each county pay to the state the entire cost of the hospitalization of such cases as they send to Madison, and
2. A system of cost accounting be instituted to show the exact per diem cost of caring for the indigent. If $4.76 per day was the cost in 1928 presumably that cost is a materially lesser amount at present. It is at least hard to understand that the cost of $4.76 a day for the great majority of cases has not changed a penny in the seven years of the hospital's operation.

ANTICIPATED EFFECT

"What is the anticipated effect of our proposal:

1. It will mean a savings to the state of from $200,000 to $300,000 or more a year.

2. It effectively ends a growth of over-centralization which, if unchecked, will demand of a larger hospital in the very near future.

3. The immediately lessened number of patients, possibly by one-half, will bring the Hospital within its rated and most effective capacity.

4. The proposal does not affect the continuation of the state sharing in the cost of the rehabilitation of crippled children for which there is no adequate provision in the state, having in mind the expensive equipment and specialized care generally required.

5. The reduced number of patients will not affect medical education at the University inasmuch as the students are given extern work throughout the state in their fourth year and have an intern year to follow.

6. The reduced load will permit of more time for research work which will benefit all citizens of the state.

7. It will meet the precise definition of proper activities enunciated by Dr. Bardeen when he advocated limiting 'hospital centralization at the University to indispensable needs and on the other hand to encourage the development of the highest type of hospital service and medical care throughout the state.'

8. It will mean the difference between hospitals with open doors as community service centers throughout this state and some whose doors may close and many whose doors can only be opened by cash payments. If this comes to pass it will be the direct and costly over-centralization on the part of the state."

UNIVERSITY VIEWPOINT

Governor Schmedeman: Has the University anything to say in reply to the remarks made by Mr. Crownhart?

Dr. Bardeen (Dean of the Medical School, University of Wisconsin): Mr. Crownhart has made an excellent presentation of his subject from the point of view of the State Medical Society. There are some other facts that enter in, of course. Not only have the hospitals of the state been injured by the depression; but also the incomes of physicians, and especially of the specialists that work in hospitals. And one factor that has not come in here that is involved is giving more opportunity for physicians that are doing this work to get some return, as they put it, in their report on this subject, for taking care of the patient. At the hospital here the patients of the type that Mr. Crownhart has referred to are cared for by the teachers in the Medical School without any charge against either the state or the county further than the salary received as teachers. So that if patients are cared for locally, that other factor has to be taken into consideration. It is only just that the doctors who care for these patients,—that is, when they are in large numbers as they are during this depression—should be paid something for their care by the county. I think the subject of supporting the care of these patients at the hospital entirely by the counties goes back fundamentally to whether or not the public interest will be best served in that way. In the state, Milwaukee County takes care of its own people of the lower economic classes in the county hospital. That hospital has a thousand beds, and the private hospitals in Milwaukee County have about two thousand beds. The only hospital in Milwaukee that gets some aid from the community fund is the Children's Hospital there, which has 15% private patients and the rest cared for from philanthropic sources.

Outside of Milwaukee County there has been no development of hospitals designed primarily for the care of patients needing care at public expense. There are a few cities and counties that are giving some aid toward that, but the hospital development outside Milwaukee has been in the direction of private hospitals which in recent years have been developed primarily to take care of patients that can afford to pay for the care—pay the physicians for the care; and during the boom times that development has gone on perhaps somewhat excessively. You can not blame the doctors that encouraged it, because we all thought we were in a new economic era; but it has made it difficult for the hospitals to weather the storm of the depression.

INADEQUATE LOCAL FACILITIES

However, the development of these private hospitals of the type that would really give the kind of care that we are trying to give in our state hospital are located only in about one-fourth of the counties of the state. The other three-fourths of the counties have no very adequate facilities. They have small hospitals, and many of these small hospitals are of a proprietary nature,—that is, run by some surgeon that runs the hospital for the sake of having a chance to do some surgery. Some of these are very good hospitals doing a good community work, but not adequate for the broader diagnostic aspects of diseases in general, for which a larger hospital would have facilities.

Now, it is a question whether those three-fourths of the counties in which there is much less wealth,—where there are fewer people having incomes that would enable them to pay for hospital care—whether those counties should be discriminated against by having to pay the total cost of care, which they cannot well afford, in favor of the counties which normally are the richer counties, the counties in which the wealth of the state is largely concentrated. Of course, I do not know that there is any wealth in the state just now from the standpoint of income, but we hope to get back into more normal times again.

A STATE PROBLEM?

I think that the solution hinges mainly on whether it is not a state problem as well as a county problem to see that adequate hospital care is available for patients that need it and cannot afford to pay for it. We do not call all these indigent, because incomes above $2,000 in the state went to only about 10% of the people back into the years 1927 to 1929; and it is families with the lower incomes,—below $1600, to whom I refer. The State Society figures show that people living on incomes above that figure ran from about 75% in Milwaukee, to less than 5% in some of the poorer counties; so that when it comes to the

(Continued on page 64)

THE JOURNAL BOOK SHELF

BOOKS RECEIVED FOR REVIEW

Infants and Children. Their feeding and growth. By Frederic H. Bartlett, M. D., director of the department of pediatrics, Fifth Avenue Hospital, New York City. Farrar & Rinehart, Inc., on Murray Hill, New York, N. Y.

Radiologic Maxims. By Harold Swamberg, M. D., editor of The Radiological Review, Quincy, Ill. Cloth. Price $1.50; 126 pages. Radiological Review Publishing Company, Quincy, Ill.

Outline of Preventive Medicine. Prepared under the auspices of The Committee on Public Health Relations, New York Academy of Medicine. Second edition. Price $5.00. Paul B. Hoeber, Inc., New York, N. Y.

Practical Obstetrics for Students and Practitioners. By P. Brooke Bland, M. D., professor of obstetrics, Jefferson Medical College; chief obstetrician, Jefferson Medical College Hospital, Philadelphia, Pa. Assisted by T. L. Montgomery, M. D., associate in obstetrics, Jefferson Medical College, Philadelphia, Pa. Price $8.00. F. A. Davis Company, 1914–16 Cherry St., Philadelphia, Pa.

BOOK REVIEWS

Any scientific publication reviewed in this column may be obtained for inspection. Orders for such inspection should be directed to the Medical Library Service, 424 N. Charter Street, Madison, Wis.

The International Medical Annual. A year book of treatment and practitioner's index. Editors: Carey F. Coombs, M. D., A. Rendle Short, M. D. William Wood and Company, New York.

The 50th edition of this medical annual, published in England by a large number of contributors, summarizes the progress made in the field of medicine and surgery within the past year. It may be classified as a dictionary of practical medicine, but in addition has chapters on new pharmaceutical preparations, surgical appliances, and publications of the year.

The dictionary of medicine actually consists of a series of well arranged concise articles which bring up to date a review of the literature on the various subjects discussed. These articles in many instances are like the abstracts usually found in medical journals except that they are more complete and constitute a review of multiple publications with references to the specific articles reviewed. Some subjects are treated much more in detail so that there is a rare occasion for reference to the original publication, for a comprehensive idea of the progress made during the past year. This annual should be of interest as a reference book to all practitioners irrespective of their special interests. The alphabetical arrangement of subject material with frequent cross references and a well compiled index both help to facilitate its ready usefulness. Unlike abstracts usually found in medical journals this publication is well illustrated and includes references following each article. K. L. P.

Internal Medicine: Its Theory And Practice. Contributed by 27 American authors. Edited by John H. Musser, B. S., M. D., professor of medicine in the Tulane University of Louisiana School of Medicine; senior visiting physician to the Charity Hospital, New Orleans. Octavo, 1316 pages, illustrated. Cloth $10.00 net. Lea and Febiger, Washington Square, Philadelphia, Pennsylvania.

This contribution constitutes a comprehensive addition to the medical texts of our day. Its organization differs materially from the existing texts in the illuminating introductions to the several sections. These are particularly useful in dealing with the infectious diseases and constitute a more logical approach to the consideration of the several specific diseases than is ordinarily found in medical texts of this type. Certain of the disease groupings present rather anomalous situations, as, for example, one is surprised to encounter infectious mononucleosis grouped with rheumatic fever, infectious jaundice, sprue and the like, and under the same heading milk sickness would appear to be rather singularly grouped among the diseases of doubtful origin. Naturally opinion will differ as to the proper classification of these diseases, but it would appear that infectious mononucleosis might for the time being at least be more advantageously grouped among the diseases of the blood-forming mechanism and the work of Bulger rather distinctly fixes milk sickness among the intoxications. In every text book there is some inertia in the assimilation of current knowledge, so that it is not surprising that there should be a note to the effect that no commercial supply of the cortical extracts is available for the treatment of Addison's Disease.

In general the necessity for abbreviation for references is apparent, but for reference purposes it is always wise to include the source of information if the contributor's name or the authority is given. Several exceptions to this rule are apparent.

The classification of arthritis is a changing one and perhaps it might have been advantageous to accept the International Nomenclature. Certain duplications occur as, for example, the inclusion of the

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thyrotoxic heart under both cardiac and endocrine sections. This may operate advantageously, but it at least affords the advantage of contrasting viewpoints.

In the section on diseases of the digestive tract illustrative cases are included which afford a further opportunity in the contrast of methods. Certainly this plan has its distinct advantages, although the text as a whole would have been much more voluminous had this form been generally applied.

The text as a whole is so well organized and oriented as to constitute a valuable addition to the student's armamentarium for quick reference and for comprehensive consideration of several topics many of the sections will prove equally valuable to the general practitioner. The important glossary under diseases of the mind is an example of this type and the detailed consideration of the elements in the diagnosis of organic diseases of the nervous system is a very useful feature. The contributors to this volume are, as a whole, relatively young men whose continued interest in their development of their several sections will constitute an assurance of even more useful revisions in the future. The reviewer feels that this text book can be recommended without reservation to the medical student and the general practitioner. W. S. M.

Your Teeth And Their Care. By Carl W. Adams, D. D. S., San Bernardino, Calif. Illustrated. Price $1.25. C. V. Mosby Co., St. Louis, 1932.

This book gives a simple explanation of the numerous questions that daily arise in the offices of dentists and physicians and should be of interest to the layman. Mothers and nurses should be especially interested in this source of information. The chart in the first chapter showing the time at which the deciduous (baby) teeth begin to calcify, erupt, and when they are shed, is of great value, the knowledge of which would prevent the loss by decay of many six year molars. The structure of the teeth and their investing tissues together with function is plainly described.

Irregularities of the teeth are discussed as to form, number, and position, any of which may cause altered function. The pressure caused by impacted wisdom teeth may give rise to nervous disturbances or may cause the teeth in the arch to be crowded out of their normal positions. These should be surgically removed. The x-ray will be of great value in uncovering this type of trouble.

Of the diseases of the teeth the most prevalent is caries or decay which is defined as a breaking down of hard tissues of a tooth by a combination of chemical and bacterial action. In other words, the action of bacteria upon starchy foods hidden away in structural defects causes the formation of concentrated lactic acid which results in the breaking down of tooth structure. Decay may not cause trouble if treated early. Dr. Mayo has said that it is possible for dentistry to add ten years to the span of a man's life.

Pyorrhea is perhaps the most destructive of dental diseases. Pyorrhea alveolaris means a flow of pus from the investing tissues of the teeth. Primarily this is caused by tartar about the necks of the teeth. The irritation then causes the gums to become inflamed and later formation of pus or pyorrhea. This condition when once allowed to occur may be checked but cannot be permanently cured.

Vincent's infection or trench mouth is a mixed infection of the mucous membrane of the mouth caused by two bacteria, the fusiform bacillus and Vincent's spirochete accompanied by ulceration and sloughing.

Three classifications of this disease:

Vincent's gingivitis: Attacks the gum tissue.

Vincent's stomatitis: May spread to the mucous membranes of the cheeks, palate, floor of the mouth, and lips.

Vincent's angina: In severe cases it attacks the tonsils, throat, and respiratory tract, and is many times fatal.

The service of a dentist who understands the disease and who will cooperate with a good physician should be sought immediately. Proper treatment should be started early and carried on until the disease is completely eradicated.

A definite procedure is given in detail for the brushing of the teeth and massage of the gums. The different filling materials are listed together with the indications and contra-indications for their use.

The author, Dr. Carl W. Adams, has succeeded in explaining dentistry and dental operations in a clear and concise manner and the book should be of great value both to the profession and to the public.

Orthopedics in Childhood. By William L. Sneed, M. D., attending surgeon, Hospital for the Relief of the Ruptured and Crippled; Fifth Avenue Hospital; consulting surgeon, French Hospital; Nassau County and North Shore Community Hospitals; instructor, Applied Anatomy Cornell Medical College. Price $5.00. J. B. Lippincott Company, Philadelphia.

The work is of definite value to the general practitioner who comes in contact with orthopedic conditions and who has had only an average amount of orthopedic training.

Its value lies in that it encourages early recognition and diagnosis of orthopedic conditions in children and also gives instruction in the simpler forms of treatment in the prevention and correction of deformities.

The work is divided into eight chapters dealing with regional orthopedic conditions. Each of these chapters is headed by discussion of the anatomy and physiology of the particular region. Three chapters are devoted to specific diseases resulting in orthopedic problems. They include chronic infectious arthritis, tuberculosis and syphilis. Another chapter is devoted to rarer conditions and anomalies. A chapter dealing with the physical agents (electro-

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therapy, high frequency current, hydrotherapy, physiotherapy and thermotherapy) used in treatment and also a chapter of braces should be of great value.

The book is recommended as a valuable edition to the general practitioner's library. H.W.

Treatment of Syphilis. By Jay F. Schamberg, A. B., M. D., and Carroll S. Wright, B. Sc., M. D. Published by D. Appleton & Company, New York. 1932.

This book is a scientific treatise on the treatment of syphilis, based on the uses of arsenic, mercury, bismuth, iodides, malaria and pyretics, separately and variously combined. A very good resumé of experimental work on each of the remedial agents, is given, which forms the basis of subsequent considerations in connection with problems of clinical applications. The major portion of the book is devoted to general principles as well as details pertaining to clinical procedure. Bibliographic references are plentifully given.

All in all, the work appears to be well worth careful study by any and all clinicians who have the responsibility of treatment of syphilis, as well as by investigators in the experimental field. It would appear to constitute a very valuable addition to any medical library. A.L.T.

Functional Disorders of the Large Intestine and Their Treatment. By Jacob Buckstein, M. D., instructor in gastrointestinal roentgenology, Cornell University Medical College; alimentary tract division, roentgen department, Bellevue Hospital. With 60 drawings and 40 reproductions of radiographs. Price $3.00. Harper & Bros., New York and London.

The author presents in a concise, readable form, the results of a wide personal experience, in addition to conclusions drawn from an extensive review of the literature.

This monograph is particularly adapted to the needs of the general practitioner, to whom frequently this type of case presents many difficulties in diagnosis and treatment.

To medical students it should hold an especial appeal, for very frequently these common types of complaint are insufficiently stressed during their medical course.

It deals, in order, with constipation; the mobile cecum; enteroptosis; the differentiation of pain arising from the cecum and right colon, and that due to chronic disease of the appendix; functional hypermotility of the colon; the irritable colon with mucus production; gaseous distention of the large bowel and megacolon.

The sections devoted to treatment—dietary, medicinal and surgical—are excellent. The text is well illustrated with numerous drawings and further enhanced in value by an appendix containing reproductions of radiographs of the subjects treated in the monograph. R.V.V.

Nursing in Nervous Diseases. By James W. McConnell, M. D., neurologist to the Philadelphia General Hospital. Illustrated with 24 engravings. Price $1.50. F. A. Davis Company, Philadelphia, 1932.

The reviewer has been disappointed in this book. There is a distinct need for an adequate text to be used in university courses of nursing in neuropsychiatry. Neurology has been given insufficient attention, being, for the best part, relegated to inclusion in texts on medical nursing. But this fails to satisfy that need. Its chief drawback is incompleteness. An effort has been made to cover some of the common neurological entities, but the disorder which presents the most diverse problems in nursing and social welfare has been entirely omitted, i.e., encephalitis with its widespread effects. The hazards encountered in the care of brain tumors have been overlooked. The feeding of patients with paralysis involving muscles of swallowing and the preparation of food for tube feeding has not received consideration. While poliomyelitis has been included, meningitis, equally important, and, in addition, presenting the problem of serum administration, has not been included. Lacking also are the details of various diagnostic and therapeutic procedures commonly employed in neurological practice in which the nurse plays a part. That a text of neurological nursing should fail to instruct in the preparation of a patient for a lumbar puncture, as well as its purposes and technic, is difficult to understand. Encephalography and lipiodal injections call for the service of a nurse who must be trained in the details that these procedures entail. The author must have purposely omitted reference to use of drugs but it seems to the reviewer that a knowledge of drugs commonly used in neurological disorders is an important adjunct to a nurse's training in neurology. Some neural anatomy must be taught not only to provide a background for the understanding of some of the nursing problems in neurology, but, also, to satisfy state board examiners. The illustrations have been poorly chosen. They have been taken from texts of anatomy designed for the medical students and are labeled in too great detail thus confusing rather than clarifying the text. M.G.M.

Essentials of Pediatric Nursing. By Ruth Alice Perkins, R. N., Graduate of Children's Memorial School of Nursing, Chicago. Illustrated with 55 engravings in the text and 6 full page colored plates. Second edition revised and enlarged. F. A. Davis Company, Philadelphia, 1932.

This book most admirably fulfills its purpose of presenting the essentials of pediatric nursing. The necessary medical groundwork and strictly nursing technic are interwoven into a thorough consideration of the nursing care of infants and children. Special attention is paid to the care of the normal child and a relatively large section is devoted to the subject of child psychology. The common disorders of infants and children, and their management are

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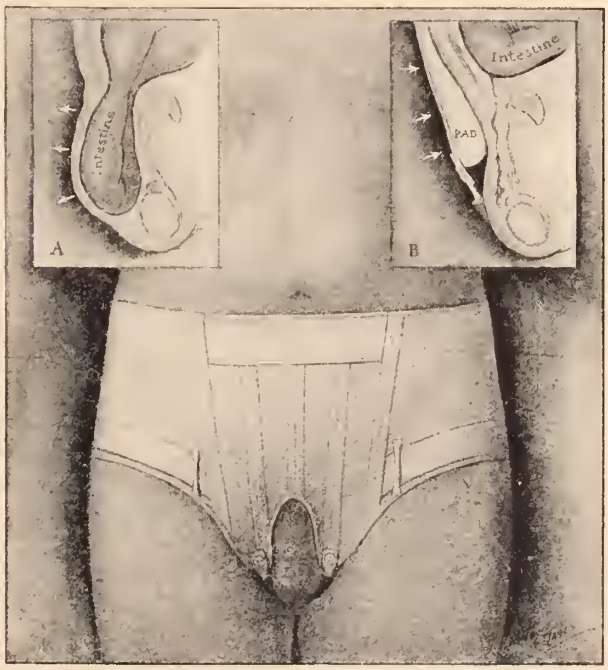

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described clearly and concisely. The chapter on nutritional disturbances is especially noteworthy of mention. This revised edition contains new chapters on communicable diseases and on orthopedic nursing.

The only criticism that can be made is that there is an intentional omission of the methods of calculation of milk formulae for normal infants, and of the indications for the various modifications of cow's milk customarily used in infant feeding. The actual preparation of the various types of milk mixtures and the technic of feeding are described in detail but any information beyond that point is regarded as an infringement on the physician's prerogative. In view of the medical recommendations made in connection with other subjects this policy is not quite consistent with the rest of the book.

Those interested in the teaching of pediatric nursing will find this a valuable book—particularly in regard to an outline for a course in pediatric nursing permitting a consideration of the greatest number of subjects with the proper distribution of emphasis. J.E.G.

Erdmann's Clinics. Stenographic reports of the clinics of John F. Erdmann, M. D., professor of surgery of Columbia University; executive officer in the department of surgery, New York Post-Graduate Medical School; director of the department of surgery, New York Post-Graduate Hospital. 315 pages with 39 illustrations. W. B. Saunders Company, Philadelphia, 1932. Cloth $4.50 net.

This volume consisting of 315 pages includes the reports of cases and the clinical discussion of a variety of surgical conditions as seen by a surgeon of vast experience over an extended period. A few rare and very interesting cases are presented. The volume is well written and amply illustrated, and the ideas of the author are clearly stated. It is marked in several instances by the brevity of the discussions. It does, however, fulfill the wishes of the author that it be used only as a reference volumne. J.W.G.

The Races of Man. Differentiation and dispersal of man. By Robert Bennett Bean, M. D., professor of anatomy, University of Virginia. The University Society, 468 Fourth Avenue, New York, New York.

This volume gives a concise and interesting summary of present knowledge concerning human races, past and present; then origin and dispersal. While it does not attempt to touch more than very lightly upon the medical aspects of physical anthropology it should be of interest to any physician who desires to obtain some knowledge of the broader, biological aspects of mankind. The author's extensive experience in this field of study makes him a competent authority. C.R.B.

Anatomy of the Brain and the Spinal Cord. By William W. Looney, A. B., M. D., professor of anatomy, Baylor University College of Medicine, Dallas, Texas. With 153 illustrations. Second edition, revised. F. A. Davis Company, Philadelphia, 1932. Price $4.50, net.

The commendable features of this book are the organization of the subject matter and its presentation in such a way as to be readily correlated and understood. The use of boldfaced type for paragraph headings and italicized type for the structures described render the book extremely useful and readable. It is not necessary to peruse much irrelevant material to obtain the answer to a particular question. The book, however, is in no sense a reference work, and controversial points are not discussed in detail.

In a subject like that of the anatomy of the central nervous system no textbook can take the place of intensive laboratory study. Reading, dissection, study of stained sections of brain tissue, and physiological significance of component parts are all essential to an adequate comprehension of the subject matter. In preparation of this textbook the author has had foremost in mind the desirability, or even necessity, of correlating structure and function.

Chapters 1 to 4 inclusive deal with general principles of development of the nervous system, histogenesis, neurones and reflex arcs, receptors, effectors, and nerve components. In chapters 5 to 11 inclusive the external and internal structure of the central nervous system are described. Chapter 12 is devoted to a consideration of the general anatomy, composition and function of the cranial nerves. Then there follow, in order, the cerebellum, diencephalon, external and internal structure of the cerebral hemispheres, rhinencephalon, the sympathetic nervous system, and the book concludes with the presentation of twelve typical clinical cases illustrative of organic derangement of function.

In the treatment of the subject matter of the internal structure of the spinal cord, the spinal pathways are considered as functional systems and are here described in their entirety.

The practitioner who has had a laboratory course in the anatomy of the nervous system will find the book most useful in reviewing the content of this subject. The book is most certainly to be recommended to the beginning student. F.D.G.

The Sputum. Its examination and clinical significance. By Randall Clifford, M. D., associated in medicine, Peter Bent Brigham Hospital; assistant in medicine, Harvard Medical School; formerly associate physician and director of pulmonary clinic, Massachusetts General Hospital. Price $4.00. The Macmillan Company, New York, 1932.

This book is devoted to a description of methods used in the macroscopic and microscopic examination of sputum. The more complicated technique of cultural and immunological identification of bacteria, fungi, and other pathogenic organisms found in sputum are not discussed.

It is divided into four sections. One section is devoted to such consideration as collections of speci-

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mens, receptacles for the specimens and methods of disinfections; one section to macroscopic examination; one to microscopic and the last section to clinical interpretations of the methods described.

It is a small book of one hundred and fifty pages, and contains little that may not be found in any standard text on clinical laboratory diagnosis. Many of the methods described are of more importance to the clinical pathologist in planning the laboratory studies to be undertaken with a given specimen than they are to the clinician in arriving at a diagnosis. W.D.S.

Synopsis of Gynecology. By Harry S. Crossen, M. D., professor of clinical gynecology, Washington University Medical School, and gyneologist-in-chief to the Barnes Hospital and the Washington University Dispensary; gynecologist to St. Louis Maternity Hospital, St. Luke's Hospital, and the De Paul Hospital; and Robert James Crossen, M. D., instructor in clinical gynecology and obstetrics, Washington University School of Medicine. 110 illustrations. C. V. Mosby Company, St. Louis, 1932. Price $2.75.

In this pocket manual of 227 pages the authors have included a wealth of material. The book is an abstract of the large text by the same authors, is thoroughly up-to-date, and reflects the same mastery that has characterized the publications of the Crossens. Unlike most books of the same size, the text is easily readable and the illustrations numerous, well chosen, and excellently reproduced. To teachers who like to teach from manuals and to students who like to learn from them, this little book will make a strong appeal. J.W.H.

The Failing Heart of Middle Life. By A. S. Hyman, M. D., cardiologist, Beth David and Manhattan General Hospitals, and A. E. Parsonnet, M. D., attending physician and cardiologist, Newark Beth Israel Hospital, Newark, N. J. With 166 illustrations, some in colors. Price $5.00 net. F. A. Davis Company, 1914 Cherry St., Philadelphia, Pa.

This book presents in a logical, comprehensive and interesting fashion all the essentials of the present day knowledge of a condition which is rapidly becoming more and more prevalent. The authors, recognizing the fact that the average middle-aged cardiac patient consults first the general practitioner, have designed the book primarily for him, and although the more highly technical methods of diagnosis are carefully reviewed, the emphasis is placed on the value of the simple office procedures, particularly a careful history and a thorough physical examination. At the same time the subject matter is sufficiently complete to enable the specialist in cardiology to employ it as a reference book in its field.

Before attempting to discuss the clinical aspects of the disease, the authors describe at length the anatomy of the heart and coronary circulation, and the physiological and pathological changes which take place with each passing decade. Each point is illustrated with one or more appropriate photographs and micro-photographs of pathological specimens. The symptomatology and physical findings are discussed in detail for each stage of the disease. The section on treatment is very complete and contains all of the most recent developments in therapy, including the new "circulatory hormone" contained in "tissue extract."

The writers are to be highly commended for their very determined effort to discourage the indiscriminate use of the greatly over-worked term "myocarditis". They have substituted in its place Dr. Riesman's designation of "myocardosis" to express the myocardial changes associated with a disturbed coronary circulation.

The last section of the book contains several chapters on the medico-legal aspects of sudden death from heart disease with full accounts of a number of illustrative cases. Of distinct value to the man who may wish to delve more deeply into some particular phase of the subject is the extensive bibliography containing over 1250 references to special articles appearing in the medical literature of the world.

In the opinion of the reviewer, this book is a very valuable contribution to a most important branch of internal medicine, and is of value alike to the specialist in cardiology and to the general practitioner. C. W. K.

Diagnosis and Treatment of Diseases of the Thyroid Gland. By George Crile and Associates. 508 pages with 164 illustrations. W. B. Saunders Company, Philadelphia and London, 1932. Cloth, $6.50 net.

This book is prepared by the collaboration of 24 authors and represents the points of view entertained by the members of the Cleveland Clinic staff at the time of writing. It is extremely difficult to review such a work because it is neither beast, bird, nor fish. When the bio-chemist writes about biochemistry and the surgeon about surgery, it makes good reading, but when a philosophically inclined surgeon includes his own explanations of the problems involved, there is much room for debate. The philosophical matter is not presented as one man's thought, but as definite and dogmatic teaching to be accepted by the reader.

The organization of the book includes a great many more or less disjointed chapters. The unity is preserved by two factors. It is all by one clinical group and it is all about the thyroid gland. From a literary point of view, much is left to be desired. Some of the authors have provided their bibliographies in excellent form with index figures helping the reader to find the original reference for his authority for a given statement. Others have given bibliographies which are of little use because large numbers of references are given without indication of which one is used. Still further chapters have no bibliography associated with their citations.

Unfortunately, the authors of some of these chap-

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ters have entirely ignored papers of considerable importance in the journal literature of the last few years. They expressly do not attempt to review the literature completely and yet it is apparent that literature is cited which fits the point of view entertained by the authors.

Some chapters present original research work in fair detail when this has not been published elsewhere. Other chapters, such as the one on adrenals, are highly unsatisfactory in that they do not give enough information to make the chapters significant.

The book is, therefore, a compendium of very interesting material representing the status of thought and work in the Cleveland Clinic in 1932, but it would not be very useful to the general internist or surgeon handling thyroid disease. E. L. S.

The Colon, Rectum and Anus. By Fred W. Rankin, B. A., M. D., division of surgery, The Mayo Clinic; associate professor of surgery, The Mayo Foundation; and J. Arnold Bargen, M. D., division of medicine, The Mayo Clinic, assistant professor of Medicine, The Mayo Foundation, and Louis A. Buie, B. A., M. D., section on proctology, The Mayo Clinic, associate professor of proctology, The Mayo Foundation. With 435 illustrations. W. B. Saunders Company, Philadelphia, 1932. Cloth, $9.50 net.

A volume of some eight hundred pages dealing with diseases of the colon, rectum, and anus. It covers the subject matter very thoroughly, has very good illustrations, and is well written. The clinical material is based on the large clinical material of the Mayo Clinic. The fundamentals are well stressed, and the clinical results well analyzed. It is very thorough and well written, covering the medical and surgical treatment. E. R. S.

Clinical Gynecology. By C. Jeff Miller, M. D., professor of gynecology, Tulane University School of Medicine, chief of the department of gynecology of Touro Infirmary; senior visiting surgeon, Charity Hospital, New Orleans. Illustrated. Price $10.00. C. V. Mosby Company, St. Louis.

This book which is designed and written solely for the teaching of the student is written by a great teacher and an outstanding clinician. The book is thoroughly written and well organized and fulfills the purpose of the author. The field of endocrinology has been brought up to date; therapeutics have been emphasized; and the technique and illustrations of operations are to be commended. R. E. C.

Children's Tonsils In or Out. By Albert D. Kaiser, M. D., associate professor of pediatrics, University of Rochester Medical School; chief pediatrician, Rochester General Hospital; pediatrician, Rochester Dental Dispensary. Illustrated. J. B. Lippincott Company, Philadelphia.

This book presents a consideration of the relationship of the tonsils and adenoids to health and disease in children based on an analysis of results obtained in a study of almost 5000 children over a period of ten years. This analysis, in the main, is concerned with a comparison of the immediate and late results between 2200 children whose tonsils and adenoids were removed and a like number in whom removal of the tonsils and adenoids was recommended but not carried out, and includes such aspects of the subject as the influence of tonsillectomy and adenoidectomy on the incidence of sore throats, "colds", cervical adenitis, bronchitis, otitis media, rheumatism, pyelitis, malnutrition, asthma, etc. In this way many facts of the most fundamental nature in connection with the possible association between diseased tonsils and various clinical manifestations are brought forth.

This book should be read with the most careful attention by everyone having a voice in the decision for or against removal of children's tonsils and adenoids. J. E. G.

Practical Obstetrics For Students and Practitioners. By P. Brooke Bland, M. D., professor of obstetrics, Jefferson Medical College; chief obstetrician, Jefferson Medical College Hospital, Philadelphia, Pa. Assisted by T. L. Montgomery, M. D., associate in obstetrics, Jefferson Medical College, Philadelphia, Pa. Price $8.00. F. A. Davis Company, 1914–16 Cherry St., Philadelphia, Pa.

This new text is a worthy addition to American obstetric literature. The subject matter is well arranged and thoroughly presented in a clear, concise style. Most of the therapeutic procedures reflect Professor Bland's commendable conservatism and his unwillingness to be swayed by many of the popular fads and fancies that seem to infest present-day obstetric literature. The illustrtaions are well chosen, excellently reproduced and the physical appearance of the book is most attractive.

The reviewer wishes to commend particularly the chapter entitled "Obstetric Jurisprudence." The legal aspects of obstetrics are almost wholly ignored in most texts and, indeed, in the instruction of students. The author has given this subject the importance it deserves and teachers as well as practitioners of obstetrics will find this subject adequately presented in this book. J. W. H.

ANTI-VIVISECTION BILL BACK

The Wisconsin Anti-Vivisection Society plans to reintroduce in this legislative session their bill to exempt dogs from vivisection. Blank petitions are now being sent members of the Society under the heading "Petition to Exempt Dogs from Vivisection in the State of Wisconsin."

The petitions will be filed with members of the legislature after the bill has been introduced. A similar measure was killed in the 1931 legislative session with only one Assemblyman voting to support it.

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(Continued from page 51)

cost of hospital care, the kind of care that people need to save them not only to themselves but to the public, large numbers of the people cannot afford it. And it is in these poorer counties, the three-fourths of the counties in the state, where we find the percentage of people that cannot afford to pay hospital care is greatest. And I think that if the plan advocated by the State Society were put through providing that the counties should bear the whole cost of care, the state would be giving up its interest in getting adequate care to that type of people, to the point that only those counties that have the fewest number of such people would be able to pay for it. That is at least the way I look at it.

NOTE FROM DEAN BARDEEN

Mr. Crownhart submitted the proof of my discussion for correction. This discussion was entirely impromptu since I had no intimation that the recommendations were to be submitted at the budget hearing or an opportunity to go over the recommendations previous to the hearing. I have attempted merely a few technical verbal corrections although several of the issues involved might well be treated at greater length. The views expressed are purely personal views since I had no authority to express the views of others. While there is no simple solution of placing adequate medical care within the reach of all in need and opinions may vary as to details of methods of approaching this ideal the most important factor between public and private agencies in working out the problem involved. C. R. B.

The people that are advocating this, that have been active in the State Society for it, are largely people who come from the wealthier counties and are interested in the hospitals that have naturally developed in the bigger cities which mark those counties.

In the poorer counties of the state the number of doctors is much less. The number of people that one doctor has to care for is much greater. In a few counties there is only one doctor to 5,000 people, whereas in Milwaukee there is one doctor to 831 people, and here in Dane Co. one to 747. We have too many here.

I think that this really is a question for the legislature to solve.

VIEWPOINT OF MEDICAL SCHOOL

Now, from the standpoint of the Medical School, the hospital as a teaching institution, we could get along very well with fewer patients than we are trying to care for now, and I think that what Mr. Crownhart said along those lines is substantially true. Also from the standpoint of my original ideas about what the state hospital should be, I still stand by the statements which he quoted from the days when it was established. I am also an advocate of local hospitals doing relatively more for the care of patients than some of them are doing now, so that we will not have an over-centralization at Madison; and we have tried to encourage it by an amendment that was passed in the last session of the legislature for more use of local hospitals, giving the counties the right to send patients to local hospitals at what would be the cost to the county here, and then encouraging a liberal interpretation of that law. We find a difficulty, however, in the bills that come back. The counties, in some instances at least, have sent patients to local hospitals at from $2.50 to $3.50 a day, the county making a liberal estimate of the cost of transportation, and then have had bills come back to the supervisors running to $8 a day, because of extras that have been added on.

Now, that brings me to another point. Mr. Crownhart in the name of the State Society advocates a much more complex accounting system than we have now. We run at an average cost per diem, so that the county knows at least how much the per diem cost is going to be. Some patients cost more and some cost less, but by averaging it up for the year it gives us some idea at least of what the cost is going to be; whereas if we tried to account for every bandage we give a patient and each little thing that is done for a patient, one patient might cost $10 a day and another $2 a day. In Michigan they have attempted exact per patient accounting. It does not save anything in the long run, so far as actual cost of the patient cared for at public expense is concerned, but it adds to that cost because such accounting is very expensive. We have tried to keep our accounting as simply as possible.[1]

Mr. Crownhart mentioned the fact that the cost of taking care of patients has not been reduced. Last year we returned $90,800 to the state, and that actually reduced the cost of patients cared for at public expense to $4.05. We had 175,000 patient days of such care. So that we are running at less, and giving the taxpayers the benefit of the reduced amount. We have even just at present counted heat and light as part of the hospital expense, although from the standpoint of the Medical School we look upon furnishing heat and light to the hospital the same as furnishing it to the cow barn, as part of the laboratory expense of teaching.

But the problem of aiding the local hospitals to give more care for those that have inadequate resources, I think, is a serious one and one that ought to be tackled. Personally, I do not think the right

[1] EDITOR'S NOTE: Mr. Crownhart did not advocate an accounting system that would show the costs for each patient. He did advocate a system that would show the actual costs of caring for state–county charges as distinguished from part-pay and pay-patients.

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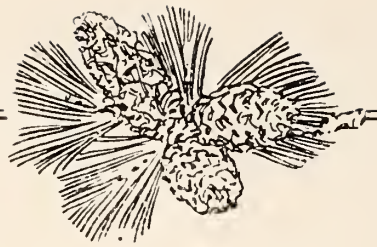

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The Role of Upper Respiratory Infections as a Cause of Death in Immature Infants*

By A. B. SCHWARTZ, M. D.**
Milwaukee

Prematurity with its associated conditions continues to be the greatest cause of death among infants. The very slight results so far obtained in reducing the mortality rate at this age period produces a feeling of either futility or indifference, so that many have come to feel that these deaths are largely beyond control. Some even maintain that this high neonatal mortality is a biologic necessity, a weeding out of the congenitally weak. This attitude is also encouraged by the practice of listing thousands of infant deaths under the term "congenital debility". Numerous infant deaths from improper feeding or infection are listed under this vague diagnostic phrase. That the state of congenital debility is a phase in the life of every immature infant is self-evident. Such experiences as this paper records indicate that, at least as far as a large number of these infants are concerned, the presence or absence of infection determines whether the infant having congenital debility dies or lives. In other words, the problem belongs in the field of preventive medicine in the same way that Credé's prophylaxis for ophthalmia.

The present study records the results obtained in the care of immature infants, and calls attention particularly to the factor of upper respiratory infection as a cause of death in these infants. This factor, while not altogether unappreciated, has not received its due importance in studies of the problem, nor has the knowledge that such a factor existed sufficiently influenced the existing set-up for handling these small infants.

The material of this study comprises two distinct groups selected from the records of the Milwaukee Children's Hospital and from those of the Milwaukee Infant's Hospital. From these records, only those whose admission weight was less than five pounds were selected. The use of this arbitrary weight line and of the term "immaturity" in accordance with Ylppö's (1) suggestion, may be said to represent the pediatric conception as opposed to the term "prematurity", which designates the obstetrical conception of an infant born before term. Inasmuch as obsterical histories obtained in children's institutions are meager and frequently unreliable, this use of the term "immaturity", as measured by body weight, gives a better working idea of the problem.

TEN-YEAR STUDY

The first part of the paper deals with the results obtained at the Milwaukee Infants' Hospital over a period of approximately ten years. This hospital, now discontinued, took care only of infants with nutritional difficulties. While there was no absolute exclusion of other types of cases, sick infants were not ordinarily admitted, these being referred to the Milwaukee Children's Hospital. The institution was, therefore, unusually free of infections so frequently seen in pediatric institutions. The patients were taken care of by nurse girls instead of by the usual student nurses. No nurse girl had more than four infants under her charge, and the hospital was rarely taxed to its capacity. With a comparatively small number of patients, the infants received a more personalized service than is usually possible in crowded charity hospitals. The patients in this group were under the medical supervision of eight attending physicians. Improvised incubators made from ordinary cribs were used, additional heat being provided by electric heaters

* From the Milwaukee Children's Hospital and the Department of Pediatrics, Marquette University Medical School.

** With technical assistance in the statistical study by Alice Richter.

in two or three bed wards and by hot water bags in the cribs. No wet nurses were available, and breast milk was provided in only exceptional circumstances when the baby's own mother sent milk to the hospital.

Of 89 immature infants admitted to the Milwaukee Infants' Hospital during the period studied, 46 died. Fifteen of these deaths occurred in the first 48 hours of hospital stay. These were usually received at the hospital in moribund condition—cyanotic, chilled, and even lifeless. Excluding these 48 hour deaths, leaves 31 who died after 48 hours—a mortality rate of 42%. Of these 31 infants, the causes of death were the following:

Upper respiratory infection	8
Alimentary dyspepsia	6
Congenital anomalies	5
Cerebral hemorrhage	2
Sepsis	2
Tuberculosis	2
Hypothermia	2
Causes unknown	2
Umbilical infection	1
Congenital debility	1

The percentage distribution of causes of neonatal deaths will vary greatly with the age period during which the observations are made. Forty-eight hour deaths are in the main related to obstetrical factors, Adair (2) regarding birth trauma responsible for about 50% of neonatal deaths. In the period when the immature infant is under pediatric supervision, the importance of birth trauma becomes less evident.

Arranging the 31 deaths in this series according to hospital stay, it is noted that in the first week the largest probable cause of death is cerebral hemorrhage. Congenital anomalies are a factor up to four weeks. Alimentary dyspepsia appears as a cause of death after the second week—herein illustrating the piling on of poor feeding results. After three weeks, the most important cause of death is upper respiratory infections. Babies who have survived as long as three weeks would apparently survive if we could prevent this prolific cause of immature infant deaths.

Eight out of 31, or 25%, died of upper respiratory infections despite the meticulous care given these tiny infants, and despite the fact that this institution dealing primarily with nutrition cases had a very low incidence of frank respiratory infections. It is interesting to note that Hottinger (3) in Basle reported 30% deaths from the same cause. His report dealing with five years' experience at the Basle Children's Hospital constitutes the best single result that has come to my attention*. His death rate, having been computed entirely from post mortem material, is more exact than the one given here. It is possible that routine post mortem examination in the Infants' Hospital material would have shown a greater percentage of deaths from this cause, as pneumonia is often a cause of death where the clinical findings alone do not suggest the diagnosis.

CHILDREN'S HOSPITAL STUDY

The second group of cases is taken from the Milwaukee Children's Hospital, regarding all those in the "immature" classification whose admission weight was less than five pounds. This study covers a period of about ten years. The background in this group may be said to be that of the usual metropolitan type of children's hospital. The premature infants were cared for in a separate room, the usual rules of individualized technique prevailing. Improvised incubators were used. Breast milk was only rarely supplied.

Of 157 cases of immaturity recorded at the Milwaukee Children's Hospital, 114 died. Excluding 56 that died in the first 48 hours, leaves 101. Of these, 58 died, a mortality rate of 57%. A careful consideration of all the data on each record permits the following classification of the causes of death:

Upper respiratory infection alone	13
Alimentary dyspepsia with upper respiratory infection	13
Alimentary dyspepsia alone	16
Congenital debility with alimentary dyspepsia	3
Congenital anomalies	2
Cerebral hemorrhage (probable)	2
Unknown infection	1
Miscellaneous	4
Prematurity (Hypothermia)	4

* Kate Freund's report of a 12.9% mortality in the new Kinderklinik at Dresden, reported before the last Deutschen Gesselschaft für Kinderheilkunde, is not comparable, since it covers only one year's experience.

Since post mortem examinations were not done in the greater number of instances, the diagnoses obviously rest on the clinical impressions given in the particular cases. As here recorded, these impressions embrace a critical consideration of the clinical notes, nurses' notes, and post mortem findings when done. Clinical symptoms alone may obviously not give the clue to the actual disease process in a premature infant—cyanosis may result from cerebral hemorrhage, pneumonia, aspiration of feeding or be associated with even less understood vasomotor phenomena. According to Ylppö undiagnosed cerebral hemorrhage is often the cause of death in the very small immature infant. An immature infant with a cerebral hemorrhage may develop an upper respiratory infection, in which case the relative importance of the causes of death is difficult to appraise. Many cases clearly exhibit evidence of several factors. Finkelstein (4) expresses this diagnostic difficulty as follows: "Uberhaupt erweist sich die Verknüpfung alimentärer, bakterieller und constitutioneller Einflüsse bei der Analyse als so innig, das in gegebenen Fällen die Einreihung in eine einzige Kategorie den Verhältnissen Gewalt antun würde".

In the present series, it seems most difficult of all to evaluate the relative sequence of alimentary dyspepsia and upper respiratory tract infection. There are reasons for believing that, given complete freedom from upper respiratory infections, the symptoms of alimentary tract upset might often not occur in a number of these infants.

Of 58 deaths in this Children's Hospital series, 26, or about 45%, may be definitely ascribed to upper respiratory infection alone or to a gastrointestinal upset with an upper respiratory infection. Some of these were admitted to the hospital with upper respiratory infections, others developed the infection after admission.

Czerny (5) says that premature infants who survive the first two weeks, during which birth injuries take their toll, have almost the same chance of survival as the mature infant. What these immature infants lack in constitutional stamina is made up for by the increased conscientiousness on the part of the caretaker to keep them living—particularly providing breast milk for them. Pediatrists in practice, thinking back on the immature infants they have seen thrive in homes of all sorts and conditions will generally agree with Czerny's dictum. The statement, however, does not hold true as applied to immature infants cared for in children's hospitals, as a perusal of the "hospital stay" column in Table 1 will show. Eliminating all clinical impressions and drawing conclusions from those instances alone in which the diagnosis of pneumonia was confirmed by necropsy, we find that out of 13 such instances, the respiratory infection actually developed after two weeks hospital stay in all but two. It is plain that as far as the hospitalized immature infant is concerned, the largest single danger to life is upper respiratory infection. Neumann (6) has shown that the incidence of hemolytic streptococci in children's throats is in direct proportion to the length of hospital stay. In children examined during the first three days, only 8.3% exhibited hemolytic streptococci. In those who stayed 13 or more weeks, 65.7% showed hemolytic strep-

TABLE I

Pneumonia Deaths (Diagnosis Confirmed by Necropsy) Showing Day of Hospital Stay Respiratory Symptoms Developed

(Milwaukee Children's Hospital)

Hospital Number	First Weight	Last Weight	Hospital Day Respiratory Symptoms Developed
17878	2 lbs. 10 oz.	4 lbs. 2 oz.	35
20613	2 lbs. 6 oz.	4 lbs. 14 oz.	14
24485	3 lbs. 3 oz.	4 lbs. 14 oz.	20
13083	3 lbs. 5 oz.	3 lbs. 5 oz.	15
17026	3 lbs. 3 oz.	5 lbs. 5 oz.	33
23970	3 lbs. 15 oz.	3 lbs. 1 oz.	4
18020	3 lbs. 12 oz.	5 lbs. 8 oz.	16
20392	3 lbs. 14 oz.	5 lbs. 4 oz.	58
20407	3 lbs. 8 oz.	3 lbs. 12 oz.	6
20708	3 lbs. 1 oz.	4 lbs. 15 oz.	65
16240	4 lbs. 5 oz.	5 lbs. 2 oz.	47
17143	4 lbs. 6 oz.	6 lbs. 9 oz.	20
19297	4 lbs. 5 oz.	7 lbs.	60

tococci. The direct relationship to hospital stay is illustrated in the following table.

Length of Stay	Number of Children	Hemolytic Streptococci
1 day to 2 weeks	55	7 = 12.7%
3 to 4 weeks	29	5 = 17.2%
5 to 6 weeks	19	7 = 36.8%
7 to 8 weeks	21	9 = 42.9%
9 to 10 weeks	18	8 = 44.4%
11 to 12 weeks	7	5 = 71.4%
13 weeks or more	32	21 = 65.7%

HOME CARE

Brennemann's (7) penetrating essay on "The Infant Ward" presents the challenge of this danger as applied to hospital wards for infants. He calls attention to the high morbidity and mortality and suggests measures for prophylaxis. First of these measures he states as follows: "No patient should be admitted to an infant ward who can, with reasonable assurance, be taken care of in an out-patient department or in a good home or foster home".

This dictum might be modified as far as immature infants are concerned by the complemental remark that: In such instances where the home or foster home is judged inadequate, provision should be made to care for immature infants in the obstetrical department of a general hospital.

It is generally agreed that the maintenance of body temperature, the use of breast milk and the avoidance of upper respiratory infections, are essential requirements in maintaining the lives of immature infants. The first need calls for suitable mechanical devices which are much more intimately related to an obstetrical department. The second requirement, the availability of breast milk, is more successfully met either by keeping the baby close to its mother in its own home or by placing it on an obstetrical floor. The frequency of upper respiratory infection in all institutions where infants are massed militates against such places for the care of immature infants.

Twenty years ago at the first meeting of the American Association for the Prevention of Infant Mortality, Knox deprecated those causes of a high infant mortality rate "sanctioned by long habit and protected by well meaning ignorance". Habit and convenience alone, not good results, sanctions the custom of caring for immature infants in children's hospitals. An immature infant whose mother has a good breast milk supply need not be admitted to a children's hospital simply because it is below five pounds in weight. Poole and Cooley (8) have recently reported the results obtained with premature infants in supervised homes. They offer an excellent illustration of the advantages of such care over the straight institutional method of handling these infants. An immature infant may, under careful follow-up work, be successfully cared for in its own home, in a foster home, on the the obstetrical floor of a general hospital, and in certain selected instances, in a children's hospital. The present high mortality of such infants is a challenge to our existing practices directed to their care.

SUMMARY

1. Upper respiratory infection is the largest single cause of death in the immature infant after the first 2 weeks of life.

2. In an infants' hospital limiting its patients to nutritional problems, 25% of the immature infants died of upper respiratory infection.

3. In a series of immature infants treated in a children's hospital, 45% of the deaths were due to upper respiratory infection.

4. In thirteen instances of death from pneumonia confirmed by necropsy, the respiratory infection developed after two weeks stay in all but two instances.

5. Children's hospitals, on account of their unusually high upper respiratory infection mortality rate, are not an ideal location for the care of immature infants.

6. An obstetrical floor of a general hospital, or supervised homes using Speedwell technique, should give a lower incidence of respiratory infection and a lower mortality rate among immature infants.

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Otitis Media and The Family Physician*

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In selecting a title for this paper, I have purposely avoided the use of the term "general practitioner." I fear that in this age of specialization, this term is often used in a spirit of derision and to imply a jack-of-all trades and master of none. "Family physician", on the other hand, conjures up a picture of a kindly, self-sacrificing individual who is the guardian of his patients' health and who has their interests at heart. It is to him that patients bring their troubles, big and little, and it is his advice that guides them in the selection of men who may be devoting their time to limited phases of medicine. He is an essential and vital cog in the field of medicine today and his interests should be well guarded. It is to him that I wish to make this appeal for a more thorough consideration of a very common complication of the diseases that he is often called upon to treat.

Otitis media, and I refer to the acute form, is a disease of childhood and early adult life. Rarely does it occur past middle life except as an acute exacerbation of an old, chronic condition. It is peculiar in the fact that it is seldom seen first by the otologist. The family physician is first on the firing line here as well as in most other acute conditions, and too often he is denied the credit as well as the remuneration due him for what he may have done. All too often, however, otitis media is considered too lightly by both the family physician and the otologist. When we stop to consider that this disease may, and often does, lead to a partial or total destruction of the important special sense of hearing, its prevention and proper treatment become obvious. Painful, acute conditions that the human body is subject to have a way of manifesting themselves in the middle of the night, and this applies to the acute ear. The result is that too often the tired doctor prescribes for its relief over the telephone.

If we picture the middle ear as an accessory cavity to the nose and throat, the etiology, pathology, and treatment of otitis media becomes much easier to understand. The cavity of the middle ear is about the size of a large pea. Its lateral border is the tympanic membrane and its internal border is the structure of the internal ear. Posteriorly, it connects with the mastoid cells through the attic and antrum, and anteriorly and medially, we have the important area from the standpoint of etiology and pathology, namely, the internal opening of the Eustachian canal. This canal can be described roughly as a double funnel in shape, one funnel opening into the post-nasal space at about the level of the middle meatus, while the other opens into the middle ear. The narrow, medial portion is known as the isthmus. The mucous membrane lining the canal and the middle ear is continuous with the mucous membrane of the naso-pharyngeal space. This anatomical fact explains the etiology of acute middle ear disease. Any acute pathology in the nose or throat may be complicated by otitis media. The morbid process merely has to extend up the membranous lin-

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ing of the Eustachian canal past the narrow isthmus to invade the middle ear. Swelling and exudation soon seal up this canal and we have the chain of symptoms of otitis media. Of course, there is always the possibility of infection reaching the middle ear through trauma or by way of the blood stream, but this occurs so rarely that for practical purposes we can consider otitis media as a complication of nose or throat disease.

ETIOLOGICAL FACTORS

Let us here consider the nose and throat diseases that are the common etiological offenders in otitis media. The chief disease, of course, is the common cold. This, no doubt, is due to its great prevalence during certain seasons and to the multiplicity of the organisms invading the structures during a cold. Next in rank come the contagious and exanthematous diseases of childhood that exhibit nose and throat manifestations, such as scarlet fever, diphtheria, whooping cough, measles, etc. Epidemics of influenza are often marked by numerous complicating cases of otitis media. Add to this the fact that a great percentage of children have a constant and more or less chronic pathology in the naso-pharynx, namely, adenoid growths and hypertrophied tonsils, and the prevalence of otitis media is readily explained. Bacteriologically, the most frequent organisms invading the middle ear are the streptococcus in its various forms, the pneumococcus, and the staphylococcus, in the order named, less frequently the diphtheria bacillus, the colon bacillus, the tuberculosis bacillus, and others may be the causative agent.

Most of these etiological diseases are of such a nature that the otologist is not consulted by the family. Often, the family physician does not see the case until complicated. Too often, the family attempts to treat the milder infections and their complications and the patient is deprived of all but household or drug-store remedies. The remedy most frequently employed by the family for ear complications is a mixture of phenol and glycerine, usually of about a ten percent strength. This treatment is often instituted without any attempt being made to examine the acute ear. It is a strange situation but a true one. Let a child develop a mild type of "sore eyes" and immediately vigorous and adequate treatment is instituted. The same patient may have a recurrent discharging ear and all that is done for it is an occasional washing and the family waits patiently for the child to outgrow the condition.

There is no reason why the family physician cannot adequately treat the ordinary acute ear. The first essential is that he provide himself with an otoscope, preferably a self-illuminating one. Any surgical supply house can provide him with one and the cost is not excessive. The next essential is that he learn to use it and to distinguish between the appearance of a normal ear and a sick one. Recently, I had occasion to treat a painful ear that had had the usual phenol-glycerine instillations and hot fomentations. Examination revealed a paper wad that the child had pushed in himself. It is evident in this case that no one had made even a casual examination before starting treatment. Ridiculous blunders of this type are easy to avoid by the use of the otoscope.

There are certain land-marks on the normal drum with which every physician should be familiar. Roughly, the drum is divided into three segments by the attachment of the long handle of the malleus to the inner aspect of the drum. This attachment is readily recognized by its prominence and by the increased vascularity of the area. It should be the first thing to look for in an ear examination. Above the upper attachment of the malleus we have an area known as the membrane flaccida which occupies a small segment of the drum. The drum proper is a pearl-grey membrane, rather glistening in the healthy state. A ball-shaped tip marks the lower extremity of the handle of the malleus and from here extends downward and forward the cone of light to the inferior border of the drum. In the middle ear disease, these relations become altered, and the physician soon learns to distinguish bulging, retraction, or other distortions.

In treating middle ear disease, early drainage must be emphasized. The same surgical principles that apply elsewhere in the body apply here. I have been told repeatedly by

busy practitioners that they seldom if ever lance an acute ear, but wait until spontaneous rupture occurs. I shudder to think of the consequence if this line of reasoning were carried out regarding confined pus in other parts of the body. It is true that the tympanic membrane will usually rupture spontaneously; nevertheless, the patient is forced to undergo a great amount of unnecessary suffering, and the danger of complications is increased. The time to rupture the drum is as soon as there is bulging. The cutaneous outer layer of the tympanic membrane often shares in the general cutaneous redness of acute febrile disease and is, therefore, not a good criterion to follow in deciding when to do a paracentesis, but when there is bulging, it is a sure sign of pressure back of the drum and relief is indicated. One should not be discouraged if there is not an immediate gush of pus, and often several hours elapse before drainage starts.

ESSENTIALS IN PARACENTESIS

A word as to the proper method of doing a paracentesis. It is advisable to give children some form of an anaesthetic. A few whiffs of ether or chloroform are sufficient. The anaesthesia need not be long or is it necessarily a hospital procedure. The operation need not take over a few minutes and can be done in the office or home. Where gas is available, it is the ideal anaesthesia. Where general anaesthesia is contraindicated, a mixture of equal parts of phenol, cocaine, and methol applied to the drum is sufficient. The location of choice for the incision is the posterior quadrant of the drum, back of the attachment of the malleus. Some authors advocate a curved or horse-shoe shaped incision, but in actual practice this is almost impossible to accomplish. The essential thing is to be sure one pierces the drum and that the opening is large enough to permit free drainage. The puncture will usually be followed by the appearance of a drop or two of blood and pus may make its appearance. There need be little fear of an opening in this location not healing. The difficulty is usually that healing occurs too quickly and that the operation may have to be repeated. While I do not advocate the promiscuous opening of the drum on suspicion, still little harm is done by the procedure. If the posterior segment is selected, healing rapidly takes place in nearly all instances without any loss of function. Perforations in the membrane flaccida and anteriorly to the long handle of the malleus do not heal as readily and are more apt to leave a permanent opening. The advantage, therefore, of early paracentesis over spontaneous rupture is that the site of perforation is not left to chance but is selected in the area where healing occurs most rapidly and where there is little danger of permanent damage to function.

After drainage has been established, there are a few essentials to be remembered. The first is cleanliness. By all means, keep the external canal free of pus and crusts. This can best be maintained by instilling a few drops of peroxide followed by mild douching with warm saline or boric solution, avoiding undue force. This procedure should be carried out as often as is necessary to keep the external canal clean, every one or two hours if need be during the day. Some authors advocate a wick in the external canal to facilitate drainage, but it is almost impossible to carry out this procedure except in hospitals. With regard to antiseptic solutions, all of them have been used and all have their advocates. All the antiseptic dyes such as acriflavine, mercurochrome, gentian violet, have in turn been lauded as having specific merits in otitis media. The salts of silver as argyrol, neo-silvol, protargol all have their staunch advocates and may have some value in retarding bacterial growth. The difficulty is that they seldom reach the area involved. Zinc ionization and diathermy have been used with varying success by different men. My personal preference when I use any antiseptic is a five percent boric acid solution in alcohol. This solution is more apt to enter the middle ear through a small perforation than some of the heavier fluids. Its disadvantage is that it is quite painful. Still, cleanliness and maintenance of adequate drainage are the two important factors in the treatment of otitis media. Gentle suction may be used to promote drainage, but care must be taken not to cause hemorrhage. General dietary measures and the building up of the patient

are of vital importance as well as a vigorous treatment of the etiological disease. Here, as in a great many other diseases, more can be accomplished by prevention than by cure. The segregation and prevention of the contagious diseases certainly reduces the incidence of ear diseases. The removal of adenoids and tonsils in children who are subject to repeated colds by eliminating the constant irritation of bacterial growth and by reestablishing the patency of the Eustachian canal in the post-nasal space helps to prevent ear complications. The use of proper diet and the administering of cod liver oil or its vitamin-containing substitutes improve the general well-being of the child and thus lessen its susceptibility to ear infection.

COMPLICATIONS

Like appendicitis, otitis media is to be feared because of its complications. Disregarding the damage that may be done to the organ of hearing, the chief dread is mastoiditis with its chain of potential complications. Meningitis, brain abscess, lateral sinus thrombosis, and even lung abscess are the lurking possibilities one should keep in mind when he undertakes the treatment of an innocent looking, inflamed middle ear. Unless given the proper attention, the best one can expect from repeated attacks of otitis media is that the morbid process will become chronic with its train of disagreeable symptoms. Every practitioner is familiar with the unfortunate victim of a chronic discharging ear, with its foul odor. Most of these patients have lost all hope of ever being rid of the disease and have resigned themselves to going through life without any chance of relief.

While it is not the province of this paper to go into the complications of otitis media, still I cannot resist the temptation to add my little weight to the vast preponderance of opinion urging early surgical intervention in case of mastoid complications. As soon as there is positive evidence of an acute mastoid, nothing is to be gained by an attitude of procrastination. The sooner one establishes thorough and adequate surgical drainage, the less danger there is of serious or even fatal complications. As in appendicitis, I have yet to hear of a case of acute mastoiditis being operated on too early, but I do know of several cases that were operated on too late and just as in appendicitis, these are the cases that may prove fatal.

Again, let me urge the adequate treatment of acute middle ear disease. Too often the condition is dismissed lightly and without any consideration of the probability of permanent disability in the form of loss of hearing or chronic discharge. Too often the patient is seen once by the doctor who prescribes hot anaesthetic ear drops and who promptly forgets the entire matter. If he is too busy or does not care to trouble himself with the proper care of this all too common condition, it is his duty to his patient immediately to refer the case to someone who will give it proper attention. By devoting a small amount of time and effort to impressing upon the patient and family the possibilities of permanent damage, he will be rewarded by the personal satisfaction that comes from a task well done.

CONCLUSIONS

Otitis media is a common complication of all contagious and upper respiratory diseases of childhood and early adult life.

It is commonly considered very lightly by the laity, by the family physician, and oftentimes by the specialist.

Its proper treatment consists of early diagnosis, early drainage, and attention to the general well-being of the patient.

Removal of diseased tonsils and adenoids and the segregation and control of infectious diseases decrease materially the incidence of otitis media.

The University Extension Division reports that many physicians have applied for reprints of the 1932 postgraduate lectures on Obstetrics and Gynecology, offered by Dr. Otto H. Schwarz and Dr. Everett D. Plass, and that copies still are available to the profession anywhere. Twelve lectures in mimeograph form, comprising this year's medical extension program in that subject, under the Society's sponsorship, will be sent for two dollars upon application to the University Extension Division at Madison.

The Relation of Infections of the Pelvic Organs and Diseases of the Eye*

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Diseases of the female pelvic organs have been considered in their relationship to various functional disorders and diseases of organs besides the eye. In many cases of infection of the cervix, patients complain chiefly of nervousness, fatigue, stomach trouble, constipation, headache, neuritis, and heart trouble. Many reports can be found in the literature concerning pelvic diseases of women that bear testimony to the relief of these symptoms after treatment of the disease or correction of faulty function of the generative organs. In connection with disorders or diseases of the eye, the following may be noted: (1) reflex; this is commonly seen as eye ache associated with headache, transient functional amblyopia, hysterical blindness, and changes in refraction; (2) systemic; such as ocular disorders associated with menorrhagia, menosepsis, menostasis, and menoplania, congestion of the conjunctiva, iris and ciliary body; these transient changes in the visual fields and of visual acuity are brought about through vasomotor instability or hypersensitivity to menstrual toxin; varying in degree with the general condition of the patient, and (3) metastatic infections from cystic cervicitis, endometritis, salpingitis, or pelvic abscess. Since the cervix has come to be regarded as a focus of infection from which metastatic infection may spread, or from which toxins may be absorbed, giving rise to acute and chronic diseases in remote organs, the incidence of such infection reaching the eye has been studied in The Mayo Clinic by Rosenow, Moench, Nickel, Von Lackum and others, in collaboration with my clinical observations. The third group, that of bacterial infections, is of interest chiefly because the lesions of the eye associated with pelvic inflammation are usually destructive to the cornea, sclera, and uveal tissues, and are preventable in most cases.

Inoculation of animals with cultures of streptococci from the secretion from the cervix has shown not only a high degree of virulence but elective localization for the tissues or organs of the animal corresponding to the affected parts of the subject from whom the cultures were made. The results of injection into animals of cultures of bacteria from foci of infection around the teeth, tonsils, prostate gland and cervix, show quite clearly the predominant virulence of strains of green-producing streptococci. This is the organism recovered from experimentally produced lesions in from 30 to 90 per cent of cases. In 1926, Benedict, Von Lackum, and Nickel reported that after injection into sixteen rabbits of six cultures made from the cervices of six patients who had lesions of the eye, macroscopic lesions of the eye developed in five (31 per cent). Similarly, eighteen cultures made from the prostate glands of eighteen patients who had lesions of the eye were injected into forty-five rabbits, and macroscopic lesions of the eye developed in thirteen (29 per cent). Thus, in a total of sixty-one rabbits which had been injected with these twenty-four strains, lesions of the eye developed in eighteen (38 per cent), in contrast to 7 per cent of 181 animals that had been given injections of seventy-nine strains obtained from teeth, tonsils, prostate gland, and cervices of patients whose conditions were not definitely diagnosed. In another series of experiments with cultures from teeth, tonsils, prostate glands and cervices, 335 strains from patients having lesions other than those of the eye were injected into 798 animals, and lesions of the eye developed in less than 1 per cent. When strains from the prostate glands and cervices of patients with lesions of the eye were injected, lesions of the eye developed in 30 per cent of the animals.

Experiments on animals are often disappointing in that chronic low-grade inflammation of eyes does not follow inoculation of cultures obtained from foci of persons suffering from such conditions. The exact con-

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ditions found in the human being are not duplicated in the inoculated animal. Results of experiments on animals similar to those quoted have been obtained repeatedly, however, by different investigators. One cannot escape the conclusion on experimental grounds alone that a definite relationship exists between acute inflammatory lesions of the eye and infection in the genito-urinary organs of both sexes. When to this is added an ever increasing number of clinical observations of this relationship, the method of control of the disease becomes a study of significance to the surgeon as well as to the ophthalmologist.

Rosenow stated: "The frequent occurrence of lesions about the ciliary body or the iris and the limbus needs special emphasis. This might be considered due to the fact that here, as in the structures about the joints and the more tendinous portion of muscles, there is a gradation from an abundant to a very scanty blood supply, and hence a gradation of the supply of available oxygen, thus inviting localization and affording opportunity for the growth of bacteria; a circumstance which for the same reasons would make for lesions by circulating toxic substances, no matter from what source."

Moench studied the cervical flora in eighty-two miscellaneous cases of leukorrhea, and noted that purulent or seropurulent discharge was characterized by many streptococci, both aerobic and anaerobic. The mucoid leukorrhea, on the other hand, was productive of relatively few streptococci, but contained a higher percentage of gram-positive bacilli, colon bacilli, and other members of the vaginal, vulvar and intestinal flora. The pathway from the pelvic focus to the eye is by the way of the blood. Obviously only a few bacteria can infect the blood without setting up a reaction. They cannot travel in great numbers, neither can toxic substances be present in amount sufficient to give rise to thermal reaction or to specific antibodies. That there are bacterial emboli in the ocular tissues has been shown repeatedly by bacteriologic and histologic methods. "In no field, perhaps, is there more convincing clinical evidence of the causal relationship of focal infection to disease in remote parts of the body than that of diseases of the eye. In the light of the newer knowledge, foci of infection wherever found, should be looked on as a place where favorable conditions are afforded for entrance into the blood stream or lymph stream of bacteria and their toxic products, and where they may acquire or maintain peculiar or relatively high invasive power. They make for a forced relationship between parasite and host."

The elective localization of bacteria in regions of limited blood supply according to Rosenow's explanation may account for nodular scleritis and episcleritis around the margin of the cornea and in the sclera over the ciliary body. In 1924 I called attention to the relationship of this disease to the infection of the cervix. Exacerbations of ocular inflammation were found to be coincident with menstruation, an observation that had been mentioned by de Schweinitz years before. Many patients with chronic or recurrent scleritis had been treated with tuberculin because of the teaching that "anterior nodular scleritis is always due to tuberculosis." Foci of infection about the teeth and tonsils had been corrected, but if the cervix had been regarded as a focus nothing had been done. The result of treatment of the pelvic disease by local measures and vaccine was shown to have an immediate effect on the disease of the eye, a circumstance which could hardly be true if the disease had been due to tuberculosis. The relationship between scleritis and pelvic infection is no longer in doubt. The effectiveness of treatment, however, was watched in the same series of cases as those reported in communications of 1924 and 1927 and in others seen since those reports were published.

Moench alluded to the treatment of cystic cervicitis by cautery and amputation. She wrote: "In recent and mild endocervicitis, when the canal is dilated and the tissues are spongy, the linear cautery of the walls of the canal, lightly applied and spaced to avoid stricture, is often more effective and economical of time than antiseptics and dyes locally applied. In the treatment of simple erosions the linear cautery is especially efficacious. In older women when the cervix is extensively involved, high amputation may

be warranted. In selected cases of chronic tubal infection or high and extensive endocervicitis in the presence of a disease of the eye rapidly compromising the vision, abdominal hysterectomy and salpingectomy may be considered. In all cases, treatment should be as conservative as is consistent with eradication of the focus and the importance of the ocular condition."

Anterior scleritis is a chronic disease of the sclera over the ciliary region of the eye. The nodules, 4 to 8 mm. in diameter, raised, red and painful, occur near the corneal limbus. The underlying uveal tissue is always more or less involved leading to vitreous opacity, loss of accommodation and cataract. The cornea becomes cloudy in a triangular area with its base at the limbus near the sclerotic nodule. It often begins in the latter part of the second decade of life and lasts for years with increasing cloudiness of the cornea and thinning of the sclera. Quiescent cases are recognized by the characteristic blue appearance of the circumcorneal region and nonvascular sclerosing keratitis. Marked bulging occurs through the excessively thinned sclera (intercalary staphyloma). The disease may progress for several years, leading to destruction of the eye. The patients are usually young women; the eye gradually becomes more changed during the third or fourth decade, and useful vision is lost in middle age. There is no parallel between the severity of the disease of the eye and that of the cervix. Some of the most serious types of scleritis have been found in cases in which cervicitis is mild, but mucopurulent leukorrhea teeming with streptococci is present. On the other hand, mild scleritis was found in cases of extreme intra-uterine infection. Usually, however, the most persistent cases of scleritis were found associated with chronic cystic cervicitis with extension into the walls of the uterus.

Cauterization or amputation of the cervix to eradicate the infection has produced good results in some cases. Masson and Parsons stated: "The indication for cautery or amputation of a hypertrophied, eroded, cystic cervix, depends on local conditions of the cervix and not on symptoms. Other things being equal, if other operations are to be carried out at the same time, amputation, rather than thorough cauterization, is advisable."

The effect of cauterization, amputation of the cervix, and hysterectomy on patients with nodular scleritis has been noted in a few cases in which such operations were carried out for local reasons other than the disease of the eye.

REPORT OF CASES

Case 1. A woman, aged thirty-five years, came to The Mayo Clinic January 19, 1920. She had had recurrent nodular scleritis of the left eye for less than a year. Local treatment gave little relief. August 18, 1922, total abdominal hysterectomy, bilateral salpingectomy, left oophorectomy, and appendectomy had been done. Multiple fibromyomas, chronic cystic cervicitis, prolapse of the uterus, chronic salpingitis, ovarian abscess and chronic catarrhal appendicitis were found. April 1, 1929, the patient reported that since the operation she had had only a few attacks of episcleritis lasting two or three days. The vision in each eye was 6/6. The corneas were clear.

Case 2. A woman, aged twenty-six years, had had her first attack of scleritis in the right eye three weeks before she came to the clinic, November 8, 1922. Vision was 6/60 in the right eye and 6/6 in the left. Infection of the tonsils and teeth was found, and the tonsils and infected teeth were removed. Nine months later five other teeth were removed to clear up suspected foci of infection. However, the condition of the eye became worse. Only after a course of treatment in hospital by foreign protein did the eye become free from pain and redness. From June, 1926, to June, 1928, the patient suffered only a few attacks of scleritis, but after this a series of severe attacks reduced the vision of both eyes to less than 6/30. In 1923 an injection of 0.002 mg. of tuberculin gave a slight positive reaction. In August, 1926, a tuberculin test reacted negatively. Besides the tuberculin, foreign proteins had been administered during the period from 1923 to 1926. The patient noted that the injections of tuberculin made the eye distinctly worse. Autogenous vaccine made from streptococci isolated from a culture from the cervix was used with temporary benefit. March 5, 1928, it was noted that the right eye had remained in good condition since douches and local treatment had been instituted a year and a half previously. However, coincident with the menstrual periods in the last six months, the left eye became inflamed. The redness and pain were greatly increased beginning three or four days before the onset of the flow, and lasting throughout the flow to subside a day or two after it had ceased. The left eye had become progressively worse in the last six months, and for two months, coincident with

the exacerbation of the left eye, the right eye again began to be painful. This syndrome was repeated during the third menstrual period, and as the left eye had become rather extensively involved, removal of the uterus and tubes was considered in an attempt to eradicate infection. Total abdominal hysterectomy, bilateral salpingectomy and appendectomy were done May 25, 1928. Before the patient left the hospital the eyes were free from inflammation, and have remained so. The vision in the right eye is normal, and under local treatment that of the left is gradually improving.

Case 3. A woman, aged forty-eight years, came to the clinic February 10, 1923, complaining of inflammation of the eyes of three months' duration. Vision of the right eye was 6/10 and of the left 6/7. She had had five children. In 1917 vaginal hysterectomy had been done for prolapse of the uterus and cystic cervicitis. The first attacks of episcleritis occurred twelve years later. Cultures of the vaginal secretions at that time revealed streptococci. Local treatment of the eyes, consisting of instillations of epinephrine and daily applications of a thermophore, resulted in healing within thirty days. An autogenous vaccine made from streptococci grown from the vaginal secretions was used for four months. In July, 1930, the patient wrote that she had been free from attacks of episcleritis for seven years.

Comment. The only apparent complication in this case was the vaginal infection. The interesting feature is the fact that the episcleritis did not begin until twelve years after hysterectomy had been performed.

Case 4. A woman, aged forty years, who had had several attacks of inflammation in both eyes for twelve years, came to the clinic May 19, 1925. The right eye was blind as a result of secondary glaucoma. Vision of the left eye was 6/12, which improved to 6/7 with correction. There was scleritis and sclerosing keratitis of the right eye and intermittent episcleritis of the left eye. Streptococci were found in the cervical secretions. July 26, 1925, the cervix was cauterized extensively and since then the eyes have been well.

Case 5. A woman, aged forty years, came to the clinic August 28, 1926, complaining of inflammation of the right eye which had been present for twenty months. Vision of the right eye was 6/12 and of the left 6/5.

Examination disclosed typical recurrent episcleritis. Cultures of the cervix showed streptococci and staphylococci. September, 1926, total abdominal hysterectomy, bilateral salpingectomy, right oophorectomy and resection of the right ovary were performed. Fibromyoma, hypertrophied endometrium, erosion of the cervix, bilateral hydrosalpinx, and bilateral cystic oophoritis were found. An autogenous vaccine was administered during September and November. More than four years later the patient reported that she had had no further attacks of episcleritis.

Case 6. A woman, aged thirty-two years, came to the clinic January 4, 1927. An attack of scleritis involving both eyes had occurred in 1916 and had lasted until 1918. The inflammation was very severe and required treatment in the hospital. Temporary improvement was brought about from injections of foreign protein. From 1918 to 1920 the patient was free from attacks. In 1920 she had had two severe attacks. The last attack occurred in November, 1926. During many of these attacks she was hospitalized for several weeks at a time, and intramuscular injections of milk were used with only temporary relief. Appendectomy was performed and an ovarian cyst was removed in 1925.

When the patient was admitted to the clinic, vision in each eye was 6/7. She was suffering from a very severe attack of scleritis for which she was hospitalized, and foreign protein was administered which gave temporary relief. Culture of the cervix revealed green-producing streptococci and staphylococci. An autogenous vaccine was given during the next few months. Attacks of scleritis, however, recurred within a year, and since May, 1930, she had had several attacks just as severe as those previously experienced. Hysterectomy was advised because of the lesion of the cervix, but the patient refused operation.

Case 7. A woman, aged thirty-seven years, came to the clinic January 31, 1927, complaining of recurrent corneal ulcers which had been present for the last four years. The vision of the right eye was 6/6 and of the left 6/12. There was typical scleritis of the left eye. In February an autogenous vaccine was made from streptococci isolated from cervical secretions, and following its administration the eye was free from inflammation for several months. In September, high amputation of the cervix, and vaginal myomectomy were done for chronic cystic cervicitis. Further mild attacks of sclerosis occurred in December, for which intramuscular injections of milk were given. The immediate result of the operation was good. During 1928, however, the patient suffered a few mild attacks of episcleritis. Vision of the right eye was 6/10, and of the left eye 6/15. At this time the intramuscular injections of milk had no effect. Douching the vagina, and the instillation of epinephrine in the eye brought about rapid improvement, and the patient has been free from attacks for about two years.

Case 8. A woman, aged forty-three years, entered the clinic May 25, 1928. She had suffered repeated attacks of inflammation of both eyes for the previous nine years. The right eye was first affected about four months after the birth of her first child. In November, 1927, eleven months after the birth of her second child, inflammation appeared in the left eye. From November, 1927, to May, 1928, there were exacerbations of the inflammation of the eyes each month, coincident with the menstrual flow. A diagnosis of scleritis and episcleritis was made and the patient was sent to the hospital for injections of foreign protein. Temporary relief was afforded by this means. A plastic operation on the cervix was

done June 28, 1927, since which time she has had only one attack of episcleritis.

Case 9. A woman, aged forty-four years, came to the clinic June 12, 1928, complaining of inflammation of the eyes and fingers. She had had episcleritis for six months. Vision was 6/10 in each eye. The patient had cervicitis and a disease of the endometrium which was thought to be the cause of the episcleritis, and chronic infectious arthritis. Staphylococci and streptococci were found in the cervical secretion. May 5, 1925, total abdominal hysterectomy and left salpingectomy were performed. The pathologist found multiple fibromyomas, hypertrophy of the endometrium, chronic cystic cervicitis, and chronic salpingitis. The patient was given a filtrate of the boiled suspension of the streptococci. Further attacks have not occurred.

Case 10. A woman, aged fifty years, came to the clinic June 23, 1928, complaining of inflammation of the left eye of one week's duration. Vision of the right eye was 6/15 and of the left, 6/7. Typical scleritis of the left eye was present. Cultures of the cervical secretions revealed streptococci. February 4, 1928, a Mayo vaginal hysterectomy for chronic hypertrophic cystic cervicitis had been done. In August, seven months after the operation, the patient was still experiencing repeated attacks of scleritis.

Case 11. A woman, aged forty-two years, came to the clinic October 1, 1928, primarily because of redness and pain of the left eye for the last two years. She had typical scleritis with exacerbation coincident with the menstrual periods. Repeated general examination did not reveal evidence of tuberculosis. Foci of infection were not found. One antrum had been opened and drained in the hope of giving relief. Vision of the right eye was 6/6, and of the left 6/7 with correction. Streptococci and staphylococci were obtained from cervical cultures. A small tonsil tag was removed. The Sturmdorf operation was performed for chronic cystic cervicitis October 13, 1928. This operation was followed by the use of vaccine for six months. Since October, 1928, the eye has been red only occasionally and the redness never lasted more than one day.

Case 12. A woman, aged thirty years, came to the clinic May 28, 1930, because of scleritis and sclerosing keratitis of the right eye of four to five years' duration. Vision of the right eye was 6/60 and of the left 6/5. The Mantoux test was negative. General examination revealed only chronic cystic cervicitis with the cervix as a focus of infection. June 2, 1930, the cervix was amputated for chronic cystic cervicitis. The inflammation of the eye subsided before the patient left the hospital. Further attacks have not been reported.

Case 13. A woman, aged thirty-eight years, came to the clinic June 11, 1930, because of typical scleritis of the right eye of eight months' duration. The eye had been treated with mild silver protein and atropine. Ulcers of the cornea had formed during the course of treatment. Vision of the right eye was reduced to the ability to count fingers and of the left eye to 6/6. A small polyp of the cervix was removed and cautery applied lightly to the cervix. The patient returned in thirty days with corneal ulcers on the right eye. During the following year, in spite of the fact that she was using a special vaccine, she was still having recurrent attacks. More extensive operation on the cervix was contemplated.

Case 14. A woman, aged thirty-six years, came to the clinic March 6, 1924, because of inflammation of the right eye which had been active since November, 1923. Vision of the right eye was 6/30 and of the left 6/5. Examination revealed typical scleritis with sclerosing keratitis of the right eye. There was no evidence of tuberculosis. Cultures of secretions from the cervix showed only gram-negative bacilli and staphylococci. Other foci of infection could not be found. An autogenous vaccine made from the cervical cultures was given during March and April, 1924, with temporary improvement in the inflammation. The patient returned in May, 1927, for a "check-up," and stated that in the last three years the right eye had been inflamed only occasionally. In November, 1928, she returned with severe inflammation of the right eye which had been present for about four months. The inflammation was practically continuous, but was always worse during menstruation. She had also had a few attacks of inflammation of a similar character in the left eye. Cultures of the cervix revealed only staphylococci and gram-negative bacilli. At this time an infection of the skin was present, which was diagnosed erythema nodosum. November 28, a Sturmdorf operation was done for chronic cystic cervicitis. Local treatment was applied to the eye. Vaccines were continued and ultra-violet light was applied during February and March, 1929. Foreign proteins were given during the month of April, and a few intravenous injections of gold sodium thiosulphate were administered with only temporary relief. April 13, 1929, hysterectomy was performed for hypertrophy of the endometrium and chronic cystic cervicitis. The condition of the eyes improved immediately, and the patient has not had subsequent serious inflammation in either eye.

COMMENT

In a paper read at the meeting of the American Academy of Ophthalmology and Otolaryngology,[1] in 1924, I called attention to the connection between infections of the cervix and recurrent scleritis of women in which evidence of tuberculosis could not be found, and to the improvement in the condition of the eyes following the use of the autogenous vaccine made from bacilli isolated from eroded cervices. Subsequent observations have repeatedly shown improvement in the inflammation of the eye following eradication of foci of infection, with

particular reference to infection of the cervix and endometrium. The infecting organism was found on repeated cultures to be a strain of green-producing streptococcus. These organisms are rather abundant in cases of mucopurulent leukorrhea, and have been isolated from cervical secretions of married and unmarried women when erosion of the cervix and chronic cystic cervicitis were associated. The organism has not been found at all times, but repeated cultures have been necessary in some cases to obtain growth of streptococci from which a satisfactory vaccine could be made. The administration of vaccine is undoubtedly of considerable value for relief of acute inflammation. Intramuscular injections of milk or, after the first or second injection of milk, intravenous injections of typhoid vaccine have been found to be quite effective. The pain subsides and the lesion of the eye begins to fade.

In many cases administration of an autogenous vaccine is effective in preventing attacks for several months. I have observed the effect of amputation of the cervix, cauterization of the cervical canal and complete hysterectomy in several cases in which attacks of scleritis have recurred. Continued observation of these patients has shown conclusively that the eradication of pelvic infection is necessary before complete subsidence of scleritis can be expected.

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The Surgical Problem of Pelvic Endometriosis*

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Pelvic endometriosis is a highly interesting subject for discussion because of its many spectacular features, and because of the controversy over its etiology. I am referring to those hemorrhagic adenomatous tumors which may be found in many situations in the body, but particularly in the pelvis, and which have a variety of characteristics in different locations. The one feature common to all, is the presence of tissue closely resembling, if not identical with, normal uterine endometrium. For this reason each tumor may be considered a "miniature uterus", its endometrium menstruating regularly under the influence of the ordinary ovarian hormone, forming a decidua during pregnancy, atrophying after menopause or double oophorectomy, and finally, in some instances undergoing carcinomatous degeneration.

Even the nomenclature is confusing, as these tumors are variously called endometrial adenoma, adenomyoma, endometrioma, chocolate cyst, tarry cyst, Sampson cyst, perforating hemorrhagic cyst of the ovary, and endometriosis. Although most of these tumors are intra-pelvic, occurring in the uterus, fallopian tubes, ovaries, round ligaments, rectovaginal septum, vagina and bladder, they have also been encountered in extra pelvic structures such as the umbilicus, the abdominal wall, the stomach, the intestines, and the external genitalia.

ETIOLOGY

A number of hypotheses have been advanced to explain the etiology of endometrial adenomata, and these may be classified under three headings as follows:

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1. Development from embryonal tissues. (a) Von Recklinghausen believed they developed from the Wolffian body, but this is now largely discredited. (b) Cullen and Sampson both admit the possibility of an origin, in certain locations, from aberrant cell rests, relics of the Müllerian ducts.

2. The serosal theory has been advanced by both Iwanoff and Meyer but they differ slightly in their conclusions. (a) The serosal theory of Iwanoff is based on the observation that all genital epithelia, including the lining of the tubes and uterus, the germinal epithelium of the ovary and the pelvic peritoneum have a common origin from the urogenital fold. Therefore, the lining of the tubes and uterus may be considered a developmental modification of the pelvic peritoneum, and consequently, it is believed by many investigators that abnormal hormonal stimulation may initiate a regional differentiation into endometrium in those allied tissues, namely, the pelvic peritoneum and the germinal epithelium of the ovary. In other words, the ectopic endometrium arises from a metaplasia of the embryonically similar tissues. (b) To Robert Meyer is credited the theory that *every* type of epithelium, regardless of location, is liable to undergo proliferation and displacement when subjected to chronic inflammation, and these heterotopic epithelial cells may wander from many situations such as the intestine, the urachus, the kidney, or the peritoneum, undergoing metaplasia, so that finally the tissue resembles epithelium such as might have come from the lining of the uterus itself. This theory, in brief, presumes a metaplasia of embryonically unrelated (to normal endometrium) epithelium with chronic inflammation as the activating force.

3. Endometrium arising from mature mucosa. (a) Cullen has demonstrated unequivocably the origin of adenomyomata of the uterus by direct invasion of the uterine muscle by mucosal diverticuli. (b) The most ingenuous and plausible theory was advanced by Sampson in 1921, who believes that these endometrial adenomata have their origin in desquamated bits of the adult uterine endometrium, which are cast off at the time of menstruation, and are regurgitated through the fallopian tubes into the peritoneal cavity, or become disseminated through hematogenous or lymphogenous routes. Factors believed to favor the transtubal migration of these endometrial grafts are obstructions to the normal drainage of menstrual blood from cervical stenosis, imperforate hymen, retroflexion, fibromyomata, blood clots and tissue debris in the genital tract, and manipulations of the uterus before and during operation. These extruded tissue grafts are then believed to become implanted on the pelvic structures, where they develop in their characteristic manner, forming miniature uterine cavities which subsequently fill with blood and rupture, with the liberation of more endometrial grafts, which through dissemination within the pelvic cavity gives rise to metastatic, hemorrhagic cysts. In order to explain the occurrence of endometrioid tissue in more remote situations, Sampson puts forward the theory of the dissemination of these tissue grafts through the blood or lymph channels.

Endometrial adenomata are most frequently found in the uterus and in this location, as well as in the round ligaments and intestine, smooth muscle fibers are present in the tumor and they are, therefore, properly called adenomyomata. The growth in the uterus may be so diffuse that the entire uterus is enlarged to several times its normal size, uniformly and symmetrically. Again, only the posterior wall, or more circumscribed areas, may be involved. The uterine mucosa covering the growth usually is normal and little diagnostic help may be expected from curettage. The growth may be quite dense and hard, or may be cystic with many blood filled spaces, and gross section reveals a whorled fibrillation on a pink surface resembling normal myometrium and contrasting to the pearly white appearance of a fibromyoma.

In the ovary, the process begins with a minute blood-filled cyst, which gradually invades the ovary from the cortex and penetrates the stroma. It then enlarges by hemorrhaging into itself at each menstrual period and at the same time rapidly stimu-

lates adhesions of the ovary to adjacent structures. These cysts are usually multiple, often bilateral, and generally occur in women from fourteen to fifty. In the early stage these cysts appear as small blebs, or dark reddish-blue vesicles, which are very superficial. Later, as they burrow into the substance and destroy the ovary they take on a greyish-blue appearance and rarely do they attain even the size of a baseball, because of their great tendency to rupture and expel their hemorrhagic contents into the pelvic cavity. The contents of these unilocular or multilocular cysts may be recently shed blood, or old degenerated blood, dark brown to black in color, hence the name "chocolate" or "tarry cyst." If secondary infection has taken place the content is pus, with a variable quantity of decomposed blood. The secondary implantations are most frequently found in Douglas' pouch where they firmly unite the anterior rectal wall and the posterior surface of the uterus, obliterating the culdesac by exceedingly dense adhesions. Implants are also frequently found on the broad ligaments, uterosacral ligaments, bladder, posterior surface of uterus and intestines. These have a similar appearance to the early implants on the ovary, except that there is a well marked puckering about the implant due to round cell infiltration and fibrous tissue contraction. The pelvic peritoneum in advanced cases reveals an irregular brownish pigmentation which is due to the presence of phagocytes containing hemosiderin, in connection with the absorption of old blood. The invasion of the recto-vaginal septum produces a small nodule in the posterior fornix, which may later invade the utero-sacral ligaments and other pelvic structures, and it may occasionally infiltrate the vaginal wall, revealing itself as bluish-black cystic lobulations in the vagina. In any event, the disease process in the pelvis finally ends in a widespread involvement of all the pelvic organs and intestine, producing a tangled mass ensnared by firm adhesions, from which it is difficult, and often unwise, to separate the individual viscera.

SYMPTOMS VARIABLE

The symptoms are variable, are not very characteristic, and may simulate other diseases of pelvic structures such as carcinoma, tuberculosis, adnexitis, and other types of cysts and tumors of the ovary and uterus. There may be no symptoms of any kind referable to pelvic endometriosis early in its course, and the disease may be discovered merely by chance, in the course of laparotomy undertaken for other pathology.

The adenomyoma of the uterus is chiefly associated with persistent and intractable menorrhagia, which is not relieved, but often aggravated, by curettage.

Pelvic endometriosis frequently causes pelvic and lower abdominal pain, which is aggravated at the menstrual period. Compression of the pelvic bowel by enlarging adenomatous tumors, and adhesions, gives rise to a gradually increasing intestinal lethargy. The duration and amount of flow may not be materially changed, but as the disease advances, menorrhagia is usual.

Involvement of the bladder or rectum may easily be mistaken for carcinoma as the symptoms of dysuria, tenesmus, hemorrhage, constipation alternating with diarrhoea, etc., are identical, but in endometriosis, these symptoms are always worse at the menstrual period. Sterility is a frequent complaint. If the endometrial cysts have become infected, the usual constitutional symptoms of sepsis are imposed on the clinical picture. Torsion of these cysts is unlikely because they are usually so firmly held by adhesions that rotation is not possible. Occasionally after rupture, these cysts may simulate ectopic pregnancy.

Aside from the history, the diagnosis depends upon pelvic examination with the finding of intra-pelvic masses. Characteristic growths in the rectum, vagina and bladder may be seen with the aid of the proper instruments.

Often it is quite a problem at the operating table for the surgeon to know just what to do when confronted with this curious disease. In general, the keynote should be conservatism and the surgeon's judgment should be influenced by the age of the patient, the desire for children, her willingness to face a

second operation later, if necessary, and the existing extent of the growth. When endometriosis is discovered, the following facts should be kept in mind: (1) The treatment is invariably surgical; (2) spillage, from endometrial hematomata, in the process of removal, may cause secondary implantation in the peritoneum or in the abdominal wall, and must be meticulously avoided; (3) the complete extirpation of the ovaries will bring about retrogression and atrophy in these tumors, often to the extent of total disappearance, inasmuch as these tumors are under direct ovarian hormonal control. However, the smallest bit of functionating ovarian tissue, if allowed to remain, will prevent this desired retrogression. Consideration of this third principle, leads to the most perplexing problem in the surgery of endometriosis, and that is, the question as to the justification of the complete removal of both ovaries in young women and also the question as to how extensive the operation may reasonably be made, to excise a multitude of these endometrial adenomata. There are too many factors involved for one to be able to generalize successfully, and each case must be judged on its particular merits. Unquestionably, however, in young women with incipient involvement, local excision of the adenomata only, should be done, conserving as much ovarian tissue as possible. On the other hand, in the advanced cases where excision of the pelvic mass is both difficult and risky, frequently entailing intestinal repairs or resection, it is better judgment to be content with total bilateral oophorectomy.

Endometrial adenomata of the uterus should have prompt hysterectomy, and small nodules in the posterior fornix can frequently be removed through the vagina, if discovered early. In the early cases of small chocolate cysts of the ovary encountered accidentally, simple evacuation of the cyst, with special care to prevent soiling the peritoneum with the cyst contents, and the complete obliteration of the lining of the cyst by excision or destruction with phenol or the cautery, followed by plastic repair of the ovary, is probably all that is necessary. In more extensive involvements of the ovary, resection of the cystic portion, rather than complete extirpation is desirable. However, when there is extensive and widespread involvement of many of the pelvic structures, especially with multiple peritoneal implants, removal of the uterus and adnexae is indicated, particularly if it can be accomplished without too great surgical risk. However, in those desperate situations where the entire pelvic cavity is a mass of adhesions, involving the rectum or ileum to such an extent that removal of the pelvic mass would necessitate a resection of the bowel, it is unwise to do other than completely extirpate both ovaries, with the confident expectancy of thereby causing a menopausal atrophy, which almost invariably destroys the adenomata. X-ray or radium may then be applied for further treatment, and, judiciously used, will hasten the disappearance of these tumors.

One would expect from a theoretical standpoint, that in the earlier cases, treatment by x-ray or radium would be ideal, in that a premature menopause could be induced by sufficient radiation to the ovary. On the other hand, the non-operative diagnosis of pelvic endometriosis is as yet too uncertain, and the possibility of carcinoma too great, to warrant the failure to subject these patients to early exploratory laparotomy and biopsy.

In general, with proper surgical treatment, the prognosis is good. The disease ordinarily runs a fairly mild, slow course, with adequate symptoms and warnings before the pelvic structures are extensively involved. Because of this, conservative surgery yields a large percentage of satisfactory end results.

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Ocular Manifestations of Focal Infection*

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It has been known for many years that a connection between diseases of the eye and focal infections existed. Several centuries ago indirect mention was made of this association, and in 1853, Arlt gives a classification of focal causes of iritis. However, it is in the past twenty years, and chiefly in this country, that the greatest study has been made. The present conception of focal infection is defined by Billings, who says that "Focal infection is a metastatic, systemic, or local condition, due to infectious micro-organisms or their toxins carried into the blood or lymph stream from a focus or foci of infection, and a focus of infection is a localized or circumscribed area of tissue containing pathogenic micro-organisms and may be either primary or secondary." Except for the work of Butler and a few other British ophthalmologists, in 1911, little was done in Europe from the modern viewpoint until 1920. Since then considerable work has been done. In this country Passler, Billings, Rosenow, Wilmer, Brown, Nadler and many others since 1909 have been working along these lines of research. Dr. Schweinitz in 1913 first gave Europe the present day viewpoint.

Early workers recognized practically only three groups of causative factors. They divided them as due to syphilis, tuberculosis and rheumatic causes. All cases that could not be placed here were unknown causes. Modern investigators have shown the percentage due to syphilis to be about the same as the early reports, but that due to tuberculosis to be much less. The group listed as rheumatic has been divided into those due to dental, tonsillar, intestinal, pelvic, genito-urinary, prostatic, gall-bladder and neurological. The group due to unknown causes

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is much smaller, although it still remains. Europe and America differ greatly as regards tuberculosis. This may be due to several facts: Tuberculosis is more common in Europe; cases reported from there are chiefly from clinics and from a poorer class of people physically; case reports in this country are more often from private practices; men there perhaps look more for tuberculosis as we do for focal infection and over-emphasize just as we do. I believe as more careful work is done by both groups, the percentage figures will more closely balance.

Ocular manifestations of focal infections are chiefly those of iritis, uveitis and cyclitis, corneal and dendritic ulcers, blepharitis, conjunctivitis, episcleritis, choroiditis, dacryocystitis, disturbances of accommodation and increased lacrimation.

FOCAL INFECTION

Focal infection plays a new and more important part now, since after the diagnosis of the eye condition present has been made, we have just begun. Formerly a man had an iritis and it was treated as iritis; now we must, if possible, determine the basic and specific etiology in order to carry out the most effective treatment. Obscure ocular lesions are a challenge to the skill, judgment and resources of the ophthalmologist.

Rosenow's work, while not entirely accepted, is yet worthy of study. Rosenow, by his experiments on elective localization, has proved that organisms from distant foci of infection have a predilection for certain areas, among them the eyes. Haden, A. L. Brown, Irons, Brown and Nadler, Benedict, and Lewis have confirmed his work in whole or in part. Improvement of certain conditions, as iritis, etc., following removal of foci, occurs so regularly that failure to relieve the condition means either that the focus has not been found or that it is so located that it cannot be removed and treatment is not successful. Infections in the genito-urinary or intestinal tract are examples of this.

First a careful history must be taken, as thorough and complete as an internist would take, emphasizing that part that is of especial interest to the ophthalmologist. Inquire as to venereal and family history, recent illnesses, as to occurrence of colds, sore throats, nasal discharge. Ask about vaginal disturbances or infections. Have there been previous attacks. The dental history is of extreme importance and there are many other important facts that much be elicited.

Then insist on a complete examination by a competent internist or general practitioner. The ophthalmologist must be personally responsible that this is carefully and thoroughly done. There are still men, who, when a patient is referred for a careful examination by the ophthalmologist, do not cooperate by performing urinal and blood tests; will not do a thorough chest or a vaginal examination and belittle the request as all foolishness. Personally I have never had that experience and believe men of that type are few.

Some of the things that should be done are a thorough medical, nose and throat examination; dentistry, of which I shall speak later; roentgenograms of the sinuses, chest, gall-bladder, gastro-intestinal tract, skull and sella turcica; spinal fluid; metabolism, blood, tuberculin, stool, urine and kidney function tests; neurological, gynecological or genito-urinary examination. Any or all of these may be indicated.

DENTAL EXAMINATIONS

Dental examinations are more often a source of worry and trouble than perhaps any other part. I have found out by experience that it is necessary to insist when you refer the patient to the dentist that you want the benefit of his experience and judgment, but that this is an eye case and requires a different viewpoint than any other. I insist on a complete series of plates, especially of areas where teeth have been extracted, that the pulp tester and transilluminator be used, that a most careful inspection of the gums be made. The use of the pulp tester will often discover teeth that are irritable, but are not enough involved to show a shadow on being x-rayed, and likewise a devitalized tooth will appear on the plate and the pulp tester be of little except negative value. Impacted teeth, especially third molars and upper cuspids, are often the seat of infection and are not

usually detected except by roentgenograms. There is a distinct tendency for many dentists to simply inspect a patient's mouth, perhaps use a pulp tester or not, and stop there. This may be perfectly all right from a dental standpoint and no doubt is fairly accurate in a capable man's hands, but it is not enough from the standpoint of the ophthalmologist, who must be sure there is no lurking obscure infection.

The pure strain of streptococcus has so often been obtained from pulpless teeth that it is not considered necessary to consider pulpless teeth as other than infected whether roentgenographically positive or not. Lack of pain, swelling or tenderness does not eliminate teeth or tonsils. Rarified areas at apices of pulpless teeth have shown to contain pathogenic organisms and the absence of pain may only indicate their adequate drainage into the blood or lymph. This is true regardless of the method of devitalization and filling of root canals. I advise removal of all devitalized teeth, especially if the patient is over fifty, if the patient is having eye trouble that could be attributable to infected teeth and no other obvious foci are found. This is done regardless of whether these teeth cause the patient any trouble and with no other roentgenographic finding than that of devitalization.

Pyorrhea, calcareous deposits, pockets around the teeth, unerupted impacted teeth, roots that have been left, devitalized teeth, apical and periapical infection, and caries are the more common causes of infections.

We must remember, though, that all of this is dependent upon two basic factors: the patient must have an eye condition commonly caused by the above dental conditions and all other factors must have been ruled out as far as possible. Nearly every dentist can mention cases in which removal of suspected teeth did not only not produce an improvement, but instead caused a severe disability to the patient. We must also remember not to promise too much as regards relief following removal of foci, for in the case of chronic foci, especially, there may be organic tissue changes which will not markedly improve.

RHINOLOGICAL EXAMINATION

The rhinological examination must be most thoroughly done. When there is an obvious purulent sinusitis, the diagnosis is easy. Hyperplasia of the turbinates is often an important predisposing factor simply by preventing aeration and drainage of the posterior ethmoid and sphenoid cells. MacGinnis, of Chicago, working with Leach, ophthalmologist, has shown that often the only evidence of nasal infection may be a dull redness or bogginess of the middle turbinate or ethmoid region and yet mere opening of the anterior ethmoid be attended by marked and immediate improvement in cases of ocular infection. We have all, I am sure, had cases of obscure conjunctivitis or low-grade iritis that improved with nasal packs when there was in our minds no proof of any definite nasal infection.

Lastly, after all the above information is ready for our consideration, we must remember not to always accept the obvious etiology as the sole cause, as there may be a second more obscure one that we have overlooked. I remember one case well of any elderly lady with an iritis, who had some badly infected teeth. These were removed, but the eye did not clear up until an infected gall-bladder was subsequently taken out. In case of the presence of several possible foci, the only safe way is the removal of all, if practicable.

IRITIS

Iritis is perhaps the most common of the ocular diseases due to focal infection. Gifford in his recent paper on the Etiology of Iritis calls attention to some interesting facts. We note that Arlt in 1853 first reports iritis as being due to syphilis 17%, tuberculosis 36%, rheumatism 21% and undetermined 25%. Little more was done from our present day view until 1909 when Billings and Rosenow reported on focal infection. It is only since then in this country and Great Britain that the recognition and importance of the dental, tonsillar and sinusital groups has been made. In Europe today iritis is considered chiefly due to syphilis, tuberculosis and rheumatic causes. In the most recent edition of Fuch's there are only two

paragraphs that mention focal infection directly and then to state that 75% of all cases are due to syphilis or tuberculosis. This may be due in part, as before stated, to the larger incidence of tuberculosis and because their reports are chiefly clinic reports.

In this country there is a striking similarity of the reports, when one considers that there are a number of years involved and different sections of the country. The reports of Irons, Gifford and others show the percentage due to syphilis as almost the same as Europe, 17 to 19%, but only show 4 to 8% of tuberculosis, while reports from Europe show from 6 to as high as 46%. Gonorrhea is credited with 5% in both countries. The second greatest difference is the tonsils 22 to 26%, teeth 13%, sinuses 2 to 6%, undetermined 22 to 26%. We are perhaps overstressing teeth and tonsils and understressing tuberculosis. The disinclination of the profession to accept tuberculosis as a frequent causative factor and their preference for focal infection may be explained by the reasonableness of method of spread in supposed cases of focal infection and the mistaken assumption that lung tuberculosis is similar to ocular tuberculosis.

According to Lloyd we shall hear less and less of focal infection and more and more of tuberculosis as a cause of ocular diseases. He states that patients suffering from any form of eye tuberculosis usually show associated physical signs and weakness. I have examined many cases from the county tuberculosis sanatorium and have asked the doctor there to advise me of any eye complaints. There have been no calls or complaints that I could possibly diagnose as tuberculosis the past three years. I do not personally believe incidence of tubercular ocular disease is very high in this country or section of it. However, in all cases of chronic eye disease that show no obvious foci of infection or do not respond to removal of foci there should be a thorough physical and laboratory examination with tuberculosis in view, including test with old tuberculin in gradually increasing doses up to 10 milligrams. If there is no reaction either systemically or locally with this amount together with negative general examination, I believe we must discount tuberculosis as a causative factor.

Dr. Schweinitz in 1920 gave as his opinion the causes of iritis in order of frequency as tonsils, teeth, sinuses, intestinal tract, posterior urethra, prostate and seminal vesicles or pelvic organs as most common and the upper respiratory tract, lung hilus, gall-bladder, appendix, and skin less common. If many causes are present the general rule of taking the most probable holds true. Tonsils should never be eliminated as a possible focus on the basis of negative findings, as infection in sealed off crypts often occurs.

RETROBULBAR NEURITIS

What has been said here applies generally to all affections involving the uveal tract.

Perhaps the next most contested entity ascribed to focal infections is *retrobulbar neuritis.* By 1877 enough observations of apparent connection between ocular disturbances and suppuration of the sphenoid and ethmoid sinuses had been made that clinicians began to associate the two. In 1866 Berger demonstrated perineuritis of the optic nerve of spheno-ethmoid origin. In 1892 Ziem is supposed to have said, "In ten years one will not be able to practice ophthalmology without rhinology." Many more names, Sluder, White and others, appear, but as yet the mechanism of the production of retrobulbar neuritis of nasal origin has not been proven.

In retrobulbar neuritis we are confronted with a loss of vision, sudden or gradual, a central scotoma and the only ophthalmoscopic finding may be a maculo-papular pallor, which later becomes atrophic. The concensus of opinion gives as the etiology of this condition, first

Multiple sclerosis, 50% or more.
Purulent sinusitis, 3½%.
Brain tumors, toxic causes, as alcohol and tobacco, acute myelitis, Leber's disease, a small and varying percent.
No cause found, 15 to 20%.

Before operating on the sinuses, one should have first a careful and competent neurologic examination, the finding of a loss

of abdominal reflexes alone would be good evidence of multiple sclerosis. A lumbar puncture should be done, for a large percentage of cases show a characteristic colloidal gold curve and an increased cell count also diagnostic of multiple sclerosis. A careful ophthalmic examination, of course, including mapping of the visual fields.

After eliminating all the more common causes, there remain 15 to 20% of undetermined origin, which show nothing on routine nasal, neurologic or roentgen examination. One should wait on these cases, using symptomatic treatments, as sweats, foreign protein and nasal treatments. If the vision continues to fail and blindness threatens, operation on the sinuses is indicated, which may consist of a submucous resection, partial middle turbinectomy, or opening of the ethmoid and sphenoid sinuses. Some observers claim merely opening the anterior ethmoids is sufficient. We are faced with the fact that no doubt some cases of retrobulbar neuritis are of nasal origin, but must remember that countless thousands of cases of acute purulent sinusitis never develop retrobulbar neuritis. We must also remember that most of the series of cases of retrobulbar neuritis report *spontaneous* recovery of 80 to 90% and the development later of multiple sclerosis. This also argues for conservative treatment, but remission can be explained on the basis of sinus remission. However, it can be stated that in a case of retrobulbar neuritis where a careful complete examination, including spinal fluid and neurological examination is negative, and the loss of vision continues to advance after a reasonable wait in which symptomatic treatment has been tried, exploration of the posterior nasal sinuses is indicated.

The less common ocular manifestations of focal infection are

Corneal ulcers, which are most common in those cases of industrial injury, superficial in character, which develop an unexpected ulcer. A dental sepsis is usually found, which when removed results in prompt improvement of the ulcers. I am sure we have all had numerous cases of this nature. The main point to be learned in these cases is that the ophthalmologist himself must be personally interested and responsible to see that these men actually go to a reputable dentist. I always ask the man who is his dentist or, if he does not have one, suggest one, and then while the man waits, make the appointment to see the dentist at once, for inspection and roentgenograms. Few of these men will go unless this is done, and immediate results, especially in industrial cases, are necessary.

Blepharitis and *tarsal cysts* are usually associated in children with tonsillar infection and in adults occasionally due to dental origin.

Conjunctivitis of several varieties, including so-called angular conjunctivitis and phlyctenular conjunctivitis, is often benefited by removal of dental sepsis or nasal treatments, even when no definite pathology is visible in the nose.

Episcleritis is also almost invariably associated with dental or tonsillar sepsis except a number of cases due to pelvic infection. Benedict has perhaps done more along this line than any other and has proven the specificity of the streptococcus of cervicitis and the response to specific therapy. Disturbances of accommodation often occur, according to Allen, associated with syphilis, chronic appendicitis, antrum infection and nasal congestion.

Increased lacrimation due to dental sepsis has been reported.

Optic neuritis and *atrophy* are considered with retrobulbar neuritis.

Recurring retinal hemorrhages, choroiditis, retinitis, vitreous opacities and *cataract formation* are also frequently attributed to focal infection.

Disturbance of *ocular motility* as a result of nasal disease is frequent enough that in search for causes a sinus examination should be included.

SUMMARY

Focal infections as causes of ocular diseases must be considered as next in importance to syphilis and tuberculosis.

More careful examination, especially dental, must be made, the ophthalmologist direct-

ing the investigation and retaining control of the patient.

Conservation of vision and improvement in the general public health program of preventive medicine will result from the elimination of foci of infection that will be found as a result of more careful consideration of the focal causes of ocular diseases.

The more general use of the intradermal tuberculin test as a diagnostic aid in suspicious cases, after foci of infections are removed and no improvement shown, is urged.

Pharyngeal Insufflation of Oxygen*

By E. A. ROVENSTINE, M. D.
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The use of oxygen in high concentrations under closely controlled conditions as a therapeutic agent has a definite place in medical practice. Since 1917, when Haldane in England and Meltzer in this country established by their experiments a definite physiological background for this method of treating conditions where oxygen want is present, many investigators have been at work and the field of oxygen therapy has widened extensively. With the increasing number of conditions where the usefulness of oxygen has been confirmed, the technique of applying it has likewise been the object of many researches. Oxygen by inhalation remains the method in vogue, but it has been given intravenously, subcutaneously, by rectum, and even swallowed by mouth.

The equipment for inhalation oxygen can be grouped as follows: Oxygen chambers, oxygen tents, nasal and face masks and pharyngeal insufflation. The oxygen chamber has proven very satisfactory, in fact nearly ideal from a physiological standpoint. It is particularly adaptable to delirious patients and very small children, but its use is limited because of the initial expense, the careful supervision necessary and the fact that it is not portable. Oxygen tents are both simple and elaborate. The better type of this apparatus offers an easily portable, economical and generally efficient means of using oxygen with accurate regulation of concentration, adequate removal of carbon dioxide, control of moisture and heat. They require trained supervision constantly and have been reported to disturb patients occasionally because of the feeling of inclosure. The use of masks is mostly for emergencies and short administrations. Both nasal inhalers and face masks are used and when patients do not object and can co-operate, this method offers an easily available and satisfactory apparatus for oxygen therapy.

ECONOMICAL, SIMPLE, EFFICIENT

Pharyngeal insufflation has proven a satisfactory procedure for administering high concentrations of oxygen in this hospital. It is one of the most economical, simple, efficient and easily available of all methods to supply excess oxygen. The cost of equipment for this method is negligible compared with others, and it requires much less supervision. Sterilization of the apparatus offers no problem, and it has been found applicable wherever oxygen therapy is desired.

The technique of using pharyngeal insufflation for oxygen therapy is important, although very simple. A rubber urethral catheter, 10 to 16 French, is perforated with 4 to 5 extra holes in the terminal half inch. These openings are made to prevent a constant stream of oxygen striking the mucosa of the pharynx in one spot and irritating the membrane or annoying the patient. The actual placing and fixing of the catheter is of the utmost importance and requires great care. The tip of the catheter must lie in the oral pharynx, since it has been shown that with the tip in the naso-pharynx, the oxygen will flow in one nostril and out the other, or around the catheter rather than toward the glottis. With oxygen flowing, the catheter is passed through the nares and slowly down the oral pharynx, until the patient finds that a bolus of oxygen is swallowed during deglutition. The patient quickly determines this point, and it is also very evident to an observer. The catheter is then withdrawn just short of this point. The proper distance in adults varies from 4½ to 5½ inches,

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and when viewed through the mouth, the tip of the catheter is about level with the tip of the uvula as it hangs during nasal breathing. By direct view through the mouth, one is enabled to be sure the tip of the catheter is properly placed. With the tip in place, the catheter is carefully fixed with adhesive to the patient's face to prevent its moving in the nostril or pharynx with consequent annoyance to the patient. It is marked where it passes the exterior nares in order to facilitate the proper placing of a fresh catheter in the other nostril after twelve hours. With the catheter properly placed and fixed, no sensation is experienced by the patient other than ease of breathing, nor does it interfere seriously with speech or swallowing. One disadvantage to the method at the present time is the type of catheters used. Ordinary urethral catheters do not always have a lumen of uniform size throughout, and this may interfere with the amount of flow. A simple check is advisable. This is easily done by inverting a filled liter graduate in a basin of water and with the oxygen flow gauge set at a given rate, time the interval needed for the gas delivered from the catheter to displace the water.

NEED FOR NEW TYPE CATHETER

There is a definite need for a specially designed catheter to use for pharyngeal insufflation. Such a catheter should be of soft rubber but stable to facilitate introduction. It should have, instead of the single opening common in urethral catheters, multiple small openings in the terminal one-half inch. Its size should correspond to 12 or 14 French, the lumen be uniform throughout and maximum in size as compared with the outside diameter.

It is advisable for the comfort of the patient, and to prevent possible dehydration of the mucous membrane, to attach to the flow tube a humidifier or some apparatus that will moisten the gas as it is delivered. Such an apparatus is the one shown in Fig. 1 made by Scanlan-Morris of Madison, Wisconsin, and known as the Wisconsin Humidifier. It consists of a round metal tray nine inches in diameter, supporting three ordinary quart Mason jars with screw tops. In the first jar,

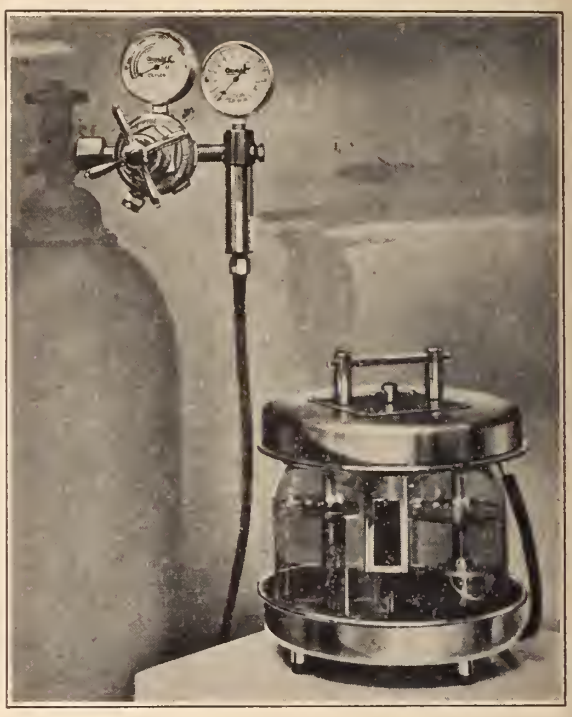

Fig. I. Wisconsin Humidifier with regulator.

which receives oxygen from the cylinder, is the humidifier immersed in water, where the oxygen is broken up in very fine bubbles and absorbs a maximum of moisture, then to the second jar which contains a flow gauge registering approximately the flow in liters of oxygen per minute, and the third jar is a moisture trap to catch particles of water which might be carried to the nasal catheter. A tray, similar to the base, serves as a cover and has a handle. The cover and base are held securely together by a bolt and the jars are so kept in place. It has been observed that with this humidifier, patients are relieved of the feeling of dryness in the throat, a not uncommon complaint heretofore, and are generally more comfortable. Moreover, it has been determined that each one hundred liters of oxygen delivered through this humidifier, in a hospital ward, will absorb on an average of 1.8 grams of water, or that when four liters per minute of oxygen are being delivered, nearly 4.5 grams of water are carried with it each hour. Under these conditions the oxygen is more than 90 per cent saturated with water. These determinations were made by allowing oxygen, delivered through the

Fig. II. Clinical use of pharyngeal oxygen insufflation.

humidifier at a known constant rate of flow, to be dehydrated in concentrated sulphuric acid and measuring by weight the water in the acid. Determinations were made at varying rates of flow and for different periods of time. The temperature of the gas delivered when flowing four liters per minute was approximately 74 degrees Fahrenheit.

CYLINDERS SUPPLY OXYGEN

The oxygen is conveniently delivered from large cylinders through any reliable pressure regulator. Such regulators are usually equipped with a gauge indicating a tank pressure and serving as an approximate guide as to depletion of the tank. Some regulators are also equipped with a small spring gauge calibrated to register the rate of flow of gas at the unobstructed outlet. Variations in size of outlet tubing or catheter may materially influence the actual rate of delivery in the pharynx. Complete obstruction of the outlet will still register flow on a spring gauge. Water flow-meters are approximately accurate, but reliable in that no flow is indicated in case of obstruction at the outlet. Such a water flow-meter is included in the humidifier unit described above. The entire apparatus in use with both spring pressure flow-meter and water flow-meter is illustrated in Fig. 2.

It has been shown by careful gas analysis (Waters and Wineland, Archives of Surg. 22:67-71, Jan. 1931) that the efficiency of pharyngeal insufflation is not surpassed by either the chamber or the tent. The volume of oxygen used per minute is practically the same for any type of apparatus. In their experiments, gas analyses were made for oxygen content of samples taken from the pharynx of patients. These patients were receiving oxygen by pharyngeal insufflation by means of nasal catheters after the method just described. With the oxygen rate of flow at 1½ to 2 liters per minute, the concentration at inspiration was 23 to 27 per cent; at 2 to 4 liters 34 to 36.7; at 4 to 5 liters 40 to 50 per cent; at 6 liters 45 to 70 per cent; at 10 liters in excess of 70 per cent. In so far as the consumption of gas is concerned, these experiments show the favorable comparison of pharyngeal insufflation of oxygen with other methods. Various reports of gas consumption with oxygen chambers ordinarily show 7 to 8 liters of oxygen per minute to maintain concentrations of 50 to 60 per cent, while similarly in tents 5 to 6 liters of oxygen per minute are generally needed to maintain 60 per cent concentrations, and with the face mask there is a like consumption of gas except when using a tight fitting mask in conjunction with carbon dioxide absorption by soda lime. The latter is limited in application.

CONCLUSIONS

Pharyngeal insufflation of oxygen by nasal catheter offers a means to efficiently supply excess oxygen up to 70 per cent concentrations at a minimum of cost, with very little supervision. The apparatus is easily available, quickly portable, satisfactorily sterilized.

With a humidifier, such as the one described, the patient is comfortable, unhampered, and receives oxygen containing a high percent of water vapor.

The efficiency of the method depends upon properly placing the tip of the nasal catheter in the oral pharynx and maintaining an adequate flow of oxygen.

It is applicable in all cases where high concentrations of oxygen are needed.

Obstetrical Anaesthesia and Analgesia in General Practice*

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Increased educational and training requirements have widened the field of usefulness of the general practitioner. Among other things he should be a capable obstetrician. Statistics show that only a small percentage of the babies born each year in the United States are born in hospitals. Practically all the births taking place in homes are attended by general practitioners. This being the case, most of the results, good and bad, can be charged to the general practitioner. Maternal mortality and morbidity statistics are far from flattering. Too many women die or are invalided by childbirth. Infection and hemorrhage are largely responsible for the morbidity figures. Infection can be largely prevented by properly observed asepsis, and adequate prenatal care. It is not my purpose to discuss infection more than to say that good obstetrical anaesthesia or analgesia will help in preventing breaks in technique and thus aid in preventing sepsis.

In spite of the fact that for centuries there have been attempts to relieve or mitigate the pain of parturition, the ideal obstetrical anaesthetic has not yet been produced. We have, however, several useful drugs, and it is my purpose to discuss their use in the hands of the general practitioner. We have (1) chloroform, (2) ether, (3) the Gwathmey method or synergistic analgesia, (4) twilight sleep, (5) sodium amytal, (6) spinal, (7) caudal.

Our object, of course, is to relieve the pain of the mother. Other conditions, however, must be fulfilled, viz., the drug must not inflict injury on the child; it should not prolong labor; it should not predispose to post partum hemorrhage.

1. CHLOROFORM

Prior to 1847 when ether and chloroform were first used in obstetrics, some form of opium was the only available drug for obstetrical analgesia. This had been used more or less for centuries with uncertain results. Simpson's introduction of ether, and within a few months of chloroform, which for a long time almost supplanted ether, met with considerable opposition. It was held by some that pain was an essential part of labor and to abolish it was wrong. Others more logically objected to it on the grounds that it retarded labor, harmed the child, and was dangerous to the mother. It appears, after reading some of the earlier literature, that the anaesthetic was often used for long periods of time and narcosis deeply maintained, which provided a sound basis for objection to its use. In spite of opposition the use of anaesthesia in obstetrics, notably chloroform, became widespread.

In the Lancet 1889, Dr. F. W. Allwright of London gives a summary of the history of anaesthesia in obstetrics and discusses chloroform. He introduces the term "obstetrical analgesia", meaning the induction of partial anaesthesia with labor pains without abolition of consciousness; thus retaining the cooperation of the patient. Used in this manner he considered chloroform practically devoid of danger, but sounded the warning that one must always be extremely careful, for occasionally even very small amounts produce deep narcosis.

The advantages of chloroform are, (1) its small bulk, (2) it is pleasant to take, (3) small amounts produce the desired analgesia, (4) it is non-inflammable, (5) it is rapid in action. These certainly are decided advantages. Its disadvantage is the narrow margin of safety. If deep narcosis is induced both heart and respiration may cease simultaneously. It is said that the parturient woman enjoys some degree of immunity to the dangers of anaesthesia. This appears to be true to a certain extent, whether or not there is any scientific foundation for the assertion.

I have discussed the use of chloroform in obstetrics with a considerable number of general practitioners of wide experience. With few exceptions they favor chloroform,

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and state when used to the obstetrical degree only, and in normal deliveries they cannot recall any undesirable results, or any deaths which could be attributed to the chloroform. I am fully aware that chloroform is considered rather dangerous. It is very seldom used as a general anaesthetic for surgical procedures, and rightly so, for there is no question that it is more toxic than ether, nitrous oxide or ethylene. I raise this question however,—when used to the obstetrical degree, in normal cases, is its use not practically devoid of danger, provided no constitutional contra-indications exist which would apply to ether as well?

2. ETHER

Ether was first used in obstetrics in 1847 by Simpson, but within a few months was almost supplanted by chloroform. As the danger of chloroform became more widely understood, however, ether came into more general use, practically supplanting chloroform as a surgical anaesthetic, and to quite an extent in obstetrics. Its sole advantage is its much wider margin of safety. Its disadvantages are, (1) it is rather unpleasant to take, (2) more is required than of chloroform, (3) it is inflammable. In a home lighted with lamps this must receive serious consideration and precaution must be taken.

Ether, in a normal case, is also used to the obstetrical degree. Enough should be given with each pain to dull sensibility, and as the head passes over the vulva, the point of greatest pain, it may be pushed to the surgical degree. The patient usually wakens within a few minutes.

To compare chloroform with ether we find chloroform more pleasant to take, rapid in action, small in bulk. We find ether less pleasant to take, slower in action, larger in bulk, and inflammable, but with a safety zone five times that of chloroform. However, I again raise a question—isn't the alleged safety of ether as opposed to chloroform based upon results obtained when these drugs were used as surgical anaesthetics? An accurate comparison of these two agents when given only to the obstetrical degree would be interesting, and if the experience of a large number of observers in general practice is to be relied upon, we may well believe that chloroform would show in a more favorable light. There is, however, another factor to be considered, viz., the repair of lacerations. We all agree, I think, that lacerations should be repaired immediately after delivery. Surgical anaesthesia is nearly always required for this, and in these cases I believe it is much wiser to use ether. One can often estimate quite accurately in advance whether or not one may expect a laceration or whether or not episiotomy will need to be done. In these cases, surely, ether should be the choice as opposed to chloroform.

3. THE GWATHMEY METHOD

This method was introduced by Dr. James T. Gwathmey at the New York Lying-in Hospital in 1923. Briefly it is as follows: when labor is well started with pains about five minutes apart, and the cervix dilated 3 or 4 cm., an intramuscular injection of 2 c. c. of 50% magnesium sulphate with 1/6 to 1/4 gr. of morphine is given. The magnesium sulphate is repeated twice at half hour intervals, but not the morphine. When the pains are three to four minutes apart and the cervix dilated 4 or 5 cm., a rectal instillation is given. The formula is: quinine (alkaloid) gr. XX; alcohol, minims XL; ether ʒiiss; olive oil or liquid petrolatum (heavy) qs. ad ʒiv. This is introduced by means of a heavy catheter, the tip of which is carried above the fetal head. If instilled by means of a syringe retention is more certain. Pressure against the perineum with a crumpled towel is maintained for 15 minutes after the instillation. Here again the object is not to produce unconsciousness, but only to abolish or mitigate pain. The magnesium sulphate synergizes both the morphine and ether, and Gwathmey states that the efficiency of the morphine is increased from 200 to 500 per cent.

It is desirable, when employing this method, after the medication is started, to have the patient in a quiet, darkened room and to disturb her as little as possible.

For this method are claimed good perineal relaxation, very little subsequent nausea or vomiting, no deleterious effects on the in-

fant, and about 95 per cent efficiency in abolishing or relieving pain. It is further claimed that occiput posterior positions rotate as frequently as with any other method.

Contra-indications are: colitis, proctitis, diabetes, and auditory disturbances.

In Surgery, Gynecology and Obstetrics of August, 1930, Dr. Gwathmey published a paper based on the study of this method in over 20,000 cases. This report bears out the claims mentioned above, and he emphasizes the following points: (1) It can easily be used in the home. (2) It can be used without special training. (3) Constant supervision of the patient is not necessary. (4) It is inexpensive. In view of the results obtained, and the relative simplicity of administration, this method is one which should commend itself to the general practitioner, who is often compelled to work alone or with untrained help.

4. TWILIGHT SLEEP

Twilight sleep, or morphine and scopolamine analgesia, was first recommended for use in obstetrics by von Steinbüchel in 1902 and popularized by Krönig and Gauss of Freiburg. These men use narcophine, a proprietary, morphine meconate, but in this country the term "twilight sleep" is generally understood to mean the use of morphine and scopolamine.

When labor is well started with pains 4 to 5 minutes apart and lasting 30 or more seconds, the first injection is given, which consists of 1/6 to 1/4 gr. of morphine, and 1/150 gr. of scopolamine. Forty-five minutes later a second injection is given, consisting of 1/200 gr. of scopolamine. Thereafter hypodermics are given at hourly intervals using scopolamine alone in doses of 1/300 to 1/150 grains. Occasionally in long labors additional doses of ⅛ gr. of morphine are required. The object is to produce and maintain amnesia. The patient must be in a darkened room, quiet must be maintained, and she must be disturbed as little as possible. Even so, these patients are often very restless, sometimes maniacal, requiring restraint. A fetal mortality of 2 per cent is attributed to this method. This fact, together with the necessity for constant supervision by trained help renders this procedure impractical and unwise for general use in the home.

On the other hand, the restrained use of morphine and scopolamine in labor is very useful, especially during the first stage. When the pains have become well established in regularity and force, 1/6 grain of morphine or 1/4 grain of pantopon with 1/200 grain of scopolamine may be given. The scopolamine may be repeated if indicated. These drugs, together with a little suggestion, usually mitigate the pains of the first stage considerably and patients frequently sleep between pains. At the end of the first stage, as the head passes through the cervix, a few inhalations of ether or chloroform will aid materially, and after that, of course, ether, or if you prefer choloform, to the obstetrical degree with each pain will carry the patient through the second stage very nicely. I myself, have found the use of pantopon and scopolamine in the first stage, with ether in the second, to give very satisfactory results, and there need be no fear of narcotization of the infant if pantopon or morphine is used in the first stage only.

5. SODIUM AMYTAL

This drug was introduced into obstetrical practice in 1928 by Robbins, McCallum, Mendenhall and Zerfas of Indianapolis. In the American Journal of Obstetrics and Gynecology of September, 1929, they report 100 cases. Since then the literature has contained a considerable number of reports by other observers. The effect of the drug is limited almost entirely to the brain and cord, the motor and sensory peripheral organs remaining intact. Its chief effect is a depression of the psychic cells of the brain, producing amnesia.

It is usually given intravenously, in 10% solution, freshly prepared, in doses proportionate to the weight. The optimum dose for a 150-pound patient is 7½ to 9 grains, or from 1/20 to 1/5 of a grain per kilogram of body weight. This is given after labor is well established, with pains 3 to 5 minutes apart and of 20 to 40 seconds duration. It is injected slowly, 1 c.c. per minute. The

patient usually falls asleep before the injection is completed.

Here again constant watchfulness is necessary. Extreme restlessness may require restraint. The blood pressure and pulse must be watched. It is contra-indicated in cases of arterioscelerosis and hypertension, and in pulmonary infections requiring expectoration.

Robbins and his co-workers report no harmful effects on the infant, but Swendson of St. Paul reported a series of cases in December, 1930, in which 1/3 of the babies were apnoeic, requiring stimulation. As to the effect on the patient, he reported satisfactory amnesia in 90%, but with slight to extreme restlessness in one-half of the patients.

It would seem then that up to the present, in view of the necessity of constant watchfulness, fairly frequent need for restraint, and a rather higher percentage of apnoesis babies than is usual, this method is hardly one to be adopted for general use in the home, although it appears fairly satisfactory in hospital practice.

6. SPINAL ANAESTHESIA

The use of spinal anaesthesia is not new. Cocainization of the spinal cord, introduced by Corning in 1885, and further developed by Bier, Tate and Cagleri, never came into widespread use because of the great dangers attendant upon the use of cocaine. Better results were obtained after the discovery of novocaine by Einhorn in 1905, yet it is only in the past 3 or 4 years that spinal anaesthesia has come into general use, except in a few of the larger surgical centers.

Impetus to the use of spinal anaesthesia in obstetrics was given by Pitkin and others. Pitkin uses a solution of 200 mgm. of novocaine in gliadin. This solution has a specific gravity of 1.019. It is injected in the 3rd lumbar interspace preferably, after which the patient is placed in the reverse Trendelenburg position for 15 minutes. This allows time for the novocaine to become fixed and produces anaesthesia of the cervix, perineum, vulva, sphincters of the bladder and anus, and a small area on the inner surface of the thighs.

Pitkin and others using this solution report a high degree of success. The claims advanced in favor of spinal anaesthesia in obstetrics are: (1) Complete anaesthesia, (2) The conscious cooperation of the patient is retained. (3) Better perineal and cervical relaxation than with any other anaesthetic; thus avoiding many lacerations which otherwise would be incurred. (4) It is without deleterious effects on the infant. (5) It is without danger to the mother.

Spinal anaesthesia is especially indicated in (1) Pulmonary disease, (2) Toxemias, (3) Pyelitis, (4) Cardiac disease, (5) Anemia, (6) Diabetes. It is, I think, without a rival for forceps deliveries and episiotomy, if, indeed, episiotomy is necessary.

Formerly the chief objection to spinal anaesthesia was the sometimes alarming fall in blood pressure, due to paralysis of the vasoconstrictors of the splanchnic region. These arise from the level of the 2nd thoracic down to and including the 1st lumbar. By keeping the solution low these nerves are not affected. The only effect, when the solution is kept low, is on the sensory nerve supply of the uterus arising from the 3rd, 4th and 5th sacral nerves. The motor innervation, arising from higher levels, is not affected, and contractions continue with usual regularity and force. Occasionally, however, one sees the contractions cease. This is usually due to some error in technique, allowing the solution to reach a high enough level to paralyze the uterine plexus, the source of motor innervation, situated above the promontory of the sacrum.

One does not necessarily have to use Pitkin's solution. One hundred milligrams of novocaine dissolved in 1 c.c. of spinal fluid will serve just as well, perhaps better. A 22 gauge, 45 degree bevel needle is used. All that is needed then is the needle, a 2 c.c. luer-lok syringe and ampoules containing novocaine crystals. Strict aseptic precautions must be observed the same as for any lumbar puncture. For the technique in detail I refer you to the paper by Stout "Spinal Anaesthesia—volume control technique", in the American Journal of Surgery, July, 1929. Anyone contemplating the employment of

(Continued on page 130)

THE WISCONSIN MEDICAL JOURNAL

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OFFICIAL PUBLICATION OF THE STATE MEDICAL SOCIETY OF WISCONSIN

EDITORIALS

A PROPER REQUEST

THE attention of our readers is called to the resolution adopted by the Council reported under proceedings of that body elsewhere in this issue. Summarized, it asks the cooperation of members of our State Society who are also members of other but specialized groups, to use only the channels of the basic organization for the expression of opinion on social and economic problems affecting the practice of medicine.

This is a proper request and is looking to the joint interest of public and profession. The county medical society, the State Society and the American Medical Association are charged with the duties of promoting the just economic interests of the profession. Their organization is such as will be most efficient to this end. If other specialized and almost strictly scientific organizations are each to endeavor to gain the front page with a voicing of their views on social-economic questions, the result can only be an apparent diversity of opinion always confusing to the layman and legislator.

Regardless of specialty, we are first and foremost physicians. At all times, and particularly now, let us do nothing that will destroy our only effective force,—a cohesive organization that embraces and speaks for the fundamental interests of us all.

WHEN THE FROST IS COMING OUT

A YEAR ago we had occasion to visit our log cabin in the woods about the first of May. To our amazement every window-frame in the house had settled to the left leaving gaps between casing and the frame that were as large as two inches in some corners. We called the carpenter post haste that this destruction caused by Mother Nature in the winter months might be remedied even though the bill obviously would be a high one.

"Why man alive! If I were to saw all those windows down to fit now it would be all out of kilter in the other direction in less than a month from now. Don't you know that the frost is just coming out of the ground? You may need some repair work but I reckon you better wait until the house settles a bit before you have me sawing things apart."

And to our amazement, just two weeks later, every window in the house, without the touch of a plane or a saw, fitted perfectly.

* * *

In this period of violent change it may be said that the frost is coming out of the ground. The end result of our economic upheaval may require a carpenter to put our house in order again but it would seem the wiser course if we were to wait until the

frost is out of the ground before we make our changes. If we make them now on the basis of the conditions that confront us at the moment, we are altogether apt to find that we have changed our house to meet a transitory condition and that we will have to change it all over again when it settles a bit.

The institution of medicine has been continuously progressive in the development of scientific knowledge and in the development of methods for its helpful application. We have no disposition to condone any weaknesses that may exist but we seriously doubt that these weaknesses are serious enough to demand radical changes that may make our home, useful for so many years, a weakened structure for the long future. It has been our observation that the old homes were well built and, kept in repair, required few changes to make them modern in service.

AS OTHERS SEE US

POLITICAL MEDICINE

The Journal has commented frequently and hopefully on the studies that have been made during the past five years by the Committee on the Costs of Medical Care. We believed that out of all the effort and expenditure involved there would surely come some solution of the twofold problem presented by the inability of a majority of people to pay present high costs for the cure of illness, and the collateral inability of doctors to earn incomes commensurate with the expense of their training.

But the mountain has labored in vain; it has brought forth a mouse.

As its major conclusions, the committee recommends, first, "that medical service, both preventive and therapeutic, should be furnished largely by organized groups of physicians, dentists, nurses, pharmacists and other associated personnel . . . organized, preferably around a hospital, for rendering complete home, office and hospital care"; and, second, "that the costs of medical care be placed on a group-payment basis, through the use of insurance, through the use of taxation, or through the use of both these methods."

In other words, state medicine.

This is the report of the majority of the committee. It is combated by a vigorous minority, which quite rightly points out that "there is nothing in experience to show that it is a workable scheme or that it would not contain evils of its own which would be worse than those it is supposed to alleviate. Above all there is no evidence to prove that it would accomplish what ought to be the first object of this committee, the lessening of the costs of medical care."

The medical profession has itself long stood in fear of the introduction of state medicine, with the building up of yet another bureaucracy to dictate its every action. The public has even greater reason to fear such a system. Already, according to the committee's statistics, taxation pays fourteen per cent of the nation's total bill for medical care—$514,500,000 out of $3,647,000,000. It is not difficult to conceive that a medical bureaucracy might rival the public-school system, or the Army and Navy, in its demands for tax funds.

Health insurance should be voluntary, according to most of the members of the committee, though a minority is for the immediate introduction of compulsory insurance. For the benefit of those people who could not afford to pay for insurance, it is suggested that "communities may well use tax funds," and if the community cannot pay "the committee recommends state financial aid."

And perhaps in recompense for this tax-fund assistance, it is suggested that the hospital board to direct the general policies and assume responsibilities for the finances of the medical center might be "elected by popular vote like school boards, or appointed by municipal or county officials." Thus creating more political jobs, and quite likely in the end making the health of voters dependent upon regularity in support of the political boss.

Meantime, what would become of those doctors who were not included in the medical-center staff? Some, of course, could continue to count upon the loyalty of patients who willingly or unwillingly would thus pay a double cost for medical care. But other physicians, forced outside the political pale, would surely find themselves dubbed as quacks, however reputable their practice might continue.

The committee was supposed to find some way by which more adequate medical care might be made available to the public at lower cost, but nothing the majority has proposed even points the way. Far better the recommendations of the minority of the committee, who proposes "that government competition in the practice of medicine be discontinued and that its activities be restricted to the care of the indigent and of those patients with diseases which can be cared for only in governmental institutions; to the promotion of public health," and to the care of the Army, Navy and veterans having war-connected disabilities.

And, of even greater importance, "The minority recommends that united attempts be made to restore the general practitioner to the central place in medical practice."

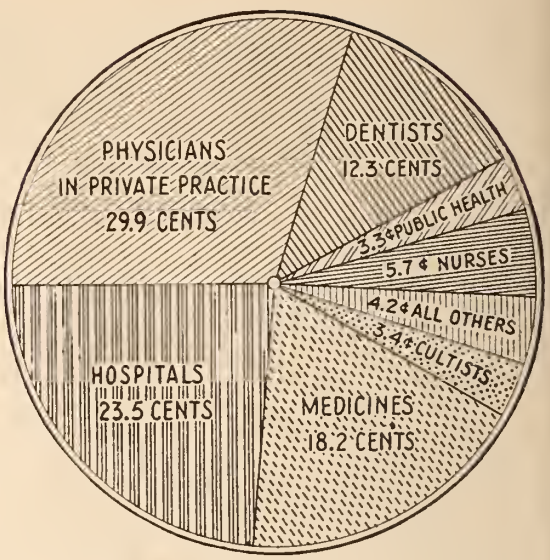
"We are opposed," says the minority report, "to all forms of medical practice which make it difficult or impossible to maintain the personal relationship of physician and patient. Neither do we agree with the majority that savings in the cost of medical care are to be made by eliminating the general

practitioner or submerging him in a group. . . . In a group the general practitioner tends to disappear. The great majority of illnesses and injuries (about 85 per cent) are of such nature that they can be treated efficiently by any able practitioner with very simple equipment."

It is the opinion of the Journal that the accomplishments of this five-year study are to be measured by the minority report and not by the majority with its Utopian and impractical schemes; that the family doctor is the most-efficient and least-expensive source of general health; that state medicine, with its demand for compulsory insurance and increased taxation, is in every way to be avoided; that the mass production of health, through any medical hierarchy or bureaucracy, is impossible; and that the simple health-insurance plan presented last month in the Journal in Paul de Kruif's article, How Well Can We Live?, is so far the most practical of all methods to enable our people to pay for illness.

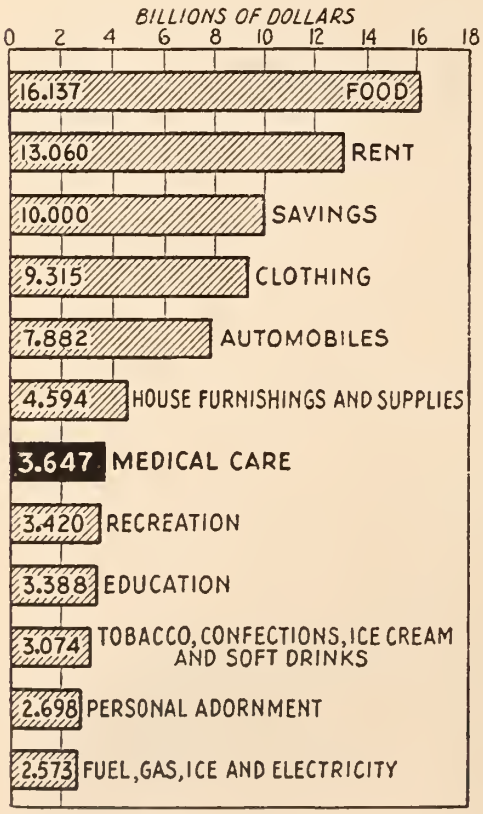
We have politics messing its often-dirty hands in business, in our schools, in most public affairs and some private ones as well. But may we be preserved from politics in personal health.

—*Editorial, Ladies Home Journal, Feb. 1933.*



Place of Medical Care in our 1929 Expenditures

From New York Times—Michigan State Medical Journal.



The Medical Dollar of 1929

From New York Times—Michigan State Medical Journal.

STATE HOSPITAL PROPOSAL

Accepting the precise recommendation of the State Medical Society of Wisconsin made at the budget hearing in December, Governor Schmedeman in his budget message to the legislature recommended that the entire cost of indigent patients admitted to the State of Wisconsin General Hospital "shall be a charge upon the county from which the court order admitting him to the hospital was issued."

Pointing out that this change in procedure will mean a saving to the general fund of the state of $385,468.83 during the biennium, the Governor's budget message stated:

"I recommend that subsection (1) of section 142.07 of the statutes be amended to provide that the entire cost of patients admitted to the Wisconsin General Hospital under order of any County Judge of the probate court at rates determined as set forth in said subsection (1) of section 142.07, shall be a charge on the county from which the court order admitting him to the hospital was issued. At the present time the county of residence and the state pay the actual cost of the patients' care at the Wisconsin General Hospital equally. I recommend that there be no change in the method of paying the hospital charges for patients admitted to the Wisconsin Orthopedic Hospital for children, which is also borne equally by the counties and the State. However, I am satisfied that the counties should pay the actual cost of care and treatment of all other patients sent by them to the Wisconsin General Hospital. Unless this is done the cost of operating this institution will soon become a very heavy burden upon the State."

Reasons for this recommended change were cited in the Wisconsin Medical Journal for January on page 47 ff.

THE PRESIDENT'S PAGE

Reginald H. Jackson

OPPORTUNITY

Let us seize, friends, our opportunity from the day as it passes.—HORACE—*Epodon XIII*

ENVELOPED in the black despair of an ever deepening financial gloom, humanity writhes and twitches like the victim of some convulsion-producing toxin. Many have arrived at the stage where their apprehension and actual fear of the inability of the guardians and practitioners of financial stability (God save the term) to prevent the total collapse of the patient, add materially to the general distress. The history of previous depressions reveals the indubitable fact that they all came to an end in due time, and that a total collapse did not occur. My father was a young practicing physician at DePere in the early eighteen seventies, and I recall the vivid pictures he portrayed of conditions following "Black Friday," when Jay Gould cornered the gold market. As a boy in the early eighteen nineties, I tried to earn pocket money by collecting some of Father's medical bills. The results were about the same as you are experiencing with yours today.

Nor is it at all a case of

"God and the Doctor we alike adore
Just on the brink of danger, not before;
The danger over, both alike are requited,
God is forgotten and the Doctor slighted."

Not until a very appreciable turn for the better occurs will it be possible for many grateful and well intentioned patients to make payments on or settlement of accounts.

The harsh realities of the present are bringing into truer perspective the inestimable boon the general practitioner of medicine is to suffering humanity. No matter how long the present depression lasts or how severe it becomes, he will remain at the post of duty, answering all calls for help regardless of the fact that the much tooted cost of medical attention will be borne largely by himself.

No other profession has an opportunity at all commensurate with ours to demonstrate to society our worthiness during this crisis. That we have an ever greater and more sincere appreciation of our ministrations to the sick cannot be doubted. Society, through the contacts of its appointed agents, is gradually awakening to a consciousness of its just obligations to the medical profession. There can be no question that when conditions again approach normal, organized medicine will receive a better hearing and more appropriate reward for its social labors than it has in the past.

While statistics tend to show that mortality rates are lower and that the incidence of disease is less at present than during prepanic days, it is probably true that numbers of sick people are deliberately refraining from seeking medical aid through unwillingness to incur a financial obligation for which they cannot provide.

Let us carry on as we have in the past, serving all to the best of our ability without regard to race, creed, color, or economic status. Especially do I urge the younger members of our profession to take full advantage of the opportunity to give such painstaking care and attention to those patients they do have that it will inevitably react to their credit in the future.

It has been my observation that the way in which the first five years of professional life are spent determines to a large extent the whole future of an individual. When times are hard and patients few and far between, it is very easy to drift into an unhappy, unprofitable attitude of mind and habit of body, with a steady decline of interest and zeal in keeping up with things medical. Slack times should be looked upon and grasped as golden hours of opportunity to acquire an ever growing fund of information about things pertaining to the art and science of medicine.

More appropriate and applicable to our profession than to any other is the old admonition

"Work, work hard, work always,
For life is short, art is long."

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SOCIETY PROCEEDINGS

BROWN–KEWAUNEE

The first meeting of 1933 was held at the Beaumont Hotel January 19th, forty-seven members being present. The minutes of the last meeting were read and approved as read.

A bill of $12.50 for repairs of a Beaumont cabinet in the old Fort Hospital was presented, also a bill of $10.00 for the purchase of several small Beaumont relics. In as much as the Society is on record as agreeing to finance the purchase of historical articles used by Dr. Beaumont, these as well and current bills for Society expenses were by motion allowed and the secretary instructed to pay them.

Drs. G. M. Shewalter and Robert Burns, both of Green Bay, were by unanimous ballot admitted to membership in the Brown–Kewaunee County Medical Society.

There being no new or unfinished business, the address of the evening was made by our guest speaker, Dr. G. A. Hipke of Milwaukee, who spoke on the subject of "Obstetrics". Dr. Hipke's talk was very practical and drawn from his long and varied experience in this field of practice. Dr. Hipke's visit was especially interesting in as much as it afforded him an opportunity of renewing old acquaintances among whom he practiced in Kewaunee County many years ago.

In addition to the address of Dr. Hipke, a very able paper on the subject of "General and Medical Economics" was read by Dr. P. R. Minahan. In his paper Dr. Minahan pictured the evolution of present day political and economical systems from the earliest times. The essayist showed much preparation and sound thinking and amply deserved the deep interest and attention he excited in his listeners. The motion was made to adjourn. O. A. S.

CALUMET

A committee of the Calumet County Medical Society met with the Poor Relief Committee of the county board on January 5th to discuss matters pertaining to indigent relief.

Members of the committee of the Society present at this meeting were Drs. J. W. Goggins and N. J. Knauf of Chilton, and A. C. Engel of New Holstein.

DANE

Under an agreement between the Dane County Outdoor Relief department and the Dane County Medical Society, the County is appropriating $125 a month for operating costs of a clinic, known as the Dane County Medical Dispensary Service, which was opened on February first, at St. Mary's Hospital, Madison.

Under the new plan, clinical examinations are made free of charge at the clinic. Physicians working there receive no compensation. Members of the Dane County Medical Society alternate on duty and an interne is on duty full time. The Madison hospitals are supplying internes for the work. The Visiting Nurses' Association is also cooperating. Family physicians of indigent persons will make the necessary house calls whenever possible, being paid their expenses.

GREEN LAKE–WAUSHARA–ADAMS

Members of the Green Lake-Waushara-Adams County Medical Society held their annual meeting at the Hotel Whiting, Berlin, on December 30th. Members of the Auxiliary of the Society were present also and at the six-thirty o'clock dinner which preceded the meeting.

The January meeting of the Society was held Monday evening, January 16th, at the Hotel Callahan, Neshkoro. A committee to direct plans for care of the indigent appointed at the December meeting and composed of Drs. A. J. Wiesender, Berlin; Dr. G. G. Mueller, Princeton, and Dr. J. M. Johnson of Ripon gave their report on the plan now in operation in Outagamie County. This plan met with the unanimous approval of the members.

KENOSHA

At the annual meeting of the Kenosha County Medical Society held in the Chamber of Commerce rooms in the U. S. National Bank building, Dr. W. C. Stewart of Kenosha was named as President of the Society for the year 1933.

Other officers named were: Dr. Alexander Schlapik, Kenosha, vice-president, and Dr. W. H. Lipman, Kenosha, secretary-treasurer.

After the election of officers, the members of the Society discussed program plans for the current year.

LA CROSSE

At the annual meeting of the La Crosse County Medical Society on December 20th, the following officers were elected for the year 1933.

President, Dr. M. A. McGarty, La Crosse; Vice-President, Dr. G. F. Wakefield, West Salem; Secretary-Treasurer, Dr. Alf Gundersen, La Crosse; Delegate, Dr. Gunnar Gundersen, La Crosse; Alternate-delegate, Dr. R. L. Eagan, La Crosse; Censor, Dr. D. S. MacArthur, La Crosse.

Following the election of officers, the "La Crosse County Medical Society Plan" was adopted. Hospital and medical fees were presented by the Economics Committee and accepted. Dr. Robert E. Flynn, La Crosse, was elected as the agent of the La Crosse County Medical Society.

A luncheon concluded the meeting. G. D. R.

MANITOWOC

A very successful meeting was held on January 12th. Following a luncheon at the K. C. Center, the Public Relations Committee submitted their report which was adopted and recommended in part that the members be appointed for two years,—two for two years, and three to be appointed each year. It was suggested that the local newspapers in reporting accidents, etc., leave out of print the names of the doctors caring for such patients.

The following were elected as officers for the coming year: President, Dr. C. L. R. MacCollum; Vice-President, Dr. Alfred Zlatnik; Secretary and Treasurer, Dr. E. C. Cary; Censor, Dr. A. J. Shimek; Dr. R. W. Hammond and Dr. W. A. Rauch were re-elected delegate and alternate delegate.

The following resolution, paying tribute to the late Dr. Luhmann, was passed at this meeting:

"The grand oak towers proudly above the soil that gave it birth but always stands ready to offer rest and shade to any who need.

"So stood Dr. Luhmann, loyal to the sturdy frontiersmen from whom he sprang but always ready to assist any in need of succor or protection.

"For half a century a public servant in one or more capacities without a breath of scandal or a word of serious criticism, his memory will be hallowed because of his outstanding work as a physician and family friend and confidant.

"The members of this Society remember him as the wise coadjutor, the considerate counsel, ever ready to sacrifice his own desires and comforts to help any one in distress, and always a faithful and earnest worker in our organization. As a life member of the Manitowoc County Medical Society his presence was a helpful influence and his absence caused regret.

"Therefore, it is resolved by the Manitowoc County Medical Society, that we extend our sincere sympathy to the members of his family in appreciation of his unusual services to the society and to each of us personally, and further, That a copy of this resolution be sent to Mrs. Luhmann and that the same be made a permanent record in our archives.

"E. GATES,
A. J. SHIMEK,
C. M. GLEASON."

MARATHON

A meeting of the Marathon County Medical Society was held at the Wausau Memorial Hospital on the evening of December 29th.

An executive committee was created at this meeting, consisting of the President, Secretary, Delegate, Councilor of the Ninth District, and one other member,—Dr. M. L. Jones, Wausau. This committee is empowered to act for the County Society in all matters within its discretion.

Officers elected for the year are as follows: President, Dr. W. A. Green; Vice-President, Dr. J. K. Trumbo; Secretary-Treasurer, Dr. V. E. Eastman; Delegate, Dr. R. W. Jones; Alternate Delegate, Dr. S. M. B. Smith, all of Wausau.

Dispensary Committee: Dr. F. C. Prehn, Chairman (1 year), Dr. W. C. Frenzel (2 years), Dr. Paul Z. Reist (3 years).

Board of Censors: Dr. George H. Stevens, Chairman (1 year), Dr. H. H. Christensen (2 years), Dr. Paul Z. Reist (3 years).

Legislative Committee: Dr. Joseph F. Smith, Dr. H. H. Christensen, Dr. W. E. Zilisch.

Health Committee: Dr. S. M. B. Smith, Dr. J. N. Doyle and Dr. J. M. Freeman.

Program Committee: Dr. R. F. Fisher, Chairman; President of the Society, and the Secretary of the Society. V. E. E.

MARINETTE

A joint meeting of the Marinette County Medical Society and the Menominee (Mich.) County Medical Society was held at the Hotel Marinette in December.

The following officers were elected for Marinette County: President, Dr. T. J. Redelings, Marinette; Vice-President, Dr. H. F. Schroeder, Marinette; Secretary, Dr. C. H. Boren, Marinette; Censor, Dr. A. T. Nadeau, Marinette.

MILWAUKEE

An executive session of the Medical Society of Milwaukee County was held at the Hotel Pfister on January 9th for the purpose of submitting to Society members details of the so-called "Milwaukee Plan" for their consideration. This plan had been developed by the special committee on the Distribution of Medical Care.

About three hundred members attended this meeting. Those present voted that the Board of Directors should be instructed to have the Committee continue its study and report at a later meeting of the Society.

The monthly meeting of The Medical Society of Milwaukee County was held in the Elizabethan Room of the Milwaukee Athletic Club on January 19th.

Dr. Ralph Pemberton, professor of medicine, graduate School, University of Pennsylvania School of Medicine, and Dr. Robert B. Osgood, professor of orthopedic surgery, Harvard University Medical School, were the speakers. Dr. Pemberton addressed the Society on "Heat, Massage, and Exercise, Especially in Relation to Arthritis," and Dr. Osgood's subject was "Body Mechanics as Basis of Physical Therapy."

Discussion of these two papers was led by Dr. F. J. Gaenslen, who was followed by Drs. L. M. Warfield and Chester C. Schneider.

It was a most enthusiastic meeting with over three hundred members in attendance. Following the scientific program, the meeting adjourned to the social hour. T. W.

OUTAGAMIE

Dr. John T. Gordon, Milwaukee, discussed bronchoscopic work at the monthly meeting of the Outagamie County Medical Society held at the Hotel Northern, Appleton, on January 17th.

POLK

The November meeting of the Polk County Medical Society was held at Balsam Lake on the 16th. The members were the guests of Dr. W. A. Nielicke at a seven o'clock dinner. The meeting was devoted to discussions of the urinary tract by Dr. H. M. Stang, Eau Claire, Councilor for the tenth district, and Dr. Fred Foley of St. Paul, Minnesota. A short discussion followed the meeting in regard to the progress of the collection service recently developed by the Society.

A Poor Man's meeting was held on December 16th at St. Croix Falls. The Polk County Poor Relief Committee, the Welfare Worker and the Polk County Medical Society were the guests of Dr. H. C. Caldwell, St. Croix Falls, to a dinner meeting.

The President of the Society opened the meeting and asked the members and the Poor Committee for an individual expression of their attitude toward the contract system of caring for the indigent sick. The expression in favor of the contract system was practically one hundred per cent. A motion was made that the Society appoint a committee to meet with the Poor Relief Committee to effect a contract for the coming year. Dr. L. O. Simenstad, Dr. W. B. Cornwall, and Mr. George B. Larson were appointed on the contract committee.

The Polk County Medical Society held its regular monthly meeting at Balsam Lake on Thursday evening, January 19. The Society was the guest of Dr. D. A. Maas, Webster.

After the dinner, the group adjourned to the Court House for the discussions. Dr. Young, University of Minnesota Hospital, presented the professional discussion of the evening, "Nasal Infections." Especial emphasis was placed on sinus drainage. This was a very timely subject filled with practical ideas and of general use to all members.

The question of continuing the contract system of caring for the indigent was discussed, and after considerable debate it was agreed to enter into a contract for the coming year, providing the sum of $7,000 was secured.

A report was given by Mr. Geo. B. Larson, Secretary, as to the progress of the Polk County Professional Bureau, a collection service owned and operated by the membership of the Polk County Medical Society. The system has proven beneficial to many of the men in the Society. G. B. L.

RACINE

The regular meeting of the Racine County Medical Society was held at the Racine Elks Club on January 19th at six-thirty o'clock. A dinner was served, after which the new officers were installed. Dr. W. C. Roth, the new president, was presented with a gavel by the Red Cross Drug Company.

Dr. Ernest E. Irons of Chicago gave a fine address having for his subject, "Blood Dyscrasias."

Dr. Robert B. Preble, Chicago, gave a splendid talk on the subject of "Coronary Disease."

The attendance was fine. S. J.

ROCK

The December meeting of the Rock County Medical Society was held in the Monterey Hotel, Janesville.

Following the dinner, Dr. Francis D. Murphy of Milwaukee gave an address on "The Heart," illustrating his talk with slides.

Officers elected for the year are: President, Dr. F. E. Brinckerhoff, Beloit; Dr. F. E. Sutherland, Janesville, Vice-President; Dr. E. C. Hartman, Janesville, Secretary-Treasurer.

VERNON

At a meeting of the Vernon County Medical Society held in January, the following were elected officers for the year:

President, Dr. C. E. Lauder, Viroqua; Secretary, Dr. P. H. Hansberry, Hillsboro; Dr. William Trowbridge, Viroqua, Delegate, and Dr. R. H. Ludden, Viroqua, alternate.

WALWORTH

The Walworth County Medical Society met at the Delavan Hotel on Tuesday, January 9th.

Following the dinner, Dr. Ira Sisk, Madison, spoke on "Transurethral Resection of the Prostate Gland."

A short business meeting followed. The newly elected officers were installed: Dr. S. G. Meany, East Troy, President; Dr. V. S. Downs, Lake Geneva, Vice-President, and Dr. H. J. Kenney, Delavan, Secretary-Treasurer. H. J. K.

WINNEBAGO

The December meeting of the Winnebago County Medical Society was held with a dinner at the Hotel Menasha, Menasha, as guests of Dr. A. B. Jensen of Menasha.

Officers for the year 1933 were elected, the slate being as follows:

Dr. Donald Hugo, Oshkosh, President; Dr. M. N. Pitz, Neenah, Vice-President; Dr. M. C. Haines, Oshkosh, Secretary-Treasurer; Dr. J. W. Lockhart, Oshkosh, Delegate; Dr. R. B. Rogers, Neenah, Alternate delegate, and Dr. G. E. Forkin, Menasha, Censor. Dr. J. B. MacLaren of Appleton gave an outline of the Outagamie County plan for the care of the indigent sick.

The January meeting of the Society was held at Sunnyview Sanatorium, Oshkosh, on the evening of January 20th. This was a joint meeting of the Fond du Lac and Winnebago county medical societies.

Dr. S. A. Morton, Milwaukee, spoke on the subject of "Fundamentals of Radiological Diagnosis of Chest Diseases." Discussion on Dr. Morton's paper was led by Dr. Oscar Lotz of Milwaukee.

Sanatorium committees of the Winnebago and Fond du Lac county boards of supervisors met at Sunnyview during the afternoon with County Judge D. E. McDonald; Dr. Oscar Lotz, Dr. E. B. Pfefferkorn, Oshkosh, and Miss Meta Bean, of the staff of the Wisconsin Anti-Tuberculosis Association.

M. C. H.

MILWAUKEE ACADEMY OF MEDICINE

Dr. Erwin R. Schmidt, Madison, and Dr. W. J. Meek, Madison, were the speakers at the meeting of the Milwaukee Academy of Medicine held on January 17th.

Dr. Schmidt's subject was "The Mortality in Appendicitis" while Dr. Meek spoke on "Experimental Obstruction."

At the annual dinner meeting of the Academy, held at the University Club on January 10th, the following officers for 1933 were elected:

President, Dr. D. E. W. Wenstrand; President-elect, Dr. George H. Fellman; Treasurer, Dr. Ralph P. Sproule; Secretary, Dr. Theodore L. Squier.

MILWAUKEE HOSPITAL INTERNS

The first meeting of the Milwaukee Hospital Interns' Association for 1933 was held on January 18th at the home of Dr. Irvin Schulz. Drs. Schulz and William P. O'Malley were the speakers of the evening.

MILWAUKEE OTO-OPHTHALMIC

The annual meeting of the Milwaukee Oto-Ophthalmic Society was held on January 24th at the Wisconsin Club. Dr. Charles N. Spratt of Minneapolis was the guest speaker.

MILWAUKEE PEDIATRIC

At the meeting of the Milwaukee Pediatric Society on December fourteenth the following papers were presented:

Dr. Kassowitz on "Variations of Basal and Post-digestive Blood-Pictures in Health and Disease"; Dr. Hall on a case of "Hernia"; Dr. Jefferson on "Integration of Psychiatry and Pediatrics".

The following officers were elected: President, Dr. Karl E. Kassowitz; Vice-President, Dr. J. H. Shimpa; Secretary, Dr. John H. Reynolds. K. E. K.

UNIVERSITY OF WISCONSIN

Dr. Karl F. Meyer, professor of bacteriology and director of the G. W. Hooper Foundation for Medical Research, University of California, gave a lecture on "Psittacosis" in the Service Memorial Institutes building, January 9th. This lecture was sponsored by the University of Wisconsin Medical Society.

WISCONSIN SOCIETY OF RADIOGRAPHERS

A second meeting of a group of radiographers in the state of Wisconsin was held Wednesday, January 11th, at the County Emergency Hospital, Milwaukee.

During the afternoon and evening session twenty-five were present. Dr. Eugene A. Smith, Milwaukee, gave an address of welcome and guided the visiting technicians on a tour through the County Emergency Hospital. A paper "The Purpose and Cause of a State Society" was given by H. H. Hook, R. T., Madison. The constitution and by-laws as drawn up by a committee appointed at a former meeting was presented for consideration. At five-thirty dinner was served by the County Hospital.

During the evening session a very interesting talk was given by Dr. Robert Arens, Chicago, a member of the American Registry Board, presenting their ideas concerning state societies. Dr. George H. Landau, Chicago, a member of the Council was also a guest. Harold Petsing, R. T., Chicago, gave a paper on "State Societies". Due to an accident which has confined him to the hospital Dr. H. B. Podlasky, Milwaukee, chairman of the American Registry Board, was unable to attend the meeting, but through Dr. Arens sent his good wishes and entire approval of our newly forming society.

It was decided to postpone the election of officers until a future meeting as it was felt there was not as yet a large enough representation of technicians at this meeting. At the present time Virginia H. Eller, Pember–Nuzum Clinic, Janesville, is acting president, and H. H. Hook, State of Wisconsin General Hospital, is acting secretary. Another meeting is to be held in Milwaukee, February 25th, at which time unfinished business will be taken care of and technicians will present papers. V. H. E.

Legislature Receives Optometry Bill

Senator Otto Mueller, Wausau, has introduced bill 45, S. providing that optometrists must not use the title "Doctor" without the word "optometrist." The bill was introduced at the request of the Wisconsin Optometrists Association.

Under existing laws the Attorney General has held that optometrists may not use the title "Dr." under any conditions. The certain effect, therefore, of Senator Mueller's bill would be to grant optometrists the legal right to this title so long as they added the word "optometrist."

INVESTIGATOR CONTINUED

Under the Governor's budget bill the investigator for the State Board of Health, who is charged with the duty of looking to the enforcement of laws governing who may treat the sick, will be continued under Governor Schmedeman's budget bill. The appropriation for the coming biennium, however, was reduced from $5,000 a year to $2,500 a year. Up to the present time, salary and expense of the investigator have been running in the neighborhood of $4,000 a year. The reduction in budget recommended by the Governor may reduce traveling expenses somewhat but it is believed that the work can be continued efficiently in uncovering at least the major cases of quackery in Wisconsin.

THE WOMAN'S AUXILIARY

MRS. FRED A. NAUSE, JR., Sheboygan, *President*
MRS. EBEN J. CAREY, Milwaukee, *President-elect*
MRS. WALTER FORD, Sheboygan, *Secretary*
MISS RUTH BUELLESBACH, Madison, *Executive Secretary*
MRS. R. G. ARVESON, Frederic, *Treasurer*
MRS. JAMES C. SARGENT, Milwaukee, *Press and Publicity Chairman*
MRS. JAMES F. PERCY, Los Angeles, Calif., *National President*

MRS. ROCK SLEYSTER, Wauwatosa, *National Convention Chairman*

National Convention, Milwaukee, June 1933

President Outlines Auxiliary Effort*

By MRS. ROCK SLEYSTER
Wauwatosa

In assuming the office of President of this organization, I can only promise my best efforts at all times and a full degree of loyalty and devotion to the duties that inevitably attend executive responsibility.

Never in the history of medicine has the profession (to the promotion of whose welfare this Society is dedicated), faced greater problems, or needed more loyal support. A universal and growing restlessness due to the economic depression is evidenced everywhere and in every walk of life. In the months to come organized medicine will be faced with many schemes to commercialize it's practice. The sole defense is an enlightened public.

This defense calls for a continued educational policy. The two principal avenues open are through the promotion of speakers to lay organizations, other educational publicity and the extension of the influence of Hygeia, the Association's one publication carrying the message of scientific medicine to the public.

The Auxiliary can be most helpful in the promotion of these educational measures and the need for our earnest support in effecting lay contacts for these agencies has never been so great. Let us as a county unit pledge continued and untiring effort along these lines.

Aside from all this, our own local organization faces this coming year, what will be it's greatest undertaking in many years. I refer to the responsibility placed on our comparatively small membership in planning and carrying out arrangements for the meeting of the National Auxiliary, and the entertainment of from two to three thousand women, who will be our guests next June. This cannot be done by your officers and a few committee chairmen. It will mean work for everyone during the convention and in the months preceding it. Success can only be attained by each and everyone of you responding whole-heartedly and promptly in assuming any duties laid out for you by those in charge. The various Committees, some twenty-six in number, will be named early in the new year and the work assigned. I ask your loyalty, your prompt response, your willingness to make personal sacrifice and your enthusiastic support,—given these I am confident we can make this the best and most enjoyable national meeting ever held.

It is most important that with this work to do, we have the support of all eligible to membership. The wives of all county Society members should feel a responsibility in doing their part in the entertainment of our guests. For this reason we suggest a membership drive this coming month. You are supplied at this meeting with the application cards. Let each one of us endeavor to bring one new applicant with us to the January meeting.

During my term of office I want the members to feel free to come to me at any time. I shall welcome your suggestions as well as your constructive criticism. I shall try to preside fairly and impartially. I ask your indulgence for mistakes which will be made only because of lack of experience.

In closing I make this plea for continued attendance at these monthly meetings. Meetings poorly attended are not conducive to enthusiastic work. Interesting and profitable programs are being arranged. We are fortunate in having secured for our next meeting, January 13th, Dr. William Allen Pusey of Chicago, a former President of the American Medical Association. Dr. Pusey, who is now serving on the Board of Directors and the Advisory Council of the World's Fair, will give us a lecture on the Fair, illustrated with lantern slides. This is a timely subject, as the great majority of our guests next summer will plan to see the Fair. We should have a knowledge of it and be able to give information regarding it.

It is only by individual feeling of responsibility that attendance at these meetings can be maintained. I ask that each and everyone of you feel that the success of the organization is dependent on your own co-operation in the work and regular attendance.

* Presented at the first annual meeting of the Woman's Auxiliary to the Medical Society of Milwaukee County, December 8, 1932.

PORTAGE COUNTY AUXILIARY ORGANIZED

Following a dinner with the members of the Portage County Medical Society at Hotel Whiting

on Wednesday evening, January twenty-fifth, the doctors' wives met and with the assistance of Miss Ruth Buellesbach, Executive Secretary of the State Auxiliary, proceeded to organize a Woman's Auxiliary to the Portage County Medical Society.

Those chosen to serve as officers include: President, Mrs. H. M. Coon, Stevens Point; President-elect, Secretary, Mrs. G. W. Reis, Junction City, and Treasurer, Mrs. F. A. Marrs, Stevens Point.

GREEN LAKE–WAUSHARA–ADAMS COUNTY

The members of the Woman's Auxiliary to the Green Lake–Waushara–Adams County Medical Society joined with the members of the County Medical Society at a dinner meeting on December thirtieth at the Hotel Whiting, Berlin.

Following the annual dinner meeting the members of the auxiliary adjourned to the home of Mrs. S. L. Casper where election of officers was held. Mrs. Gustave Mueller, Princeton, was elected president; Mrs. Arthur J. Wiesender, Berlin, vice-president; Mrs. S. L. Casper, Berlin, secretary; Mrs. Paul Eisele, Ripon, treasurer.

Cards and a social evening was enjoyed by the ladies.

MILWAUKEE COUNTY

The Woman's Auxiliary to the Medical Society of Milwaukee County held its first 1933 meeting on January 13th at the Y. W. C. A. with more than 200 ladies in attendance. Mrs. Rock Sleyster, Wauwatosa, assumed her duties as the new president. Eight members of the newly organized auxiliary in Racine county attended this meeting and it was a pleasure to congratulate them on their new organization.

Dr. William Allen Pusey, professor emeritus of dermatology, University of Illinois College of Medicine, was the guest speaker. He gave an illustrated talk on the Chicago Century of Progress Exposition.

Seven new members joined the auxiliary in January and 31 applications for membership have been received.

As a result of a questionnaire sent to all county rural schools by the Hygeia committee of 1932, nine six-month subscriptions were sent to rural schools in Milwaukee County. Five one-year subscriptions will be placed in institutions of Milwaukee County this month.

Through the Speaker's Bureau of the County Medical Society, the Public Relations committee reports having placed seven speakers in lay organizations in the city during the month of January. The Committee has appointed members to canvass different sections of the city for the purpose of placing speakers in the lay organizations.

POLK COUNTY

The Woman's Auxiliary to the Polk County Medical Society met on Thursday evening, December 16th at St. Croix Falls. Dinner was served at the St. Croix Inn and the meeting was held at the home of Mrs. J. A. Riegel. Mrs. George B. Larson was elected to associate membership in the auxiliary.

Mrs. R. G. Arveson, Frederic, state treasurer, gave a report of the proceedings of the state auxiliary meeting. A talk on the Report of the Committee on Costs of Medical Care was given by Mr. George B. Larson, Secretary of the Polk County Medical Society.

At the suggestion of the Secretary of the Medical Society the Auxiliary moved to make a complete tabulation of the findings of the Child Health Survey made by the Medical Society at the opening of the school year. The money received for this tabulation is to be used to place Hygeia in every school in Polk County.

RACINE COUNTY

A group of Racine members of the Woman's Auxiliary to the Racine County Medical Society attended a luncheon at the Y. W. C. A. in Milwaukee given by the Milwaukee County Medical society's auxiliary. Among those who attended were the president, Mrs. E. C. Pfeiffer; the president-elect, Mrs. L. E. Fazen; the vice-president, Mrs. McCracken of Union Grove; Mrs. Ira Thompson, Mrs. E. J. Schneller, Mrs. A. M. Linder, Mrs. F. W. Pope and Mrs. A. S. Pfeiffer.

Mrs. F. W. Pope is press and publicity chairman of Racine County auxiliary. In her report to the state chairman, Mrs. Pope said: "We had a very enjoyable time at your Milwaukee County auxiliary meeting and hope to have the pleasure of meeting with you again. I think these meetings will do a great deal toward promoting friendship between the different localities of our state."

SHEBOYGAN COUNTY

Mrs. Glenn Rothenmaier, Elkhart Lake, press and publicity chairman of Sheboygan County Auxiliary, reports that on January fourth the members of the Sheboygan County auxiliary enjoyed a pleasant luncheon at Elsie Timm's Tea Room at Sheboygan. After a short business meeting the afternoon was delightfully spent at bridge.

HEALTH ESSAY CONTEST

At the Executive Board meeting in September the members voted to endorse and sponsor a Health Essay Contest for sophomores in high schools in the counties in which there are county auxiliaries organized. Mrs. Henry Gramling, Milwaukee, State Public Relations chairman, is chairman of the contest. The essays are to be based on those articles appearing in February and March issues of Hygeia which pertain to health, or the relationship of the medical profession to the individual, the family and the community. The contest will be open from March 15th to April 15th. The contest will be supervised by the local auxiliary and the state public relations committee. The Advisory Council of

STATE INCOME TAX

The Wisconsin Tax Commission advises that, by reason of its wording, the recent State Income Tax Digest published by the Society gave the impression that money **derived from** any political unit of government was exempt from the state income tax. This is not the case. **All revenue derived by a physician from any unit of government of this state must be reported on the state income tax return.** The state does not impose a tax on income received from the United States, and such income need not be reported.

The wording referred to here is the clause numbered (1) (e) on page 7 of the digest under the general title "Exemptions". It merely states that the state does not tax income **received by** the United States or other governmental units, and refers only to public and not to private receipts.

each county auxiliary will choose the three best papers and these in turn will be submitted to the final judges who are Dr. Reginald Jackson, President, State Medical Society; Dr. C. A. Harper, State Health Officer, and Mr. George Crownhart, Secretary, State Medical Society. Prizes will be awarded in gold.

Final plans and rules for the contest will appear in the Auxiliary section of the March issue of the Journal.

Mrs. Gramling states, "We hope all auxiliary members will promote this project which has as its objective the sponsoring of authoritative health information among our young people."

HYGEIA TO COUNTY SUPERINTENDENTS

That the seventy-two county superintendents of schools in Wisconsin may become acquainted with the outstanding publication in the country today that is endeavoring to promote the public health and which is found upon the approved list certified by the state superintendent of schools, the Woman's Auxiliary to the State Medical Society has entered six month subscriptions to Hygeia for each of the county superintendents. A personal letter, signed by the State Hygeia Chairman, Mrs. James V. May, was sent to each county superintendent.

EXECUTIVE BOARD MEETING

Fourteen members of the Executive Board of the Woman's Auxiliary to the State Medical Society attended the mid-year board meeting held at the Y. W. C. A. in Milwaukee on Friday, January twentieth, with Mrs. Fred A. Nause, Jr., presiding.

NATIONAL CONVENTION PLANS

General plans for the national convention to be held in Milwaukee in June are being formed by Mrs. Rock Sleyster, National Convention chairman, and her executive committee. Final arrangements have been made with the Hotel Pfister, as the National Auxiliary headquarters, and the committee feels that it can assure all convention guests of satisfactory accommodations. It is not too early to plan on coming to Milwaukee for the convention, June 12th to June 16th. Make your reservations now!

FROM THE NATIONAL PRESIDENT

The old year is ended and the bright New Year full of possibilities for success and happiness is before us. And Oh! such opportunities for Resolutions! Not the proverbial kind, forgotten so soon, but for growth, consolidation and coordination, thus stabilizing all phases of our activities, warm friendships mellowing the memories of past years and bringing our own year to such a close as will find us more firmly established than ever in the hearts and lives of those we serve.

The poet has sung—"Oh for a day in June" and what can be lovelier than Wisconsin in June! Already our thoughts are turning conventionward. This means reports, and it should not be too early NOW to think of what those reports will contain. In many cities, high school students are allowed to run the various parts of city government for a day. It would provide an awakening experience if some of our members could be national officers, at least for a day. Each state has its own definite interests and problems, and each officer, especially Standing Committee Chairmen, earnestly tries to sympathetically understand and assist in their development.

In the last News letter, Mrs. Freeman's splendid article emphasized the importance and value of Hygeia. Today let us turn to the importance of public relations. Every newspaper, as well as medical journals, has given headlines to the reports of the Committee on the Cost of Medical Care. Who more than the Auxiliaries should carefully read, discuss and understand both the majority and minority reports, and be thoroughly familiar with their arguments and claims.

We have asked this might be considered a State Year. Assurances have come from so many of the states, too numerous to mention for fear we might omit one, that again we urge each group of state officers to cooperate to the fullest with everyone of the national chairmen. Your success is our success. As you grow our influence multiplies and enables us all to accomplish the things we seem to have been born to do.

Instinctively we all know what we would like to accomplish in the coming year.

Let us do it with all our might!

Faithfully yours,

MRS. JAMES F. PERCY.

NEWS ITEMS AND PERSONALS

Dr. Kate K. Clark of Cable, Wisconsin, was honored at a community surprise party on December 20th with more than one hundred guests present. As a tribute to her many years of service and friendship to the community, Dr. Clark was presented with a radio. In the presentation address, Dr. Clark was given praise for her efforts in helping to establish the schools and for her great interest in community enterprises. Following a musical program, a luncheon was served.

Dr. Hugh P. Greeley, Madison, spoke on "Girth Control" at a meeting of the Kiwanis Club of Madison.

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Dr. John J. Looze, Wisconsin Rapids, received minor injuries when his car was struck by a truck on county trunk F, a few miles outside the city, while returning from a call.

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Dr. David Wigod, formerly of Milwaukee and more recently of Warrens, Wisconsin, has opened an office at Hancock.

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The American Board of Obstetrics and Gynecology proposes to hold the first of a series of annual dinners for Diplomates of the Board and their friends on the first day of the scientific session of the American Medical Association meeting in Milwaukee, at which time the successful candidates from the examination of the day before will be introduced in person. Diplomates expecting to be in attendance at the scientific session of the American Medical Association are urged to make reservation for this dinner as early as possible through the office of the Secretary of this Board.

The next general, clinical examination is to be held in Milwaukee on Tuesday, June 13, 1933, immediately preceding the annual session of the American Medical Association. Reduced railroad rates will apply. For further information and application blanks, address the secretary, Dr. Paul Titus, 1015 Highland Building, Pittsburgh, Pa.

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Dr. F. C. Lane of Merrill was reappointed county health officer at a meeting of the Outside Poor Committee in January.

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Dr. W. W. Kelly, Green Bay, in January resigned as a member of the Green Bay Board of Education of which he was president since his appointment three and one-half years ago.

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Dr. M. O. Eiel, formerly of the staff of Wisconsin General Hospital, has become associated with the offices of Drs. Eugene and Arthur Sullivan, 16 N. Carroll Street, Madison.

—△—

Dr. Ira Thompson, Racine, was the speaker at a luncheon session of the Uptown Business Men's association. He spoke on matters pertaining to the health of the city, showing charts and drawings in explanation of the progress of the various contagious diseases.

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Dr. E. H. Brooks of Appleton was elected president of St. Elizabeth's hospital staff at the annual meeting in January. Dr. J. L. Benton was named vice-president and Dr. Carl D. Neidhold was chosen as secretary and treasurer. A dinner, served annually to the staff by the Sisters in charge of the hospital, preceded the business meeting.

Dr. Philip R. Fox, Madison, who underwent an operation in Rochester, is steadily improving at his home, 28 W. Wilson Street.

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Dr. J. B. MacLaren of Appleton was the speaker before a meeting of the Rotary Club of Appleton at the Hotel Northern. Dr. MacLaren discussed the history of medicine and the present status of the medical profession from the standpoint of economics.

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Dr. R. L. MacCornack, secretary of Trempealeau, Jackson, Buffalo County Medical Society, Whitehall, was reelected chairman of Trempealeau County Red Cross Chapter.

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Dr. E. A. Linger of Oconto was appointed city health officer by the city council at a meeting in January. He fills the vacancy caused by the death of Dr. C. E. Armstrong.

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Dr. and Mrs. M. V. DeWire of Sharon received severe injuries when their car left the highway near Valparaiso, Indiana, crashing into a pole and overturning. They were returning from a Christmas vacation spent with Dr. DeWire's family in Edon, Ohio.

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Dr. V. W. Koch, Janesville, was elected President of Mercy Hospital staff for the year 1933. Other new officers are: Dr. E. C. Hartman, vice-president; Dr. M. M. Baumgartner, secretary-treasurer.

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Dr. George Benson, son of Dr. Gideon Benson of Richland Center returned in January from Los Angeles where he completed his internship. He is now associated with his father at Richland Center.

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Dr. Kenneth Swartz, Waupun, lieutenant governor of Kiwanis International in the Wisconsin-Upper Michigan district, talked on "Opportunities and Responsibilities of Kiwanis" at a weekly luncheon meeting of the Menasha Kiwanis club at Hotel Menasha.

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Dr. R. G. Arveson of Frederic is spending the winter months in Florida. He will return to active practice in the early spring.

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Dr. O. T. Gunther, Sheboygan, was appointed chief-of-staff of the Sheboygan Memorial Hospital.

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Dr. J. M. Dodd of Ashland has announced his candidacy for the office of mayor at the spring election. Dr. Dodd was a former mayor of Ashland, serving from 1911 to 1913.

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At a meeting of the Candlelight Club of Oshkosh on January 17th at the Athearn Hotel, Dr. C. J. Combs of that city was the principal speaker. His subject was "State and Industrial Medicine."

Before retirement from office on January first, Governor Philip F. La Follette announced the appointment of a state committee to hold a Wisconsin conference on child health. The conference will probably be held in Madison in the early spring.

Members of the committee as appointed by the Governor are: Dr. C. A. Harper, Chairman; Col. John J. Hannan, chairman of the State Board of Control; J. G. Crownhart, secretary of the State Medical Society and Mesdames Jeanne Eldridge, Durand; M. V. O'Shea, Madison; Grant C. Haas, Madison; Josephine Maloney, Milwaukee; Mrs. Thomas Duncan, Milwaukee, and Clinton M. Barr, Milwaukee.

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"The History of the Art of Medicine" was the subject of an address by Dr. A. T. Smedal of Stoughton before the Brotherhood of Christ Lutheran church.

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Among his early appointments, Governor Albert G. Schmedeman announced the reappointment of Dr. J. J. Seelman, Milwaukee, and Dr. Joseph Dean, Madison, to the State Board of Health.

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The paper by Dr. John H. Karsten of Horicon presented before the 90th annual meeting of the State Medical Society of Wisconsin on "The Small Town Physician in General Practice and his Relationship to the Medical Profession" was made the first article in the January issue of "The Diplomate" published by the National Board of Medical Examiners.

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Dr. W. M. Sonnenburg, Sheboygan, has announced his candidacy for the office of mayor in the spring election.

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Dr. C. A. Harper, Madison, spoke on "Health Work Among the Indians" before a meeting of the Woman's Club of Madison on January 27th.

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Dr. Karl Icks of Green Bay in January received notice of his appointment as Lieutenant in the United States Naval Reserves.

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The new 94-bed Sheboygan Memorial Hospital was opened to the public on January 21st. It was built as a result of a bequest by Miss Eliza Prange, who died in 1928, and left $150,000 for the building of a new hospital, provided that other contributors would add another $100,000 to the fund within ten years. At the same time it was announced that Henry C. Prange had left a bequest of $50,000 for the same purpose. Following announcement of these bequests, a drive was held in 1929 to get the additional amount required and enough was raised to bring the total available to $322,865.

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MILWAUKEE

The Speakers' Bureau, sponsored by the Educational committee of the Medical Society of Milwaukee County, was represented by Drs. W. P. Blount and Harvey E. Webb.

Dr. Blount appeared before the Milwaukee Catholic Home for the Aged on December 6th, addressing them on "Facts and Fallacies About Our Feet."

Dr. Webb's subject, when he addressed the Parent-Teacher Association of St. Matthew's School on December 14th, was "Normal Living."

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Members of the Milwaukee County Dental Society have been granted the privileges of the Physicians' Service Bureau, owned and operated by The Medical Society of Milwaukee County, at the same rates as paid by members of the Bureau.

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Dr. E. L. Miloslavich addressed the South Side Community Club on December 16th. His subject was "Scientific Criminological Investigation of Homicides."

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Dr. Elisabeth Seiler had as her guests over the holidays Dr. and Mrs. Hermann Ranke of Madison. Dr. Ranke is the Carl Schurz exchange professor from the University of Heidelberg to the University of Wisconsin this year.

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Dr. and Mrs. Henry Helmholz and family of Rochester, Minnesota, were Milwaukee visitors over the holidays.

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Mrs. Lena Teschan, widow of Dr. Rudolph C. Teschan, and mother of Dr. Rudolph F. Teschan, died at St. Mary's Hospital on January 5th, at the age of seventy-eight years.

Besides Dr. Teschan, Mrs. Teschan is survived by two daughters, Mrs. Erik Andersen and Mrs. Carl Biefer, both of Milwaukee.

—△—

Dr. S. H. Lippitt and his wife, Dr. Eleänore Cushing-Lippitt, had as their house guest during the week of January 1, Mr. Adrian Rosley, who portrayed the French ambassador in "Of Thee I Sing," which played in Milwaukee that week.

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Mrs. Jessie Primakow, mother of Mrs. S. M. Markson, died at the home of Dr. and Mrs. Markson, 2537 N. Farwell Avenue, on December 30th. She was sixty-nine years of age.

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Dr. and Mrs. C. J. Coffey on January 1st, announced the engagement of their niece, Miss Genevieve Elizabeth Coffey, to Mr. Joseph A. Dunn, son of Mrs. Johanna Dunn, Milwaukee.

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Dr. Nelson M. Black, of Miami, Florida, a former Milwaukee resident, was a Milwaukee visitor during the holiday season.

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Dr. Daniel Thomas Quigley, physician, surgeon, and a resident of Omaha, Nebraska, lectured on "Vitamins and Life" on January the fifth, at the City Club.

Dr. R. A. Jefferson addressed the Milwaukee Teachers' Association on January 11th. His subject was "Levels of Mental Hygiene."

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Mrs. Caroline Henes, mother of Dr. Edwin Henes, Jr., passed away on January 1, in New York City after a long illness. She was seventy years of age. Surviving Mrs. Henes are her son and a daughter.

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The new Harriet L. Cramer Memorial Medical School building at Marquette University was dedicated on January the fourth.

Evening exercises were held in the University gymnasium with Archbishop Samuel A. Stritch, Mayor Hoan, Governor Schmedeman, Dr. William Gerry Morgan, Dean of the Georgetown University School of Medicine, and Dr. Richard Everingham Scammon, Dean of Medical Sciences at the University of Minnesota as the speakers.

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Harris Kretchmar, father of Drs. Louis and Morris Kretchmar, died in St. Joseph's Hospital on January 7th, after a long illness, at the age of seventy years.

Mr. Kretchmar was born in Kiev, Russia, coming to Milwaukee about forty-two years ago. He had been a cantor in Jewish synagogues since he was eighteen years of age.

Besides his sons in Milwaukee, Mr. Kretchmar is survived by a son, Max, and a daughter, Eva, in Chicago.

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Dr. M. G. Peterman announced the removal of his offices for private patients to suite 1133-35, Wells Building, 324 E. Wisconsin Avenue, on December 16, 1932. He will continue at the Children's Hospital mornings.

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Dr. Hoyt E. Dearholt of the Wisconsin Anti-Tuberculosis Association, Dr. D. E. W. Wenstrand of the Milwaukee Academy of Medicine, Dr. Karl E. Kassowitz of the Milwaukee Pediatric Society, and Dr. James Sargent, President of The Medical Society of Milwaukee County, were recently appointed by Milwaukee's Commissioner of Health, Dr. John P. Koehler, to lay plans for an anti-tuberculosis campaign among school children.

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The following health talks, sponsored by the State Board of Health, and delivered by Mr. Theodore Wiprud, Executive Secretary of The Medical Society of Milwaukee County, will be broadcast over the Milwaukee Journal Radio Station, WTMJ, during the month of February:

February 3—"The Price of Worry"; February 10—"I'm Hard of Hearing"; February 17—"Why is a Child Always Hungry?"; February 24—"The Unseen World."

These talks are broadcast each Friday from 4 to 4:15 P. M.

Plans have been completed for the fourth postgraduate course for 1932-33, sponsored by the educational committee of The Medical Society of Milwaukee County.

Following the procedure of the former courses, there will be an opening session, to be attended by all enrolled for the course, after which those desiring to participate will be divided into small groups and assigned to local instructors.

The opening session for the Postgraduate Course in Eye, Ear, Nose, and Throat, was held on January 23rd, at the Milwaukee Academy of Medicine, with Dr. George F. Suker, Senior Ophthalmic Surgeon of the Cook County and Chicago Postgraduate Hospitals, as the principal speaker.

These courses have been most interesting and profitable to the men taking them, and more and more members are participating.

—△—

The Speakers' Bureau, sponsored by the Educational Committee of The Medical Society of Milwaukee County, sent out a number of speakers during the month of January. The following physicians addressed lay audiences:

January 6—Dr. Samuel, Plahner, "Your Child and the School," Luther Burbank P. T. A.

January 9—Dr. F. R. Janney, "Health of School Children," Mercy High School P. T. A.

January 10—Dr. P. J. Eisenberg, "The Tragedy of Appendicitis," Aetna Life Insurance Co.

January 13—Dr. P. J. Eisenberg, "The Tragedy of Appendicitis," Wauwatosa Township Advancement Association.

January 19—Dr. F. R. Janney, "Health of School Children," Milw. Normal Teachers' College.

January 24—Dr. Francis D. Murphy, "What You Should Know About High Blood Pressure," Kiwanis Club of Wauwatosa.

January 27—Dr. T. L. Squier, "When Food is Poison," Woman's League of the Wauwatosa Congregational Church.

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Seventy-five physicians enrolled in the postgraduate course in eye, ear, nose, and throat, which opened on January 23rd. Instructors met their classes for the first time on January 30th. Each instructor holds three sessions, and the following two will be conducted during the first half of February.

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Dr. E. L. Tharinger was the guest speaker at the luncheon meeting of the Junior Association of Commerce, held at the Hotel Medford on January 18th.

Dr. Tharinger's subject was "The Story Behind The Autopsy."

BIRTHS

A son to Dr. and Mrs. N. Warren Bourne, Milwaukee, on January 5th.

A son to Dr. and Mrs. C. H. Burnett, Milwaukee, on December 7th.

A son to Dr. and Mrs. J. J. Adamkiewicz, Milwaukee, on December 24th.

ENGAGEMENTS

The engagement of Dr. Edward Eisenberg, Milwaukee, to Miss Charlotte Adland, daughter of Mr. and Mrs. Sam Adland, Milwaukee, was announced on January 15th.

MARRIAGES

Dr. Charles A. Wright, Delavan, to Mrs. Martha Kranstaber, in New York City on December 24th.

DEATHS

Dr. Frank W. Arnold, Milwaukee, died at St. Luke's Hospital on January 12th after a short illness.

Dr. Arnold was born in Grand Rapids, Michigan, in 1870. His medical training was obtained at the Milwaukee Medical College from which he was graduated in 1902. He had practiced on the south side of Milwaukee for more than twenty-five years.

He was a member of the Medical Society of Milwaukee County, the State Medical Society, and the American Medical Association.

Surviving Dr. Arnold are a sister and a brother.

Dr. Claude E. Armstrong, Oconto, died on December 20th at his home. He had been recovering from pneumonia but on the afternoon of the 20th was taken ill with a heart attack.

Dr. Armstrong was born in Sussex, Wisconsin, August 18, 1861. He was a graduate of Northwestern University School of Medicine in 1883. His first work was at Lomira in Dodge County. Following this he spent five years at the State Hospital for Insane at Mendota where he was for a time second assistant and then first assistant physician. From the hospital, he moved to Fond du Lac and later to Oakfield. In 1893, Dr. Armstrong came to Oconto and since that time had practiced there. He served as health officer and was also a member of the Board of Trustees, Farnsworth Public Library Board. He was also a member of the Board of Education.

Dr. Armstrong was a member of Oconto County Medical Society, the State Medical Society, and the American Medical Association.

He is survived by his widow, and two children, Mrs. Herbert O. Lord, Madison, and John W. Armstrong, now studying opera at Graz, Austria.

Dr. J. N. Cunningham, Stanley, died at his home on December 30th, of heart disease.

Dr. Cunningham was born at Elwood City, Pennsylvania, in 1868. He was graduated from Marion-Sims College of Medicine. St. Louis. in 1899. He first practiced at Spring Valley, Wisconsin, and then came to Stanley where he had since practiced.

He is survived by his widow, one son and one daughter.

Dr. William H. Owens, Milwaukee, died suddenly on December 26th at his home, 2504 W. Auer Avenue.

Dr. Owens was born in the year 1884 and was a graduate of Marquette University School of Medicine in 1908. He had practiced in Milwaukee for twenty-two years, and was a member of the staffs of St. Joseph's and St. Mary's hospitals.

Dr. Owens is survived by his widow, one son and four daughters.

Dr. William M. Ruckle, Wisconsin Rapids, died at Riverview Hospital on December 28th of thrombosis of the intestine.

Born on November 23, 1877, at Lovington, Ill., he moved with his parents to Decatur, Ill. In that city he attended high school and business college. Later, after working for a time as a bookkeeper, he decided on a medical career and became a student in the Chicago Homeopathic Medical College from which he graduated in 1903. During part of 1904 and 1905 he practiced in Chicago, then a short period in Danville, Ill., and later at Nelson, Nebraska. In June, 1905, Dr. Ruckle came to Wisconsin Rapids to practice, specializing in eye, ear, nose and throat diseases.

Dr. Ruckle was a member of the Wood County Medical Society, the State Medical Society, and was a fellow of the American Medical Association.

He is survived by his widow and one daughter.

Dr. Lorenzo A. Winn, Poynette, died December 23rd at a Madison hospital after a long illness.

Dr. Winn was born in 1855. He was a graduate of the College of Physicians and Surgeons of Keokuk, Iowa, in 1887. Dr. Winn was one of the oldest practicing physicians of Columbia County, having practiced there over forty-five years.

He is survived by one son, Dr. Henry N. Winn of Madison.

Dr. F. S. Luhman, Manitowoc, died of a stroke on January 10th. He was stricken at his home the day before his death and died without regaining consciousness.

Dr. Luhman was born May 25, 1851, at Franklin, Sheboygan county. He attended Ripon College for two years, and later entered the University of Wisconsin, from which he graduated in 1875. He was also a graduate of Rush Medical College in the year 1877. After practicing for a year at Two Rivers, Dr. Luhman took postgraduate work abroad for two years. He returned to Manitowoc in 1880 to begin the practice of medicine. He was elected coroner in the fall of 1882 and was chosen for that office for seven consecutive terms. Following this, he was elected as county physician, holding that position for thirty-five years. During the World War, Dr. Luhman served as medical examiner for the draft board.

The deceased was a member of the Manitowoc County Medical Society, the State Medical Society, and the American Medical Association.

He is survived by his widow, two sons and two daughters.

SOCIETY RECORDS

New Members

Irving Auld, 32 South Main St., Clintonville.
C. A. Sholtes, Richland Center.
Harold J. Schilling, Platteville.
M. J. Robertson, Bayfield.
J. M. Sullivan, Prairie du Chien.

Changes in Address

E. H. Lechtenberg, Cassville to Potosi.

Resigned

Dr. Sylvester A. Ennis, Shullsburg.
Dr. H. Rasmussen, Milwaukee.
Dr. A. L. Bork, Milwaukee.
Dr. W. F. Reich, Milwaukee.

» » » CORRESPONDENCE « « «

A "G. P." CONSIDERS THE REPORT ON MEDICAL COSTS

Dear Editor:

I have read with considerable care the majority and minority reports of the Commission of Medical Costs. We were told and it has been reiterated in the last five years, that the personnel of this Commission was made up of intellectual giants. God save the mark! It must be that they stand so close to the limelight of publicity, that they cast long shadows and we mistake the shadows for the substance. They have taken the cancer, that is eating into and spreading its metastasis throughout the body—medical; that is destroying its very soul; they have dressed it up with a few frills and have recommended that this wild growth be substituted for our medical body. In their report, there is not a single original idea, not one that has not been expressed time and again by men who knew nothing about the prevention and cure of disease, no, *not one*. For example, years ago Henry Ford suggested putting patients on a conveyor system, with the various specialists at properly spaced intervals and the finished report of all the specialists' findings massed for collation at the end of the conveyor and the patient returned to his room or ward. This seemed funny at the time, but now, well maybe it was not so ridiculous after all, in the light of our sociologist's report.

As to the minority report, that may be easily passed over. The general practitioner sees the patient first and refers him to the appropriate specialist for such services as require special knowledge or skill. To be sure, there are many specialists who assume the role of the general practitioner and encourage the people to diagnose their own ailments and select for their imagined illnesses the appropriate specialist. And the strange part of it is, that the patient's diagnosis is always right. If the patient thinks a pain in his right side is appendicitis, all the surgeon has to do is to confirm the diagnosis and remove said appendix for a price. But fortunately these men comprise but a small fraction of the specialists. And of the real specialists, most of their work is that referred by the men in the front lines, those that see the patients first. This is probably partly the cause of the recent passionate admiration in prose and song for the old G. P.

This commission was appointed apparently on the basis, first, that there is a large part of the population either being neglected or receiving very inefficient medical care. This is not true. Second, that good medical care is beyond the capacity to pay, of the average working man. This is not generally true. It is true only in rare and exceptional cases. Third, that the medical profession is exploiting the sick for their own benefit, which is partly true. All these investigations, all our economic griefs and continued antagonisms against us, are our own fault, our very great fault. Let our profession clean out its own Augean Stables and these investigations, bickerings and antagonisms will fade out to insignificant murmurings. We must remember that in this world of tremendous changes, there is one thing that does not change, and that is human nature. And if so many doctors had not changed the watchword from service, irrespective of gain, to "caveat emptor, let the buyer beware", all this commotion would not have arisen.

The faults of our profession, to which this commission was either blind, or had not the courage to state, or were "too tactful" which is the same thing, are these,

1. Commercialism.
2. Social climbing.
3. Machine diagnosis.
4. Idleness and indifference.
5. Utter loss of the ancient ideals of our profession.

In fact there has been a tendency to change medicine from a profession into a trade and turn out county medical societies into trade unions. We have divorced medicine from learning, from culture, from the appreciation of the beautiful, from all art, and teach it as a trade. As one of my young confreres recently remarked (he had just returned from a short tour in Germany), "A guy that ain't studied in Europe, don't know how ignorant he is". So much of medicine today is given over to the clever, the shrewd, the smart man, those who are aggres-

sive, greedy, selfish, and only *too* willing to exploit the unfortunate. This type dominates to such an extent, that the people think that they comprise the whole or at least a large part of the profession, which is not true.

This is partly due to the fashionable sneering cynicism now extant. This cynicism has served a useful purpose among the laity, to restrain an attitude of sloppy sentimentality, so frequent among the unthinking. But this cynicism has no place in medicine. Among us medical men, sneers are mistaken for cleverness.

At the same time we like to boast of our charity. The County Medical Society recently requested of each man a financial accounting of his "charity work". What rot! Charity work that is accounted for is never charity, but is done for a purpose, be it publicity, experience, or for self-flattery, a cheap condescension, but never charity.

Medicine is becoming mechanized to such an extent that it is scarcely necessary to think. Surgery has become so standardized that our youngest novices are performing a large proportion of our operations in a purely mechanical way, thoughtlessly, stupidly, but at great financial profit. Even diagnosis has become purely a matter of mechanics. An old patient of mine was recently induced to enter a rather well known clinic. She is 75 years of age, very arterio-sclerotic, with typical symptoms of myocardosis and coronary-sclerosis. At this clinical group she received as follows:

1. Basal metabolism reading.
2. Electro-cardiogram.
3. Complete blood chemistry.
4. Differential blood count.
5. Kidney efficiency test.
6. Chest x-ray (to determine cause of cough)
7. A cardiac orthodiagram.
8. Series of G. I. plates.
9. X-ray of gall bladder under dye.
10. Neurological examination.

and a few other tests, that I have forgotten. A complete report was sent to me, with the diagnosis of, "arterio-sclerosis, cirrhosis, nephritis, coronary disease, and myocardial deficiency". Do you think I exaggerate? I solemnly affirm that this is all true. But worse than that, they charged her for it. To have done all this was stupidity, but to charge her for it was quackery.

Now my point is this, if we of the medical profession will only take thought to ourselves, wash our own dirty linen at home, and not in public, as done in "Let's Operate". Let us, ourselves, attempt to solve the problem of putting a check on that part of our profession, who are so willing to exploit the public, and teach our young men the true ideals of medicine, to stick to our ancient oath, "With purity and with holiness will I pass my life and practice my Art". If we do this, I say, we may regain the respect of the people, disarm the suspicious antagonism, now so wide-spread and all these defense schemes, these investigation commissions, will disappear. The problem of contract practice, panel work, lodge work, will sink into insignificance and will be relegated to the few idle, indifferent men, who are natural servants and who enjoy being told what to do and how to do it by the laity.

Let us work with pride, but not with the foolish pride that I recently heard a young man express in regard to night calls. "I didn't spend a fortune and put in seven years of hard work to plug around nights like a milk wagon driver". I say that fellow was not fit to practice medicine. No thought of sympathy, nor interest in his patients, only pity for himself. But let us have true pride in our work, in work well done, at a minimum of expense to our patients, consistent with good work, pride in the confidence, hope and affection that our people show for us.

In this way we will regain our place in society, that which we have ruthlessly thrown away for a useless mess of pottage.

Me, I love the practice of Medicine.

THOMAS WILLETT, M. D.

January 10, 1933.
West Allis, Wis.

"HELPFUL TO INDUSTRIAL NURSES"

NATIONAL ORGANIZATION FOR PUBLIC HEALTH NURSING, INC.
450 Seventh Avenue
New York, N. Y.

January 24, 1933.

Mr. J. G. Crownhart, Secretary
State Medical Society of Wisconsin,
Madison, Wis.

My dear Mr. Crownhart:

In preparing the manuscript for a book on "Nursing in Industry," I should like very much to incorporate "Suggested Standing Orders for Nurses in Industry" which have been approved, as a guide for the registered nurses who are employed in industrial plants, by the State Medical Society of Wisconsin. I believe these will be very helpful to industrial nurses and trust that I may have your permission to incorporate them in this material.

Assuring you of my appreciation of this privilege, I am

Very truly yours,
(Mrs.) VIOLET H. HODGSON,
Assistant Director.

PRESS SERVICE INVALUABLE

Ripon, Wis., Jan. 24, 1932.

State Medical Society of Wisconsin,
Madison, Wis.

Gentlemen:

The Mt. Horeb Times has suspended publication. There will be no necessity of your sending me any more literature.

I wish to take this opportunity to thank you for your past favors, as I considered your material invaluable to my paper.

Sincerely,
WM. G. IHLAND,

Proceedings of the January Council Meeting at Milwaukee

1. *Call to order.* The Council met at the University Club, Milwaukee, at 9 A. M., Saturday, January seventh. Roll call showed the following present: Councilors Rogers, Cunningham, Smith, Beebe, Stang, Schiek, Duer, Johnson, Blumenthal, Pope, Harper, Gavin and Heidner; President Jackson; President-elect Seeger, Speaker of the House Carter; Treasurer Sleyster, Secretary Crownhart and as guest, Dr. R. G. Leland, Director of the Bureau of Medical Economics of the American Medical Association.

2. *Election of Chairman.* President Jackson presiding called for nominations for the office of Chairman of the Council. Moved by Stang–Duer that the Secretary be instructed to cast the unanimous ballot of the Council for Dr. Arthur W. Rogers, Oconomowoc, to succeed himself. Carried.

3. *Election of a Secretary.* Chairman Rogers called for nominations for a Secretary of the Society and of the Council for the year 1933. Moved by Beebe–Stang that the Chairman cast the unanimous ballot of the Council for Mr. J. G. Crownhart to succeed himself. Carried.

4. *Election of a Treasurer.* Moved by Smith–Blumenthal that the Secretary cast the unanimous ballot of the Council for Dr. Rock Sleyster, Wauwatosa, to succeed himself as Treasurer of the Society and of the Council. Carried.

5. *November minutes.* Moved by Stang–Smith that the article appearing in the Wisconsin Medical Journal of December concerning the attitude of the Council on the proposed Silicosis Clinic constitute the minutes of the November meeting and such minutes are hereby approved. Carried.

6. *Report of the Treasurer.* The report of Treasurer Sleyster was accepted by motion of Smith–Cunningham as follows:

TREASURER'S REPORT
STATE MEDICAL SOCIETY OF WISCONSIN
As at December 31, 1932

	Gen'l Fund	Med. Defense Fund
Balance January 1, 1932	$ 773.18	$ 1,535.77
Receipts during year 1932	41,822.26	2,528.00
	$42,595.44	$ 4,063.77
Disbursements during year 1932	41,041.77	3,052.49*
Bank Balance in Funds December 31, 1932	$ 1,553.67	$ 1,011.28

Recapitulation of Funds

General Fund:		
Bank Balance December 31, 1932	$ 1,553.67	
Investment Securities	25,000.00	$26,553.67
Medical Defense Fund:		
Bank Balance December 31, 1932	$ 1,011.28	
Investment Securities	9,000.00	10,011.28
		$36,564.95
Total Cash Resources as of December 31, 1932		$36,564.95

* This item of Disbursements includes a purchase of $2,000.00 par value Bonds for the Medical Defense Fund.

Investment Securities

General Fund:				
Northern States Power Co.	1941	5%	$ 4,000.00	
American Tel. & Tel. Co.	1936	4%	4,000.00	
Wisconsin Public Service	1942	5%	3,000.00	
T. M. E. R. & L. Co.	1961	5%	2,000.00	
Milwaukee Gas Light Co.	1967	4½%	2,000.00	
Canadian Nat'l Ry. Co.	1969	5%	2,000.00	
City of Milwaukee	1936–37	4½%	3,000.00	
Ironwood & Bessemer Ry. & Lt. Co.	1936	5%	1,000.00	
Beloit Water, Gas & Elec. Co.	1937	5%	1,000.00	
Wisconsin Power, Light & Heat Co.	1946	5%	1,000.00	
St. Joseph's Congregation, Racine	1941	5%	1,000.00	
N. Y. State Elec. & Gas Corp.	1980	4½%	1,000.00	25,000.00
Medical Defense Fund:				
Commonwealth Edison Co.	1957	4½%	$2,000.00	
Bell Telephone Co. of Canada	1955	5%	2,000.00	
Pacific Tel. & Tel. Co.	1937	5%	1,000.00	
North American Co.	1961	5%	2,000.00	
Wisconsin Gas & Elec. Co.	1952	5%	1,000.00	
Milwaukee County Sewer	1944	4½%	1,000.00	9,000.00
Total Bonds				$34,000.00

Analysis Medical Defense Fund

Bank Balance January 1, 1932	$ 1,535.77	
Receipts, dues	2,068.00	
Receipts, interest on Bonds	460.00	4,063.77
Paid to attorneys	$ 1,034.24	
Paid to accrued interest on Bonds	18.25	
Bonds purchased	2,000.00	3,052.49
Bank Balance Medical Defense Fund December 31, 1932		$ 1,011.28

7. *Approval of Mail Ballots.* After discussion it was moved by Blumenthal–Pope that the mail ballot confirming the recommendation of the Executive Committee that dues for 1933 only be reduced from $15 to $12 be approved. Carried.

B. *The Budget.* The question was upon approval of the budget as recommended by the Executive Committee of the Council. Moved by Smith–Cunningham that the Council consider each item separately. Carried. Moved by Smith–Beebe that accounting methods be changed to make Secretary's entire salary payable from the General Fund. Ayes —3. Noes—6. Motion lost. Moved by Cunningham–Heidner that the Conference of Secretaries of component societies be held in conjunction with the annual meeting. Carried. Moved by Duer–Blumenthal that the Budget be now approved. Carried. The budget for the calendar year of 1933 follows:

BUDGET 1933

Items	*1932*	*1933*
Salaries: J. G. Crownhart, Secretary–Managing Editor. The Secretary also receives $1200 from the Journal which has been self-supporting up to 1932. His total salary was thus $8,000 dating from Jan. 1, 1930.		

Items	1932	1933
The Council voted an $800 reduction. His total salary is now $7,200	$6,800	$6,000
Miss Ruth Buellesbach, R. N., assistant in charge of radio broadcasting, all research work for the Secretary and committees, executive for the Auxiliary, is a typist, and handles all routine correspondence for the Secretary. Radio talks prepared by Miss Buellesbach and broadcast twice weekly over the University station are also used in Eau Claire, Stevens Point, Sheboygan, and La Crosse, Salary dated from May 1, 1931,—date of employment. Ten per cent reduction voted	2,100	1,890
Miss Florence Ripley, in charge of all membership records, addressograph system, reads proof for Journal, handles all remittances for dues. Salary dated from Jan. 1, 1932. Ten per cent reduction voted	1,700	1,530
Miss Ellinore Beck, stenographer, handles all subject and investigation files, aids in proof reading and makes up Journal in addition to all of the stenographic work. Salary dated from Jan. 1, 1932. Ten per cent reduction voted	1,700	1,530
Treasurer: Accountant's services	300	270
Rent: (A reduction of $30 a month was secured for 1932. No further reductions appear available for 1933). Present rent is $80 a month, $10 of which is paid by the Journal	900	840
Supplies: This includes all printing, postage, telephone, telegraph, office supplies and all miscellaneous items. Left unchanged for 1933, it amounts to $300 reduction by reason of new federal taxes and increased postage rates	2,400	2,400
Press Service: Furnishes a weekly article on the advances and services of the family physician and scientific medicine to all daily and weekly papers in the state. In 1930 this item was budgeted at $2,750. This service is widely used (285 newspaper recipients each week) and has been copied in other states. It is edited by Mr. Fred L. Holmes, legislative correspondent and attorney, who also gives counsel to the Society. After the legislative session, Miss Buellesbach will have had sufficient training to take over this work. Mr. Holmes' employment will end August 1, 1933. The cost of the service will thus be cut to $625 a year after August 1, 1933.		

Items		1932	1933
1933 Account			
Postage and Mailing	$550		
Paper	75		
Salary to Aug. 1 (reduced from $150 to $100)	700		
	1,325	2,200	1,325
Travel: Of the Secretary and Assistant		1,000	600
Special Committee on Distribution of Medical Services in Wisconsin: This committee has been continued for one year to complete its studies but no separate appropriation given		1,800	----
Editorial Board: In 1932 the Board, by authorization of the House, employed Dr. John Huston as Medical Editor at an honorarium of $50 a month. It was anticipated that the advertising loss would be $900 in 1932. Actually the Journal is sustaining a loss of $250 a month through cancelled advertising. Cost of printing was reduced in January by agreement with the printers. A further reduction in printing costs has just been obtained. So long as advertising standards are upheld, it will be a year or two before the advertising revenue can be secured that will return the Journal to a self-supporting basis. A Journal surplus of former years will take care of the deficit of 1932 but the increase of budget is essential for 1933. Even at the increased figure the Wisconsin Journal is published at the lowest per member cost of any state. The Editorial Board asked an increase in the honorarium to the Medical Editor of $25 a month, which Dr. Huston was ready to waive in the interest of carrying forward this project. The Council voted, however, to drop the appropriation for the services of Dr. Huston altogether		1,500	2,400
Annual Meeting: Appropriation authorized by Council, September, 1932		1,800	1,800
Foundation Fund		250	----
Committee on Public Policy: 1933 is a legislative year. Last legislative year we used a little in excess of $2,200. The Council voted to reduce this item to $1,500		500	1,500
Hygeia: For several years we have presented a year's subscription to Hygeia to the members of the legislature, state officers, some editors, district attorneys, libraries of the seven teachers colleges and to a selected list of laymen interested in			

Items	*1932*	*1933*
public health work. These subscriptions are purchased from the A. M. A. at a fifty percent reduction or cost rate—$1.25 each. A personal letter is sent with each presentation every Christmas and the entire project is simply an educational effort for those who have to deal directly with health laws, their enactment and enforcement. We cut the list of recipients materially this year. This item for 1933 was approved by the Council at its September meeting	500	300
Delegates to the A. M. A.: (3—rail and Pullman fares). The Executive Committee voted no appropriation for the Milwaukee meeting	360	----
Secretaries' Conference	300	150
Legal Expense: This is the cost of securing legal opinions on questions directly affecting the active practice of medicine, — questions raised both within the Secretary's office and from the general membership. It is without doubt one of the most essential items in the budget. Vital questions that affect the welfare of the entire profession are raised constantly, such as, who owns x-ray films; are hospital records of the physician confidential; how may a county society enter into a contract that will not involve all members in a possible suit for alleged malpractice by some one member; is a given company actually doing a corporate and thus illegal practice; can a county society set up a health insurance plan? All these questions each year are but typical of the countless questions raised each year which demand of answer in the interest of the profession as a whole	1,000	750
Committees: Expense of committee members in attending meetings (rail only); expense of meetings themselves; expenses of Council meetings, etc.	750	750
County Constitutions: Revision of	100	----
Special Committee to Investigate Admissions to the Wisconsin General Hospital: The Secretary recommended $300. The Council voted no separate appropriation	500	----

Income: Dues 1900 members at $12	$22,800
Interest on investments	1,000
Total	$23,800
Expenses: Budget	24,035
Deficit to be made up from $1600 surplus from 1932	$ 235

7C. *Emergency Appropriation.* Moved by Heidner–Smith that the Executive Committee of the Council consisting of the Chairman, Secretary, Treasurer and Councilors Blumenthal and Gavin, be granted authority to expend upon their own motion amounts up to $3,500 in addition to the budget as set forth for the purpose of meeting promptly any emergency which might arise during the year. Carried.

8. *Fort Winnebago Hospital.* Through its Chairman, Dr. Harper, the Special Committee of the Council on the preservation of the Fort Winnebago Hospital at Portage reported progress.

9. *Free Choice of Physicians.* The Secretary reported that the 1932 House of Delegates had adopted the principle that all willing and capable physicians should be permitted opportunity to care for those injured under the Workmen's Compensation Act; and further, that whether the Society should endeavor to accomplish this end through legislation for absolute free choice as a matter of law, or by contacting insurance companies to secure the end by their cooperation, was to be determined by the Council after the question had been submitted to the several county medical societies. The Secretary reported that the question had been submitted promptly after the annual meeting with the following result:

Societies favoring contacting insurance carriers: Sheboygan, Lincoln, Walworth, Dodge, Pierce–St. Croix, Grant, Chippewa, Clark, Winnebago, Crawford, Ashland–Bayfield–Iron, Eau Claire and Associated, Polk, Milwaukee, Marathon, Calumet, Waukesha, Jefferson, Marinette–Florence and Brown–Kewaunee.

Favoring free choice by law if course one above fails—Polk.

Favoring no change—Outagamie.

Favoring free choice as a matter of law—Barron–Washburn–Sawyer–Burnett Society, Green, and LaCrosse.

No decision—Kenosha (11–11).

Moved by Heidner–Smith that the Secretary be instructed to contact insurance carriers for the purpose outlined by the House of Delegates. Carried.

10. *Depositories for funds.* The Secretary reported on audits of Madison banks and requested approval of the American Exchange Bank of Madison to be depository for such funds of the Society as are or may be in the hands of the Secretary–Managing Editor. Moved by Blumenthal–Cunningham that such bank be designated as Madison depository. Carried. The Treasurer requested like action for approval of the First National Bank of Wauwatosa as depository for such funds of the Society as are or may be in the hands of the Treasurer, exclusive of bond purchases. Moved by Cunningham–Blumenthal that the First National Bank of Wauwatosa be so designated. Carried.

11. *Foundation Fund.* Report of the Special Committee on the Foundation Fund of the Society was presented by Dr. Blumenthal, Chairman. Moved by Smith–Gavin that the report and recommendation be accepted and constitute the action of the Council. Carried. The report follows:

REPORT OF THE SPECIAL COMMITTEE ON THE FOUNDATION FUND

To the Council:

Your Committee was created to review the legal status to date of the foundation funds of the Society and to make any legal arrangements necessary to preserve its integrity when donations should be received. The Committee has had several meetings and many conferences with legal counsel.

At the present time the Foundation Fund of the Society has the proper legal status before the law and when funds are received their investment will be by the Council of the Society. Your Committee had in mind the question of advisability of transferring this responsibility for investments to the First Wisconsin Trust Company. Legal papers to that effect were in fact drawn. It was found, however, that while much is to be said in favor of such procedure there are, as well, certain features, necessary to any such instrument, but which may have an exceedingly tight administration and usage of funds.

After long study your Committee is of the opinion that the present integrity of other funds of the Society is ample guarantee that the Council will invest contributions to the Foundation Fund wisely and carefully. We are of the opinion that until the funds received constitute an actual financial responsibility which the Council no longer wishes to discharge for itself, it will be as well to retain the present set-up rather than complete at this time the proposed agreement with the trust company. The agreement will be maintained on file that it may be available for immediate reference any future time when the Council may wish to complete it.

Respectfully submitted,
R. W. BLUMENTHAL, M. D., *Chairman,*
F. J. GAENSLEN, M. D.,
ROCK SLEYSTER, M. D.

Jan. 7, 1933.

12. *Resolution.* Dr. Rock Sleyster presented the following resolution:

"Whereas, there have been formed important national organizations of physicians, specialists other than the American Medical Association, and

"Whereas, such organizations fundamentally formed for scientific purposes have from time to time publicly expressed opinions concerning the entire practice of medicine, especially in its social and economic relationships, and

"Whereas, an unsual emphasis on the social and economic position of medical practice has recently been precipitated by the published report of the national Committee on the Costs of Medical Care,

"Be It Resolved, in the interest of the welfare of the public and the maintenance of the most serviceable form of medical practice, the proper representatives of the American Medical Association request other national medical organizations whose qualification for membership includes membership in the American Medical Association, to publicly declare their opinions on general social, legislative, and economic relationships of medical practice only through approved channels of the American Medical Association. To this end the Council of the State Medical Society of Wisconsin pledges its own efforts and influences to bring about this most desirable point of view in the minds of members of the State Medical Society of Wisconsin, who are also members or Fellows of the other organizations to which reference has been made. The Council also respectfully requests the Board of Trustees of the American Medical Association to bend every effort to accomplish this purpose throughout the Association at the earliest possible moment in order that the sane evolutionary progress of medical practice may not be disturbed by social experiments which endanger the health and the welfare of our citizenship, and which have proved a pernicious health influence in other nations."

Moved by Stang–Blumenthal that the resolution be adopted. Carried.

13. *Grievance Committee.* The Secretary asked the wishes of the Council in the matter of re-introducing in the present legislative session the measure calling for the establishment of a Medical Grievance Committee. After discussion it was moved by Smith–Pope that the measure be re-introduced in the 1933 legislative session. Carried.

14. *Costs of Medical Care.* Dr. Duer reported on a plan that appeared to be feasible based on savings accounts. Upon request Dr. Duer promised to send copies of his material to all members of the Council for further study.

15. *Special Report of the Secretary.* The Secretary presented the following special report to the Council:

REPORT OF THE SECRETARY

7 January 1933.

To The Council:

An inventory of our activities was made at the time of our September Annual Meeting, and at the opening of this new year we more appropriately may take this opportunity for a sighting of our position in the light of changed and changing conditions.

This is the annual occasion for any changes in our course deemed necessary that we may reach our destination. It is not my purpose to chart the course,—that is for the Council to determine. It is my desire to present such data concerning our present position, prevailing winds and tides as may be helpful to you in that effort.

As we survey the state in which we live, we find:

1. Fifteen per cent of our people are dependent

(Continued on page 132)

THE JOURNAL BOOK SHELF

BOOKS RECEIVED FOR REVIEW

Asthma, Hay Fever and Related Disorders. By Samuel M. Feinberg, M. D., assistant professor of medicine and attending physician in Asthma and Hay Fever Clinic, Northwestern University Medical School; attending physician, Cook County Hospital, Chicago. Illustrated. Price $1.50 net. Lea & Febiger Co., Washington Square, Philadelphia.

Office Surgery. By Fenwick Beekman, M. D., visiting surgeon, Bellevue Hospital; visiting surgeon, Hospital for the Ruptured and Crippled; consulting surgeon, Lincoln Hospital; clinical professor of surgery, N. Y. University and Bellevue Medical College. 94 illustrations. J. B. Lippincott Company, Philadelphia.

The Sex Technique in Marriage. By Isabel E. Hutton. Price $2.00. Emerson Books, Inc., New York.

BOOK REVIEWS

Any scientific publication reviewed in this column may be obtained for inspection. Orders for such inspection should be directed to the Medical Library Service, 424 N. Charter Street, Madison, Wis.

Injuries of the Eye, by H. V. Würdemann, M. D. Second edition; 900 pages with 236 illustrations and 10 color plates. Price $12.00. C. V. Mosby Company, St. Louis, 1932.

This handsome volume, dedicated to the medical profession of America, is offered by the author as "an exhaustive and authoritative work upon injuries of the eye." Certainly no other single volume on this subject yet published approaches this work in scope or thoroughness.

The book is based primarily on an experience of forty-two years of special practice by the author, though the work of various writers is drawn upon freely.

The book is divided into three parts. Part I covers: General Injuries, with seventeen chapters devoted to: Type of Ocular Injuries, Etiology of Injuries to the Eye, Mechanism of Ocular Injuries, Complications Occurring During and After Ocular Injuries, Operative Injuries, Injuries from Childbirth, Injuries from Accidental or Medicinal Application of Certain Drugs, Diagnosis of Injuries to the Eye, Radiography, Prognosis of Injuries of the Eye, Prophylaxis of Injuries of the Eye, Conservation of the Wounded Eye, Radical Treatment of Ocular Injuries, Artificial Eyes, Operations for Restoration of the Culdesac, and Conservative Operations—The Removal of Foreign Bodies from the Eye.

Part II: Contains thirteen chapters concerning Injuries of the Special Structures of the Eye, viz., Conjunctiva, Cornea, Sclera and Corneoscleral Margin, the Uvea, Lens and Zonula, Vitreous, Retina, the Visual Nervous System, Lids, Orbit—Contents, Entire Eyeball, Traumatic Disturbances of the Motility of the Eye, and Injuries of the Lacrimal Apparatus.

Part III: Devoted to Forensic Medicine, the three chapters being divided between: Medicolegal, Protective Legislation (Pensions and Accident Insurance), and Visual Economics. These chapters are abstracted from previous works of the author, from the work of Lindley D. Clark on Protective Legislation, and from Bulletin No. 74, U. S. Bureau of Labor, and from the Industrial and Indemnity Rules of various governments.

Each chapter is prefaced in bold face type by subchapter headings which makes reference to a special subject quickly and easily available. The illustrations are nearly all original and the drawings are by the author. Certainly no opthalmologist can afford to be without this excellent and exhaustive treatise. The work is more than a treatise on injuries of the eye for it touches so many related subjects, particularly operative surgery.

F. A. D.

Infants and Children. Their feeding and growth. By Frederic H. Bartlett, M. D., director of the department of pediatrics, Fifth Avenue Hospital, New York City. Farrar & Rinehart, Inc., on Murray Hill, New York, N. Y.

This book is intended as a manual for the daily use of mothers. About half of the material is concerned with infant feeding in its various aspects. The remainder consists of chapters on: Care, Training, Habits, Development, Clothing and Nursery Equipment, Contagious Diseases, The Common Cold, Other Diseases and Emergencies. The subject of infant feeding, and especially the artificial feeding of infants is presented with so much attention to detail that it becomes too involved for the ready comprehension of the average mother. In addition, some of the recommendations in regard to infant feeding are quite unusual—such, for example, as putting the infant on three meals a day at the age of 7 to 9 months. The other subjects are treated clearly along conservative lines. The chapter on habits ("bad habits") is particularly good. The index is exceptionally well arranged.

J. E. G.

Investment Service

of particular value to the professional man

The comprehensive investment service offered by the First Wisconsin Company has proved of particular value to the professional man who may have neither the time nor inclination for extended personal study of complex investment matters.

It is a constructive service aimed at the up-building of sound and well-balanced investment accounts. We invite the opportunity of making this service available to you.

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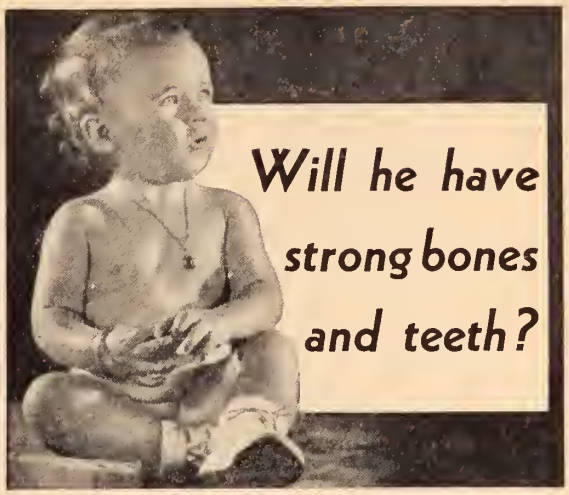

So much depends on his mother's diet during pregnancy and lactation

AT NO TIME is the need for a protective diet so great as during pregnancy and lactation. All elements required for the child's developing body must come from the mother's food—*or from her own body.*

Cocomalt has well proved its value during these two periods of special stress. For not only does it substantially increase the caloric intake; it provides *extra* proteins, carbohydrates, mineral nutrients (calcium and phosphorus) and vitamins. Prepared according to label directions, Cocomalt adds 70% more food-energy nourishment to milk.

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Radiologic Maxims, by Harold Swanberg, B. Sc., M. D., F.A.C.P., Editor of The Radiological Review, Quincy, Illinois. With a foreword by Henry Schmitz, A. M., M. D., L.L. D., F.A.C.S., Professor of Gynecology and Head of the Department, Loyola University School of Medicine. Cloth. Price, $1.50, Pages 126. Quincy, Illinois: Radiological Review Publishing Company, 1932.

This book introduced by H. Schmitz (Chicago) represents mostly the compilation of material selected by the author from the column "Radiologic Maxims," published during the last six years in "The Radiological Review." Bearing in mind Horace's advice, "Whatsoever you teach be brief, for minds grasp with readiness what is said shortly and retain it firmly," Swanberg has condensed into about 100 pages a wealth of information on radiology in all its phases. Sometimes it is only one sentence, quite often a quotation from the writings of some outstanding physician which endorses the author's belief: "There is a woeful lack of knowledge of what the radiologist can do." Your reviewer sincerely hopes that every physician will take the time to read this little book which offers much food for thought. E. A. P.

Outline of Preventive Medicine. Prepared under the auspices of The Committee on Public Health Relations, New York Academy of Medicine. Second edition. Price $5.00. Paul B. Hoeber, Inc., New York, N. Y.

Most text books intended for physicians and medical students enumerate the signs and symptoms of diseases and describe the methods used to elicit or observe them. There is much talk about prevention but, as the editors say in the introduction, there is no clear understanding on the part of the medical student how his education in clinical medicine can be utilized for the practice of preventive medicine.

This book is no repetition of other text books of clinical medicine with here and there an occasional use of the word prevention. It presumes that the student has been trained in the technique of medical diagnosis and treatment and proceeds from the first chapter to indicate how this technique can be used to the mutual advantage of the patient and physician for the prevention of a disabling and confining illness.

Neither does it deal in generalities. The first chapter deals with annual physical examination as a means of conserving health. In this chapter the place of the general practitioner and the specialist is made clear. While it is stated that the general practitioner is the logical physician to make these examinations, it also points out the importance to the specialist of his returning to the broader aspects of disease manifestation in the human body to whet his interest for his own, maybe narrow, specialty and to make his services more important to his patients. Such questions as: At what age should annual physical examination begin; at what age should they be discontinued; and, how should they be conducted are answered.

In the chapter on Preclinical Medicine and Hygiene the words "Preclinical Medicine" are made to have a new meaning. These words to most physicians and medical students connote something remote from clinical practice. They usually signify something which must be endured in order to attain clinical medicine. In this book they are made to mean the use of clinical methods for the diagnosis and treatment of disease in its incipiency.

The author says:

1. Causes of future illness and early stages of existing illness may be present and may be discovered in persons in apparently good health.
2. When these prodromata are discovered, preventive steps may be advantageously taken.

This is a statement of the two branches of a new development in "Preclinical Medicine" which has two corresponding parts:

1. Preclinical diagnosis.
2. Preclinical therapy.

Physicians and medical students will find in this book a helpful treatise on the clinical practice of preventive medicine. W. D. S.

ANAESTHESIA

(Continued from page 105)

spinal anaesthesia will do well to read this excellent paper and digest its contents.

As far as I have been able to learn, the only real objection to spinal anaesthesia in obstetrics is the fact that perineal anaesthesia is so perfect that the reflex urge to bear down and expel the fetus is lost. This auxiliary force is a great aid in a spontaneous delivery and its loss may necessitate the use of low forceps.

Cosgrove, of Jersey City, in a paper published in Anaesthesia and Analgesia for March–April, 1930, emphasizes the fact that in primiparae the presenting part should be on the pelvic floor, and in multiparae it should be fairly well engaged before the spinal anaesthesia is administered. There should, of course, be no obstructive dystocia present. If the auxiliary forces are lost after administration of the spinal anaesthesia, Cosgrove gives 5 minims of pituitrin. If spontaneous delivery does not then take place in 30 minutes he terminates the labor with low forceps. Forceps are also used if the fetal heart shows signs of embarrassment.

The wisdom of the routine use of pituitrin and of frequent forceps deliveries is certainly open to question. However, the per-

Thank You Doctor

The baby is doing splendidly and Tom and I are so pleased.

When you first told me that Junior would have to have bottle feedings I thought I was due for a lot of trouble and work because I remembered what a time my sister had when her baby was on the bottle. She sent for a formula that was advertised to be recommended by many authorities, but something was wrong. She used to spend hours in her kitchen mixing this, that and the other thing. And in spite of all her trouble, her baby fretted and cried and didn't gain properly.

This S.M.A. you have prescribed for my baby is a new one to me. In fact, I have never seen it advertised. But, believe me, it works like a charm and it is *so* simple to prepare—no fuss or bother at all.

Junior reaches to take the bottle right out of my hands and drinks it all up. And he's the *best* child. Always happy when he's awake, and sleeps the whole night through.

And talk about a picture of health! I believe he would take first prize in any baby contest.

I'm going to bring him down to your office Wednesday as you suggested. That S.M.A. folder you gave me says even a breast fed baby should be under the supervision of a physician and I think myself that it's better to *keep* the baby well than to wait until trouble starts.

We certainly want to thank you for bringing our baby along so well, Doctor. It increases our confidence in you as our family physician. Tom has already "said it with dollars", but I wanted to thank you personally, too.

And I'm going to persuade Mrs. Brown,—that's my neighbor with the baby that's not gaining—to come along on Wednesday so you can prescribe the proper diet for *him* too.

Trial supply of S.M.A. offered without charge Because S.M.A. has won favor under typical conditions we are quite willing that you should try it in your own practice and under your own control. To make this easy we offer you a generous trial supply without charge or obligation.

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- ☐ New S.M.A. prescription pad.
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ineal relaxation is so good that the danger of laceration, which is increased by pituitrin, is greatly reduced, and if a tear seems imminent an episiotomy can be done.

Spinal anaesthesia then, is harmless to mother and child, it affords complete anaesthesia and perineal relaxation. It might be regarded as the perfect obstetrical anaesthesia were it not for the fact that it causes the loss of the auxiliary forces, and frequently necessitates the use of forceps or pituitrin. For low or mid-forceps, however, or for episiotomy and perineal repair, I believe it is unsurpassed.

7. CAUDAL ANAESTHESIA

Caudal anaesthesia has also been used to a certain extent in obstetrics. The results published are not as successful as those with spinal and there are more difficulties in the way of its use in the home. The chief of these objections is the fact that the solution must be prepared fresh for each case. Furthermore, deformities in the sacral hiatus are quite frequently encountered, which make the administration difficult or impossible.

I have not discussed the use of nitrous oxide or ethylene and oxygen. These anaesthetics are highly satisfactory in obstetrics but their use is necessarily restricted to hospital practice.

CONCLUSIONS

1. Morphine or pantopon and scopolamine in small doses in the first stage, with ether or chloroform inhalations to the obstetrical degree in the second stage, constitutes a satisfactory obstetrical anaesthetic in the majority of normal cases.

2. The Gwathmey method or synergistic analgesia is practicable and satisfactory.

3. Twilight sleep is not to be recommended for use in the home.

4. Sodium amytal, while quite satisfactory in hospital practice, is not well adapted to home use.

5. Spinal anaesthesia is unsurpassed for forceps deliveries, episiotomy, and perineal repair, but can hardly be recommended for routine use because of the frequent loss of the auxiliary forces following its employment.

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COUNCIL PROCEEDINGS

(Continued from page 127)

upon some form of public relief for the necessities of life including medical attention.

2. Our own studies indicate that another seventy-five per cent are supported by earners whose gross cash incomes fall under $1600 a year.

3. But ten per cent or less of the 2,900,000 people of Wisconsin are supported by earners whose gross cash incomes are in excess of $1600 a year.

4. The average net cash income of the general practitioner of Wisconsin from his practice only, ten years out of school, was $3,500 in 1930; of the specialist the average was $6,000–$7,000.

PHYSICIANS' EXCHANGE

Advertisements for this column must be received by the 25th of the month preceding month of issue. A charge is made of $2.00 for the first appearance of copy occupying 1 inch or less of space and $1.00 for each succeeding insertion of the same copy. Kindly accompany copy with remittance to cover number of insertions desired. Advertisements from members of the State Medical Society will be accepted without charge. Such copy will be taken out after its second publication unless otherwise requested. Where numbers follow advertisements replies should be addressed care Wisconsin Medical Jonrnal.

FOR SALE—Victor x-ray machine, compact unit and very suitable for dental and bone work, also tube stand. In excellent condition and guaranteed to do very best work. Very reasonable. Address No. 896 in care of the Journal. DJF

LOCATION WANTED—By general surgeon with some orthopedic experience. Capable of doing high grade surgery. Would consider partnership or will buy a good, going practice. Address No. 903 in care of the Journal. FMA

FOR SALE—X-ray equipment. Standard 9 in. transformer, fluoroscopic table complete with screen, Bucky, plate chest, 2 Coolidge tubes, casettes, screens, etc. A bargain for cash. Address No. 897 in care of the Journal. DJF

WANTED—Locum tenens work by capable physician; available for short or long period; Wisconsin license; references; will not compete. Address number 851 in care of the Journal.

POSITION WANTED—As locum tenens or to fill vacancy. Available at once. Graduate University of Wisconsin. Have Wisconsin license. Five years experience in general medicine. Two years at Philadelphia General Hospital. Address No. 900 in care of the Journal. JFM

FOR SALE—Dr. C. E. Armstrong's practice, residence, office fully equipped, complete line of drugs. In active practice 40 years. Died suddenly December 20, 1932. Location, Oconto, Wisconsin. 5,000 population, county seat surrounded by heavily populated high class farming community. Only three doctors, two of the older men having died in past year. Residence and office on Main Street, finest location in city. Residence can be converted into private hospital. Part cash, balance on time. Wonderful opportunity for good surgeon. Giles V. Megan, Attorney for Estate, Oconto, Wisconsin.

FOR SALE—$10,000 eye, ear, nose and throat practice in Wisconsin, also full equipment. Established twenty-seven years. City nearly 10,000. Excellent surrounding territory. Wonderful opportunity for man able to do all work. Address No. 902 in care of the Journal. FMA

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5. The net income of the general practitioner declined 8% in 1931.

6. Our studies in distribution of physicians in Wisconsin indicate that while the physician of exceptional abilities will always make his own place, there are no communities in the state that presently lack medical service, having in mind the extension of telephone and all weather roads.

7. It may be said with fairness that the residents generally do not use all the facilities available to them, particularly in the field of preventive medicine. This is due in part to lack of education and in part to a lack of funds. I would not venture to assign a percentage figure to these two causes.

8. Voluntary health insurance with inferior types of medical service is to be found in Wisconsin in certain of the benefit and lodge groups. Compulsory health insurance without free choice of physician is to be found in the benefit association of the Milwaukee Electric Railway and Light Company.

9. Various forms of contract practice exist extensively in Milwaukee and in lesser degree in all urban areas.

10. Wisconsin has as many clinic groups, or medical service centers, as any other state of like medical population. It is my judgment that practice in many of these groups is not clinic practice as that term is generally understood by the medical profession, but that they are in fact associations of physicians representing various interests in medicine who have grouped themselves about a single unit for convenience, presumed economy, and prestige. Where such medical centers were erected prior to 1929, the majority now find themselves with a heavy overhead that cannot be contracted to meet changed economic conditions. In general it is my judgment that physician members of most clinics have been hit harder by the economic stringency than any others except specialists who received high incomes.

11. In Wisconsin great effort has been made by our county medical societies to secure adoption of plans for the more adequate care of the indigent sick. It is our present experience that too frequently government officials are concerned not with the need of an adequate service, not in free choice of physicians, nor in compensation that will purchase an adequate service but in how they may discharge a legal obligation in the cheapest manner. No thought is given to preventive medicine.

From a broader and national viewpoint, the Report of the Committee on the Costs of Medical Care (Majority Group) is stimulating movements looking towards the development of voluntary health insurance and community medical centers as the means for the delivery of such service. It is admitted by the Chairman of the Committee that the ultimate desideratum is compulsory health insurance.

The Report of the Commission on Medical Education states that unequal purchase power stands between the people and the type of medical service they should receive. While offering encouragement to efforts designed to break down this barrier, the report presents the fact that in every other country voluntary health insurance has been but the stepping stone to compulsory health insurance. Nor is it denied by either Committee that compulsory health insurance as found elsewhere would not, in existing forms, be a contribution to American life.

The tendency has been, and is now, to emphasize the economics of medicine rather than the type of service to be delivered. Elsewhere plans devised to meet the economic situation on the basis of good service have been placed in almost immediate competition with plans devised to offer a cheaper service, with the resultant effect that the public has bought medical care on the basis of its initial cash outlay rather than on the basis of delivery of an adequate and reasonable service.

This but emphasizes the fact that general application of new and untried remedies for our social structure can be just as disadvantageous as faulty prescriptions for our individual ills.

Organized medicine may not drift with safety. Two courses may be said to be before us:

1. To maintain that the economic foundation of medicine does not differ from that underlying the purchase of food, clothing, and shelter; that its purchase must represent savings for illness which is as inevitable as death and that its freer purchase is dependent upon education as to comparative values and upon solving the economic problems underlying a nationally restricted purchase power, or

2. Declaring that medical service contains such uncertainties as to cost and needs as to be without any stable value for budget purposes, that necessities frequently are actually denied because of inability to pay, and therefore medical service will be best administered on the basis of insurance payments.

If we are to accept the latter principle we should be sufficiently far-sighted to appreciate that we will make no very great headway with the lay mind in differentiating between insurance administered by physicians, insurance administered by private groups, and insurance administered by the state. What the layman will see is "health insurance" and it would not seem likely that he will be any more critical in selecting the insurance carrier than he is in selecting his savings securities. And using the same analogy—government securities will have a distinct appeal.

If we are to accept the latter principle, that of insurance payments, we should be prompt to institute carefully limited and controlled experiments designed to prove that which is good from that which is bad. But our experiments must be early ones if we are to expect therefrom results that are to be of any vital value in determining how health insurance is to be administered, for once committed to the principle of insurance we must anticipate a rather rapid development.

If we are to say that the first course of action shall govern, we must make renewed efforts to deliver an adequate service despite the lack of purchase power, making a present sacrifice that physicians may continue in their present individual capacity at such future times as the financial rewards

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shall be greater. This in itself will mean a most earnest effort by the organization, as well as by present sacrifice of the individual members. We must recognize the existence of a well-financed program looking towards voluntary and then compulsory health insurance. This can only be met by actions that will satisfy the layman as to the advantages of the present service from the points of both costs and adequacy.

If, on the other hand, we ourselves decide to offer health insurance service, legislation may be considered essential to prevent competition from commercialized groups seemingly offering "more for less" and to legalize our own activities.

Your secretary has purposely avoided offering his personal views on the choice to be made, for it seemed more fitting that this report be confined to placing the subject matter of the discussion before the Council for present consideration.

Summarized, we face the question of whether the advantages of health insurance, for the catastrophic costs or for all medical service, outweigh the disadvantages which are inherent to any plan which, originally controlled by the profession, may subsequently progress into private or state control. Seemingly we are now in the possession of such data as should enable us to arrive at a charting of our course.

Respectfully submitted,

J. G. CROWNHART,
Secretary.

15. *(Continued).* Dr. R. G. Leland, Director of the Bureau of Medical Economics of the American Medical Association was asked to open the general discussion by Chairman Rogers. Following general questions the Council recessed for lunch at 12:30 noon. The Council reconvened at 1:30 with Dr. J. C. Sargent, President of the Medical Society of Milwaukee county, and Mr. Theodore Wiprud, Secretary, as its invited guests. Dr. Sargent presented to the Council at their request the fundamental points involved in the so-called "Milwaukee Plan".

A three hour discussion followed in which all present participated. At the suggestion of the Secretary, it was moved by Stang–Heidner that members of the Executive Committee of the Council attend the meeting of the Medical Society of Milwaukee County on January ninth at which the "Milwaukee Plan" would receive further discussion, and that the Committee make such recommendations for Council action as it deems best suited to promote the public interest involved, such recommendations to be placed before the Council promptly if/and/or when made. Carried.

The Council adjourned at five p. m. subject to call of the Chairman.

J. G. CROWNHART,
Secretary.

Approved: A. W. ROGERS, M. D.,
Chairman.

Builders' Mutual in Process of Liquidation: Physicians and Hospitals Asked to Accept Deferred Payments on Claims

That physicians and hospitals holding claims under the Compensation Act against the Builders' Mutual Insurance Company of Madison will receive a larger percentage of amounts due by permitting the Company to proceed in an orderly liquidation, was the statement this month of H. L. Geisler, Vice-President and Manager of the Company. The company has ceased writing business and, by agreement, the Employers Mutual Liability Company of Wausau will handle without charge the liquidation process.

First cash assets will be used to complete the claims of injured employees, wholly dependent upon such payment. Letters from the Vice-President and Mr. Voyta Wrabetz, member of the Industrial Commission, explaining the situation follow:

BUILDERS' MUTUAL CASUALTY COMPANY
Madison, Wis.

Doctors and Hospitals:

The Builders' Mutual Casualty Company, Madison, Wis., ceased operating on December 31, 1932, and is now in process of liquidation.

The Employers Mutual Insurance Company, Wausau, Wis., has agreed to undertake the liquidation of the claims outstanding against the Builders' Mutual at no expense to the company or its policyholders. This does not mean that the Employers Mutual is assuming any liability for any of the obligations incurred by the Builders' Mutual on claims occurring prior to January 1, 1933. It is simply handling the liquidation of the Builders' Mutual claims.

Owing to the frozen state of the Builders' Mutual assets, liquidation of them now would only result in unwarranted loss to former policyholders of that company.

Under the liquidation plan as adopted it is hoped that all claims will eventually be paid in full. We have asked the Employers Mutual to first apply available cash and other liquid assets of our company to compensation claims of injured persons and their dependents. This problem was also taken up with the Industrial Commission and in a letter from the Commission, dated January 7, 1933, the following statement is made:

> "We presume there are many medical bills outstanding. We feel sure that if the full situation is brought to the attention of the doctors they will have patience in their demands for payment and, of course, will recognize the

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11– 1	Hypertensive Heart Disease DR. VOLINI	Angina pectoris DR. STRAUSS	Electrocardiography DR. MAHER	Pathology DR. JAFFE	Gastric carcinoma DR. S. PORTIS	Diabetes DR. MCMULLEN
2– 4	Arterio sclerotic heart disease DR. SUTTON	Subacute bacterial endocarditis DR. TRACE	Glomerulonephritis DR. W. C. BUCHBINDER	Arthritis DR. TRAUT	Gastritis DR. J. MEYER	Carcinoma of intestines DR. D. C. GATEWOOD
4– 6	Rheumatic heart disease DR. ISAACS	Acute vascular diseases DR. SLOAN	Liver diseases DR. E. F. FOLEY	Therapy of heart disease DR. HINES	X-Ray of G. I. Tract DR. WARFIELD	Lung Abscess DR. PILOT

SECOND WEEK

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
9–11	Pulmonary neoplasms DR. A. ARKIN	Hodgkin's disease DR. TICE	Mediastinal tumors DR. VOLINI	Leukemias DR. PILOT	Auricular Fibrillation DR. VOLINI	Cirrhosis DR. SLOAN
11– 1	Bronchial Asthma DR. UNGER	Coronary thrombosis DR. ISAACS	Obesity DR. LUSK	Pathology DR. JAFFE	Pericarditis DR. BRAMS	Cholelithiasis DR. QUIGLEY
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necessity of your meeting preferentially and immediately current weekly compensation payments to injured employees who have no other source of income."

As these items are disposed of and additional assets become available, attention will be given to unpaid medical bills. It will, of course, take quite a few months time to dispose of the compensation claims and, as we see it now, you may be asked to accept a considerable discount on your claims.

If you are willing to make a substantial reduction in connection with bills you now have pending with the Builders' Mutual, we suggest that you write the Employers Mutual to that effect and possibly a more prompt adjustment of your account may be made.

We ask your indulgence in connection with any delay there may be in the payment of accounts owing you by the Builders' Mutual. Every effort will be made to dispose of these as soon as possible under the circumstances.

Yours very truly,
H. L. GEISLER,
Vice President.

INDUSTRIAL COMMISSION LETTER

Madison, Wis., January 7, 1933.

Mr. W. H. Burhop, Secretary,
Employers Mutual Liability Ins. Co.,
Wausau, Wisconsin.

Dear Mr. Burhop:

We have your letter of January 3rd relating to your arrangements in connection with the liquidation of the affairs of the Builders' Mutual Casualty Company.

We are sorry that the present depression has caused this company to withdraw from the compensation field. In withdrawing, however, we are glad that the affairs of the company are placed in your hands for liquidation.

We note from your letter that money readily available for the payment of compensation and medical obligations of the Builders' Mutual Casualty Company is low and that the assets of the company are in such a badly frozen condition that a forced sale at this time would mean very substantial losses. These assets, of course, should be handled and disposed of at a reasonable time so as to result in as great a saving as possible for the payment of compensation and medical liabilities. You may be sure that in our awards of compensation we will cooperate with you so that presently payment of obligations will be reduced to a minimum, and it would appear from your statements that all obligations of the company will undoubtedly be paid without loss.

We presume there are many medical bills outstanding. We feel sure that if the full situation is brought to the attention of the doctors they will have patience in their demands for payment and, of course, will recognize the necessity of your meeting preferentially and immediately current weekly compensation payments to injured employees who have no other source of income.

We most sincerely trust and we feel confident that you will successfully liquidate the affairs of this company and to that end in the various cases involved, you can expect prompt attention from us.

Yours very truly,
INDUSTRIAL COMMISSION,
Voyta Wrabetz,
Commissioner.

The High Points in the Recommendations of the Committee on the Costs of Medical Care*

By RAY LYMAN WILBUR, M. D.

There is no emotion in science. Its control depends upon the keenest and cleanest use of the mental faculties. It is natural that a considerable portion of those dealing with the sick should have their faces turned toward the past and that they should endeavor to use old formulae for new conditions. The automobile and the associated highways have changed all of the time factors in medical practice. The automobile, the operating table, the microscope, the telephone, the test tube, the Roentgen ray, the trained nurse, the interne and the mechanotherapist, are indispensable to the modern doctor. Each has its place and each costs money. We cannot care for the intricate set-up of modern medicine by a bookkeeping system such as that of the past, which was built around the notes carried in the silk hat of the bewhiskered, lovable and friendly general practitioner. We cannot wisely carry forward the fears and the shibboleths of the past in facing the social and economic forces of the day. Issues must be faced and not avoided by repeating the outworn slogans. "Contract practice" and "state medicine" must be redefined and "debogie-ized". Waving scarecrows only disturb the unthinking.

* * *

Medicine has been built up step by step through persistent experimentation. The

* Delivered at the National Conference on the Costs of Medical Care at the New York Academy of Medicine, November 29, 1932. Extracts from address published in The New England Journal of Medicine, Dec. 15, 1932.

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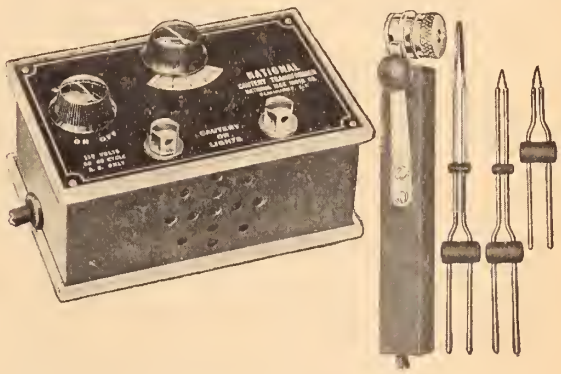

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social applications of medicine require the same repeated and carefully controlled experiments. We should recognize that the scientific side of medicine is up-to-date and in full synchronization with the peaks of human achievement, while for the most part the social side and the economic side as developed now are often archaic and ineffective in operation.

* * *

The making of experiments is well on its way. In Washington, Oregon and California, leaders in the medical profession are at grips with the details of proposals and definite plans. The doctor must recognize that, whether he likes it or not, something is going to be done. It is better to have it done by him than to him.

You are all familiar with what has taken place in regard to these Veterans' hospitals. You recognize that, with the income tax providing large funds and due to the political pressure, we now have nearly a billion dollars going annually into various forms of veterans' relief. Our Federal Government has the largest and finest set of hospitals anywhere in the world for a particular purpose, and the number of these hospitals is growing. But the men for whom they were built are growing older and before long we will have in this country a great hospital system and only a few old men in those buildings. Then we will really face the question of whether there is something further to be done in the relationship of the Federal Government with the operation of these hospitals for special groups in the population.

We are up against certain forms of State medicine at the moment. We have these problems clearly in front of us to be faced. No one is more fearful of bureaucracy than am I. I have been operating several bureaus in the Government and I know how they function. The more local we can make the conduct of these medical enterprises which have been discussed, the better the results are going to be. Those who know the most about the individual are those near at hand, and, if they can make these decisions, we are almost sure to have them reasonably wise. I fear decisions in this field made too far afield by legislative groups with authority and with funds. But I also fear that that is exactly what will happen if the medical profession fails to go at this job and do it well.

Something definite is going to be done, there isn't any question about that. So we are on our way whether we want to be or not.

* * *

We assume that whatever is going to be done is going to be upon the basis of existing institutions. We have an enormous capital plant which must be used. Whatever we do must bring that into full play. In some places there is already a grouping which makes it possible to use existing units with comparatively little change. Some combinations of institutions and of men can take place in almost all communities. In the larger communities, such combinations will not be like the great absorbing corporations and take in everything, but there will be a zoning of these medical centers.

When you get right down to the real question, what we are doing here is to adopt the corporate idea to the practice of medicine, and to bring the efficiency and the economy of that idea into medicine and in the organization, control, management, and operation of the accessories of medicine which have become as costly as the actual expenditures for the doctor himself. In any one of these groups we can use in our early experimental period existing personnel and existing means.

In the first place, no one is to make money out of the plant and out of the accessories. They are to be handled as our great volunteer hospitals are, by boards of experts in finance and in administration, who will do this service for the community.

The control of the medical side is to be in the hands of the staff of physicians. They are to work out the professional standards and the procedures as to what shall be done. If the medical profession cannot meet that, then somebody will meet it for them. I think they can, and I think they will meet it. Those of us who have had contact with medical schools and hospitals in an administrative way know that we can discover physicians who have a unique facility and a great skill in administration. They can be found, they can bring together these groups, as do

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Clinical Facilities Medical and surgical clinics are conducted in Milwaukee County Hospital, and in a number of city hospitals, thereby affording adequate facilities for imparting bedside instruction under scientifically competent and experienced staffs.

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the deans of the medical schools. They can gather the men and study them for their particular abilities and capacities. They can decide what specialties shall be represented and how they shall be handled. We know that these things can be done because they are being done right now in a number of places.

It is true that the full scope of the medical center proposed by the Committee is not in operation as yet, but it is merely an extension of what already is being done.

The advantages to the doctor are obvious. He will get a division of expense for these accessories, not having to take the whole load. He will get greater efficiency, greater opportunities for work, more ease in postgraduate study and in vacations, more co-operation from his friends and neighbors, more education from constant association with others.

* * *

We really do not need to work out any great extension of capital investment. We have enough at the present time to try these experiments out and to do something in most of our communities. The charitable contributions which have been made in the past are of immense significance and have been of the greatest advantage. They give us a stable basis from which to work forward. When we add to them these group payment plans for a division of the load of cost and a sharing of the burden of illness, it seems to me that we can within a short time go farther than in any other way.

* * *

When we come to the question that was faced by the Committee as to whether these group payments are to take the form of voluntary or compulsory contributions, naturally we meet differences in viewpoint that can only be worked out in time. We felt in the Committee that it was safer to start off with the voluntary method, for we feared that the compulsory method carried out too soon with vigor and enthusiasm of legislative bodies, that might have members who want to be re-elected on a popular cause, might project us into a field from which we might later wish to retreat. But if, after a few years, we have been able to demonstrate that there is a willingness to meet this charge, and that only those fail to meet it who are reluctant or negligent or indigent, then we can see our way toward some plan that may have the compulsory feature in it. In other words, we can develop a plan of compulsory health insurance gradually.

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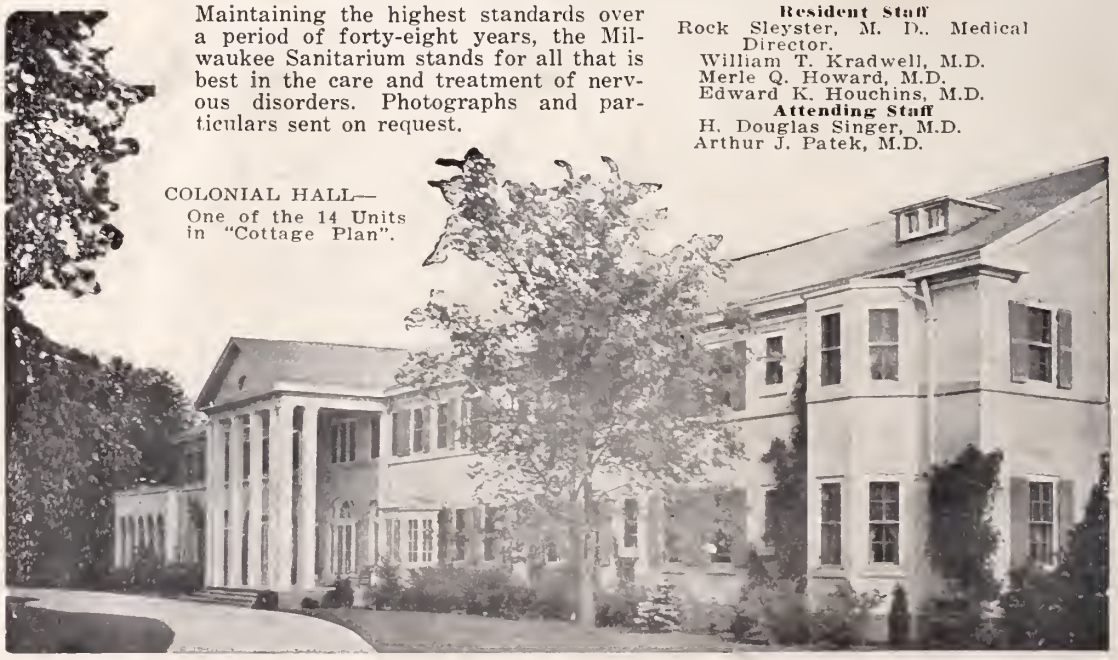

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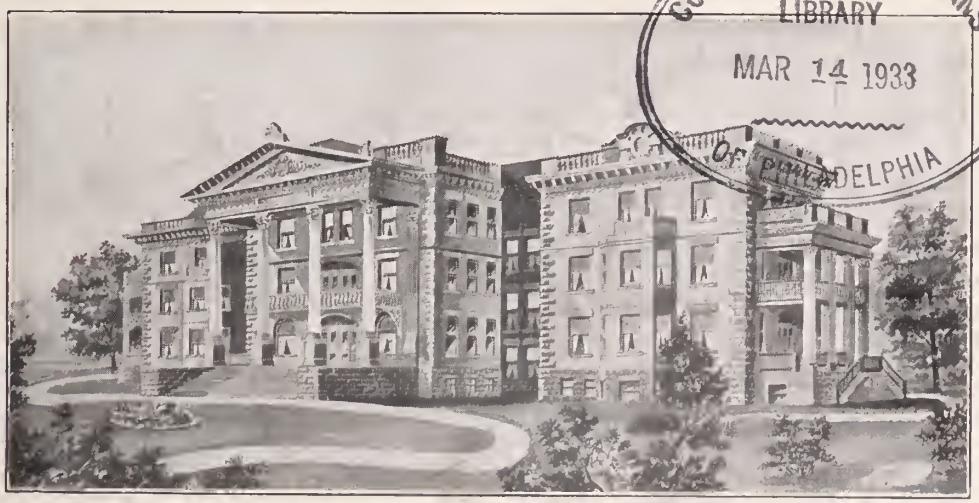

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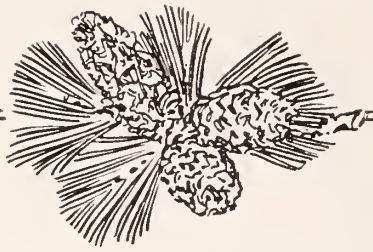

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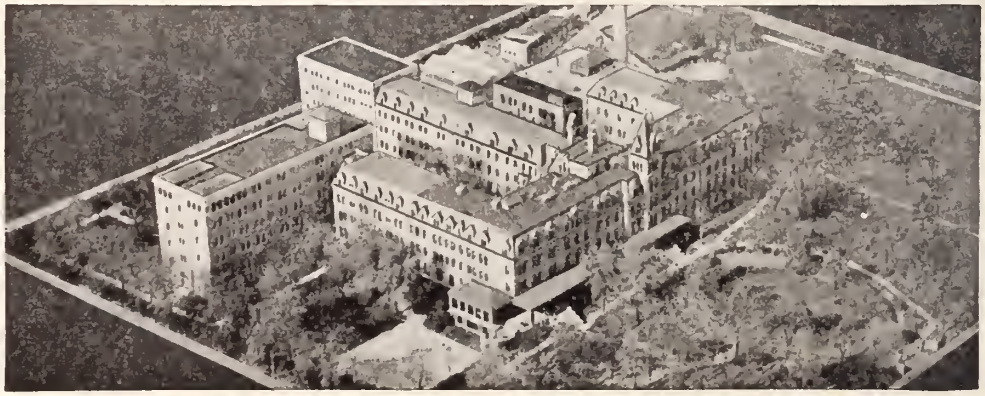

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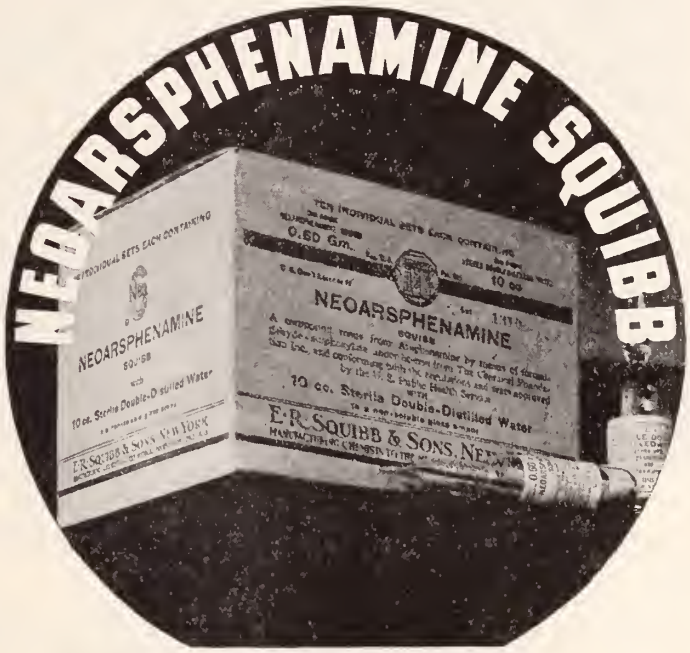

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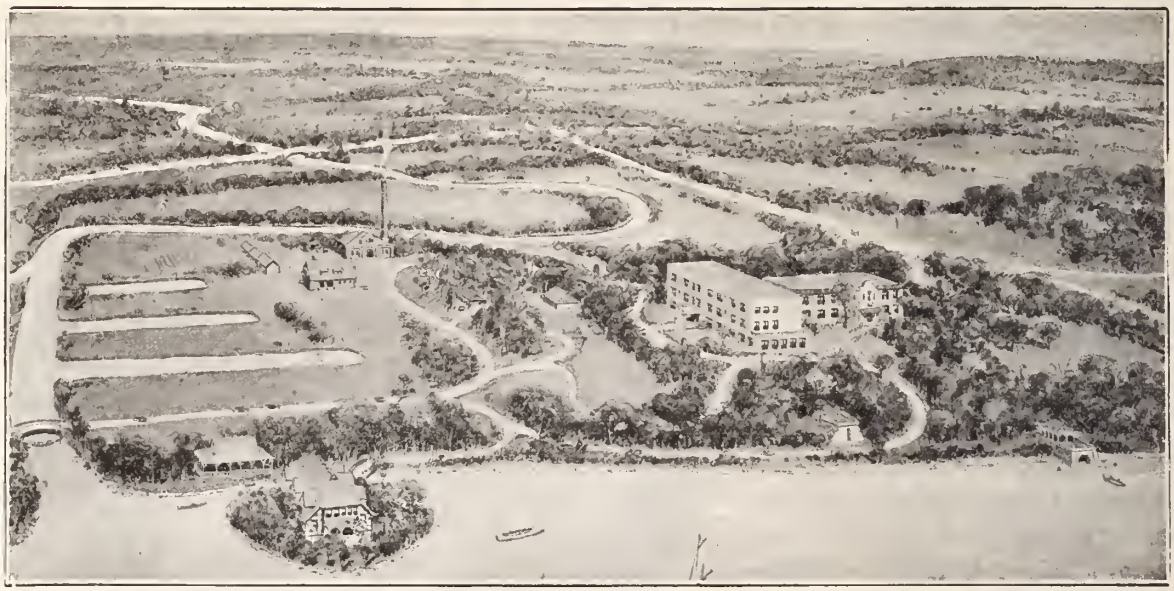

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Some Recent Advances in the Medical Sciences (Bacteriology and Immunology as They Apply to Clinical Practice*

By W. D. STOVALL, M. D.
Madison

Two generations ago Cohn and Koch pronounced a conception of the growth and development of bacteria which has endured until the present time with here and there a few dissenters. This conception represents bacteria as the simplest forms of life. This simplicity is based upon their mode of reproduction, simple fission. It is argued that because of their simple method of reproduction they are limited very narrowly in their variability. That is to say, a bacillus can not vary enough to become a coccus nor can a coccus vary enough to become a bacillus. This same argument leads to the conclusion; bacterial forms which we recognize in ordinary cultures have no other stage and therefore are not filterable. This conception of the stability of bacterial species has been described by the term monomorphism.

Monomorphism has not gone uncontested. In the latter part of the nineteenth century variability was recognized by such scientists as Nageli and Gruber and later Nageli and Massini, who described the variants as mutants. This term suggested the change of one type of organism into another.

Early in the beginning of this century, 1907, there began to develop among a few bacteriologists the idea that the variability of bacteria so long recognized as involution forms, degeneration forms, mutants, and as cultural contaminants really represents a phase in a cycle through which the organisms pass during normal development or as a result of environmental influences.

At the present time there are two schools of bacteriologists, those who cling more or less to the old idea of bacterial type stability, monomorphists, and the much smaller group, who feel that the cyclical development of bacteria is proven, the cyclical variationists.

It is possible to discuss only a few of the ramifications of these changing ideas about bacterial life and to point out only a few of the clinical implications.

Observation on the dissociation of bacterial species is the evidence which gives strong support to the cyclical variationists. This phenomenon expresses itself in a variation in the morphology, colony appearance, virulence, immunological reactions and serological reaction of pure cultures of single strains of bacteria. The contributors to the literature on this subject have shown that from a pure culture of a single strain of bacteria it is possible to recognize and demonstrate two and often three variants which are so dissimilar as to grow in distinguishing colony formation, to differ so in their antigenic properties that anti-serum for one fails to react specifically with the other, to have wide differences in virulence, and to be so changed in morphology that in one phase the organism can be recognized by our usual methods of miscroscopic and bacteriological study and in another it is filterable.

Recently, Kendall,[1] Evans[2] and Tunicliffe[3] have contributed important reports on this subject. Kendall reports that on a media rich in protein and poor in peptone certain bacteria go into a filterable state. Thus a culture was obtained from an influenza patient which when grown in this media became filterable and when the filtrate was cultured on agar the organism developed as a coccus. He was also able to produce a filterable state with several other pathogens included among which was B. Typhosus.

Alice Evans working with cultures secured from cases of encephalitis and herpes has reported a virus found in the tissues in a fil-

* Presented before 91st anniversary meeting, State Medical Society of Wisconsin, Milwaukee, September, 1932.

terable state which when properly cultured appear in cultures as a coccus resembling streptococcus. This work strongly suggests the early work of Rosenow in which he was able to culture streptococci from cases of poliomyelitis. Rosenow's reports were not favorably received by orthodox bacteriologists who expressed themselves as of the opinion that his cultures were the result of contamination and therefore the organisms bore no causal relation to poliomyelitis.

Closely following the work of Evans and carrying suggestions of a similar nature, Tunicliffe and others have recently shown that pure strains of hemolytic streptococci undergo a dissociation which brings into predominance in the various isolations organisms of widely different qualities. Tunicliffe particularly has shown that dissociation among strains of streptococcus scarlatinae results in strains which show marked differences in pathogenicity and antigenic properties. She was able to show that hemolytic streptococci isolated from cases of scarlet fever are specifically phagocytized by leucocytes in a mixture of leucocytes, immune serum and bacteria while hemolytic streptococci isolated from carriers and complicating suppurating lymphadenitis are not.

Eberson[4] and Sweeney have shown that the morphology and virulence of tubercle bacilli can be modified by cultivation in a non-protein, simple culture medium.

These ideas when applied to clinical medicine clear up some apparent discrepancies between the results of laboratory and ward examinations, extend the usefulness of certain laboratory tests in medical diagnosis, and possibly influence medical thought on the therapeutic and prophylactic treatment of certain diseases. A few examples will suffice to illustrate these points.

As I have already said, B. Typhosus has been shown to undergo dissociation. In one state it is said to be in the smooth (S) phase and the other the (R) or rough phase. The two phases exhibit such marked differences in agglutinability that a serum which agglutinates the organism in the smooth stage may not agglutinate one in the more specific or rough phase. This variability of agglutinability of B. Typhosus is explained on the basis that the organisms contain two antigenic qualities, the so-called "H" antigen and the "O" antigen.

The "H" antigen is highly specific, responding only to "H" agglutinins of its homologous specie. The "O" antigen is non-specific. It unites with agglutinins produced by organisms of closely related species.

The monomorphic idea has maintained a specific relation between agglutinins and antigens. In clinical medicine this has resulted in the more or less widespread practice of accepting positive agglutination of B. Typhosus as certain evidence of typhoid fever. Cross agglutinations, positive reactions in patients proved later not to have typhoid fever, and the confusion of the agglutination reaction in the diagnosis of typhoid fever due to the patient's previous inoculation with typhoid-paratyphoid vaccine has not been well explained and has resulted often in a loss of confidence in the diagnostic value of the test.

The demonstration of two antigenic substances in the specie and the recognition of the properties of each has made it possible to elucidate some of the confusing results and has brought about a greater usefulness of agglutination tests.

These points are illustrated in the reports of Pijper[5] and the work of Felix,[6] Gardner,[7] White[8] and Andrews.[9]

Pijper reported thirty-four (34) persistently negative agglutination reactions in one hundred and twenty (120) cases of undoubted typhoid fever. These anomalous results were undoubtedly due to the fact that the patients were producing, we will say, O agglutinins and his antigen was suitable for demonstrating only H agglutinins. Hektoen has reported the reverse condition, i.e., patients whose blood serum agglutinated B. Typhosus but who had some other infection. We may conclude, I think, that the use of two antigens, H and O, will clear up many such doubtful results.

Felix has reported the development of both O and H agglutinin by typhoid patients. He suggests that the H identifies the infecting organism and the O is an expression of the body's response to the infection. It has been his experience that patients who re-

spond well to the infection and eventually recover are those who produce early in the disease a high concentration of O agglutinin. On the other hand, overwhelming infection results in the production of little or no O agglutinin and conversely very mild infections do not offer sufficient stimulation for their production. Certain other investigators have substantiated these ideas. Felix and Olitzki[10] believe that the O agglutinins are identical with bactericidal antibodies.

APPLICATION OF STUDIES

When these ideas are applied to clinical practice they modify the significance and the technique for carrying out the agglutination reaction in suspected cases of typhoid and other enteric fevers. The association of O agglutinin with bactericidal antibodies attaches to these agglutinins a prognostic significance. Thus those patients who show a high titer O agglutinin are demonstrating a strong resistance to the infection and the prognosis is favorable. The diagnostic significance is also enhanced since the vaccinated respond with a high titer of the H agglutinin and the infected person with a high titer of O agglutinin. Because of the significance of H and O agglutinins and also because the one is specie specific and the other is not, the qualitative and quantitave receptor analysis becomes useful in the differential diagnosis of enteric fevers, in the recognition of positive agglutinations as a result of vaccination from that of true B. Typhosus infection in patients suffering from a typhoid-like disease and possibly as an indication of the resistance of the patient to the infection.

There is still another interesting illustration which is somewhat theoretical, but in the light of what I have said about cyclic variation and its effect upon various biological characteristics of bacteria, it is worthy of brief consideration. We have seen that there is evidence to show that various forms of streptococci undergo dissociation into rough and smooth forms and this transformation brings about a change in the virulence of the organism. In the case of hemolytic streptococcus scarlatinae these ideas have some bearing upon clinical observations. The scarlet fever streptococcus, as already pointed out, in the rough phase is associated with complications of the disease and carriers, and is not susceptible to specific phagocytic action, while in the smooth phase it is associated with the toxic stage of the disease and is susceptible to specific phagocytosis.

These considerations are interesting in view of the clinical observation that the early administration of scarlet fever antitoxin is necessary in order to successfully combat the toxemia and that the antitoxin is ineffectual for the treatment of the septic complications.

It is also interesting in this connection to consider the active immunization against scarlet fever. This immunization is carried out with the toxin of streptococcus scarlatinae. It results in an antitoxin response which protects against the toxic manifestation of the disease, which is recognized clinically by the rash. Since the organism in its rough phase is not susceptible to the specific immunological test but retains its pyogenic potentialities, the suggestion that the toxin immunization is one sided and that it may result in masking the clinical diagnosis can not be escaped.

This paper deals with some of the advances, particularly in bacteriology, which are influencing medical thought and practice. It has been my desire to point out that the recognition of dissociation or cyclic variation among bacteria is opening up new fields for study, enlarging our ideas concerning the diagnostic value of certain laboratory tests, giving us new viewpoints as to the therapeutic values of certain biologics, and particularly, that it is fatal to much of the dogma which has been perpetuated in our text books.

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Acute Leukopenic Leukemia and Its Differential Diagnosis*

By CHARLES H. WATKINS, M. D.
Division of Medicine, The Mayo Clinic
Rochester, Minnesota

Because the morphologic features of the formed elements of the circulating blood are of great significance in the differential diagnosis of most blood dyscrasias, it is well to mention the morphologic characteristics of the cells that are to be considered later. The progenitor of the myeloid and lymphoid cell is called the stem cell, myeloblast, or lymphoblast. This cell has a large nucleus, a very finely arranged chromatin network which is generally granular or in small, rod-like clumps, the parachromatin is sharply differentiated from the chromatin, and there are generally two or more nucleoli; the cytoplasm stains blue with Wright's stain and may or may not contain azurophilic granules. In the development of the granulocytic series, the first stage from the myeloblast is the leukoblast, which is distinguished from the former by slight condensation of the chromatin, decrease in number of, or absence of nucleoli, and a tendency toward a more basophilic cytoplasm. The next stage, the promyelocyte, which may be identified as neutrophilic, eosinophilic or basophilic, is characterized by a still coarser chromatin, with still a sharp distinction between chromatin and parachromatin, although the latter has faded into the background, and by a beginning acidophilia or pinkish stain to the cytoplasm. In this stage, the specific granulation first appears in slight amount, generally intermingled with the nonspecific azurophilic granulation. As the promyelocyte approaches maturity, the myelocyte and metamyelocyte are recognized. In the myelocyte, the nucleus is eccentric, the chromatin more dense, and the cytoplasm acidophilic, with specific granulation practically complete. The chief change in the metamyelocyte is beginning lobulation of the nucleus, with characteristics of chromatin and cytoplasm of the mature granulocyte.

Lymphocytes normally develop chiefly from reticular cells of the lymphadenoid tissue, but under pathologic conditions the stages of development can be traced from the stem cell or lymphoblast which morphologically is identical with the stem cell or myeloblast, from which the granulocytes are developed. The nuclear structure of the mature lymphocyte is constant, consisting of arrangement of chromatin in blocks, with gradual transition between chromatin and parachromatin, so that no sharp edge of chromatin can be seen. This nuclear structure is present regardless of the size of the nucleus, if the cell is mature. The cytoplasm is light blue and is relatively unimportant so far as recognition of immaturity is concerned. Tracing the development in retrograde fashion, immaturity of the lymphocyte is evidenced by a beginning sharpness of differentiation of the chromatin and parachromatin, and in still more immature stages by a finer chromatin network, with sharper differentiation of chromatin, which is more pronounced as the stage of the stem cell or myeloblast is approached.

In recent years much significance has been attached to a decrease of the number of neutrophilic leukocytes in the peripheral blood. Among the diseases which frequently produce leukopenia are influenza, typhoid fever, tuberculosis, overwhelming infections with streptococci and pneumococci, osteomyelitis, idiopathic agranulocytosis (agranulocytic angina), and splenic anemia. Lymphoblastoma, pernicious anemia, and acute leukemia also occasionally produce leukopenia. Roentgen rays or the gamma rays from radium in heavy dosage have been observed to produce a marked decrease in the number of

* Read before the 91st Anniversary Meeting State Medical Society of Wisconsin, Milwaukee, September, 1932.

leukocytes, particularly of those in the myeloid series, to the degree that there may be total absence of neutrophils in the peripheral blood. Chemical poisoning by arsenic and its derivatives, benzene, mesothorium, and trinitrotoluene often produces a marked reduction in the number of leukocytes. Moreover, a small percentage of persons normally have leukopenia of moderate degree in the absence of any etiologic factor, but in these, as a rule, when a demand for cells occurs, the bone marrow is able to respond in a normal manner.

"Agranulocytosis" and "malignant neutropenia" are descriptive terms, meaning marked decrease in, or total absence of, the granular leukocytes in the peripheral blood. In current literature the terms usually designate a clinical syndrome characterized by high fever, ulceration of the mucous membranes, chiefly those of the mouth and throat, malaise, decrease or total absence of the granulocytes, and absolute decrease in the number of lymphocytes in the peripheral blood, with rapid onset and generally rapid failure and death. Diagnosis of this condition is usually not difficult, for it may be suspected from the leukopenia and verified by a differential count from the blood smear. Since the various treatments that have been suggested are thought to be more efficacious in the early stages of the disease, frequent leukocyte counts should be made in all cases of sore throat or sore mouth, or of unexplained high fever.

The name "leukemia" implies a condition in which there is an abnormal increase in the number of leukocytes in the peripheral blood, with many of the individual cells showing the features of immaturity. The more acute the process the more evidence of immaturity is found. Full dependence for a diagnosis of leukemia must not be placed on a high leukocyte count, for in many instances in the presence of acute or chronic leukemia the total leukocyte count may be less than 10,000 cells for each cubic millimeter of blood or even marked leukopenia may be present. In approximately 45 per cent of the cases of acute leukemia seen at The Mayo Clinic during the last four years, the total number of leukocytes has been less than 10,000 cells for each cubic millimeter of blood. Morphologically, the diagnosis may be readily made by finding immature leukocytes, with a high proportion of myeloblasts and leukoblasts if the leukemia is myelogenous in type, or of myeloblasts and very immature lymphocytes if lymphatic in type. Peculiarly the clinical findings in these cases in which the leukocyte count is low, as a rule are quite variable, which places more responsibility on the physician or technician who examines the blood smear than is the rule in the average case of blood dyscrasia. The most common clinical features are hemorrhage from the mucous membranes and into the skin, weakness, anemia, and fever. Splenomegalia and hepatomegalia in general are slight, and in acute lymphatic leukemia there is usually no adenopathy. The tendency toward hemorrhage from mucous membranes may be absent, and the outstanding feature may be severe anemia, which may lead to an erroneous diagnosis of pernicious anemia.

Leukemia with low leukocyte count has been termed "aleukemic leukemia" by many writers, but most hematologists prefer to limit application of this term to conditions in which the clinical findings are suggestive of leukemia, there is leukemic infiltration of the organs, and immature leukocytes are not found in the peripheral blood. The term "leukopenic leukemia" is a misnomer, but for lack of a more descriptive term at present it must suffice. In general, this condition must be distinguished from essential thrombocytopenic purpura, acute aplastic anemia and pernicious anemia, for results of coagulation tests may be essentially the same in all three conditions. Hemophilia may be considered in differential diagnosis, although the characteristic anomaly of coagulation distinguishes hemophilia from the former conditions.

DIFFERENTIAL DIAGNOSIS

The differential diagnosis may be illustrated by the following case:

A man, aged sixty years, came to The Mayo Clinic January 28, 1932, with a history of having had weakness and a tired feeling for two months. He had been fairly well until January 11, when he became very pale, and examination of blood disclosed

severe anemia. A diagnosis of pernicious anemia was made and he was given Lilly's liver extract, three vials daily, without improvement. The anemia became more profound and epistaxis, bleeding from the gums, and hemorrhage into the bowel developed. At this time, a diagnosis of hemorrhagic purpura of essential thrombocytopenic type was made. Three transfusions were given.

On examination here, there were marked hemorrhage from the gums and nose and large areas of ecchymosis over the extremities and abdomen. A tourniquet test gave positive results, graded 4. Enlargement of the spleen was graded 2 and the edge of the liver was 3 cm. below the right costal margin. The concentration of hemoglobin was 20 per cent (Dare); erythrocytes numbered 1,260,000, leukocytes 4,900, and platelets 48,000 in each cubic millimeter of blood; bleeding time was twenty minutes, and coagulation time (Lee) was six minutes; clot did not retract in twelve hours. Study of the smear revealed marked polychromatophilia, many normoblasts, and in the leukocyte series myeloblasts, leukoblasts, and an occasional promyelocyte and myelocyte. A diagnosis of acute myelogenous leukemia was made.

A transfusion of 500 c.c. of blood (citrate method) was given, but the bleeding continued and the patient died January 31. At necropsy, changes typical of acute myelogenous leukemia were found in the organs.

Pernicious anemia may be eliminated from the diagnostic possibilities because of absence of a history of glossitis, diarrhea, or paresthesia, presence of splenomegalia of more marked degree than is usually seen in pernicious anemia, absence of macrocytosis of erythrocytes, absence of right shift of the neutrophiles with absence of thinning and stranding of the individual nuclear lobes, absence of the other characteristic morphologic findings of pernicious anemia, and absence of response to an adequate dosage of an effective liver extract.

Prolonged bleeding time, thrombocytopenia, normal coagulation time, prolonged clot retraction time, severe anemia, and a leukocyte count of less than 10,000 cells for each cubic millimeter of blood are usually found in cases of essential thrombocytopenic purpura, acute aplastic anemia, and acute forms of leukemia of leukopenic type. The acute course, splenomegalia, normal leukocyte count, and failure to derive temporary benefit from transfusion are against a diagnosis of aplastic anemia. Morphologically, the signs of active erythrocytic regeneration, marked polychromatophilia, and the occurrence of many normoblasts, definitely eliminate acute aplastic anemia from consideration in diagnosis.

Essential thrombocytopenic purpura may be conclusively excluded only by morphologic study of the blood smear, but absence of the slight to moderate leukocytosis which is usually present in this condition is contributory evidence toward its elimination from consideration in diagnosis. The occurrence of typical myeloblasts in a fairly large percentage of cases establishes the diagnosis of acute leukemia, and the presence of leukoblasts, and cells indicative of intermediate stages of leukocytic maturation, such as promyelocytes, myelocytes, and metamyelocytes proclaim the leukemia to be myelogenous in type.

The value of detailed microscopic study of the blood smear in the differential diagnosis of the blood dyscrasias mentioned, can readily be seen, for from such study the final diagnosis can be made, although from the clinical and other laboratory findings inferences may be drawn which suggest the correct interpretation of the condition. Frequently, patients with disorders of the foregoing type are subjected to splenectomy, because a diagnosis of essential thrombocytopenic purpura has been made. Following operation there is no cessation of bleeding, and unless it is later discovered that the condition is leukopenic leukemia, failure is credited to splenectomy in the treatment of essential thrombocytopenic purpura.

Hemophilia may, as a rule, be eliminated from the diagnosis, because in hemophilia the family tendency toward bleeding is chiefly confined to males. Generally in this blood dyscrasia, hemophilia, there is a history of a tendency toward bleeding and to joint hemorrhages over a number of years. The leukocyte count, differential count, evidence of regeneration, morphology of the leukocytes, and platelet count are normal. The bleeding time is normal or only slightly prolonged, the clot retraction time is normal, and the clotting time of the venous blood and the prothrombin time are prolonged.

FEATURES OF COAGULATION IN HEMORRHAGIC DISEASES

Characteristics	Hemophilia	Purpura hemorrhagica	Aplastic anemia	Acute leukemia
Leukocyte count, total	Normal	Increased or normal	Progressively decreased	Normal, increased or decreased
Leukocyte count, differential	Normal	Normal distribution; normal cells	Relative lymphocytosis	Immature cells, especially stem cells
Signs of regeneration of erythrocytes	Normal	Reticulocyte count usually increased; polychromatophilia and anisocytosis	Reticulocyte count low; polychromatophilia and anisocytosis usually absent	Usually normal
Platelet count	Normal	Decreased	Decreased	Increased, normal, or decreased
Bleeding time	Normal or slightly prolonged	Prolonged	Prolonged	Normal or prolonged
Coagulation time, venous blood	Prolonged	Normal	Normal or prolonged	Normal or prolonged
Retractility of clot	Normal; reclotting phenomenon	Delayed or absent	Normal, delayed or absent	Normal, delayed or absent
Prothrombin time	Prolonged	Normal or prolonged	Normal or prolonged	May be prolonged
Tourniquet test	Negative	Usually positive	Frequently positive	May be positive
Heredity	Positive, occurs in males, transmitted by females	Little significance	No significance	No significance
Joint hemorrhages	Common	Rare	Rare	Rare
Petechiae and purpura	Rare	Common	Common	Not uncommon

TREATMENT

The treatment of acute leukopenic leukemia, just as for acute leukemia with high leukocyte count, is at best palliative. Occasionally, if the disease is recognized sufficiently early, repeated transfusions may prolong life a few months. Exposure to roentgen rays or radium is contraindicated, for this usually hastens the end by causing more marked immaturity of the leukocytes and more infiltration of the bone marrow and other hematopoietic organs.

Leukemia with a normal leukocyte count or with leukopenia is not necessarily limited to the acute types. Occasionally chronic leukemia with a leukocyte count of 10,000 leukocytes for each cubic millimeter of blood is seen. This condition is practically always myelogenous, and as a rule presents clinically a moderately enlarged spleen and liver, with moderate anemia. Because of the relatively low leukocyte count, it is difficult to administer adequate radiotherapy. Mild irradiation by roentgen rays or radium may be given over a relatively long period, with fairly good results, but a daily leukocyte count and study of the blood smear should be made in order to discontinue the treatment if too rapid destruction of cells is taking place. The span of life in cases of this type closely approximates that in cases of ordinary chronic myelogenous leukemia under radiotherapy.

Chronic myelogenous leukemia with low leukocyte count may be confused clinically with so-called splenic anemia of the Banti type. In the latter, there is often marked leukopenia with relative lymphocytosis, often so marked as to suggest agranulocytosis of idiopathic type. The spleen is moderately or markedly enlarged, there is moderate anemia, and morphologically there is increased poikilocytosis of erythrocytes. Absence of immaturity of the leukocytes eliminates leukemia, whereas agranulocytosis of idiopathic type is eliminated by absence of

angina, high fever, and malaise. Also, in cases of agranulocytosis, splenomegalia is rarely found, and when so found is generally only of slight degree.

SUMMARY

The features of immature leukocytes of the myeloid and lymphatic series have been presented.

Acute and chronic leukemia with low leukocyte count, and the differential diagnosis of these conditions from aplastic anemia, hemorrhagic purpura, pernicious anemia, and splenic anemia have been considered.

The importance of a detailed morphologic study of the cells of the peripheral blood as an aid to the diagnosis of these blood dyscrasias, has been emphasized.

The Leukopenic Syndrome*

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For many years after the presence of leucocytes in the circulating blood was established, it was assumed that, because of their small numbers, they were of no clinical importance. The almost simultaneous observations by Virchow and Bennett in 1845 of the condition we now know as leukemia indicated their pathological significance.

Cohnheim's studies on inflammation and suppuration shortly afterward demonstrated their physiological significance. Not until Ehrlich's work in the latter part of the last century, however, were the various types of white cells differentiated and the importance of the bone marrow as the leucopoietic organ established. For some time attention was focused principally on the leucocytoses and little thought was given to the occasional decreases of the white cells which were observed in infectious diseases and in some of the severe anemias. There were also scattered reports of marked leucopenias (Koblanek, 1895; Brown, 1902; Schwartz, 1904; Turk, 1907; Stursberg, 1910), some of which occurred in the course of a severe sepsis and a few in rapidly fatal illnesses without other manifestations. But not until Schultz in 1922 reported the now well known group of cases occurring in middle aged women with acute onset of fever, ulcerative and necrotic stomatitis or pharyngitis, an extreme leucopenia and a rapidly fatal termination did it become apparent that a decrease of the white cells in the peripheral blood stream was of considerable clinical significance. Many reports of similar cases have followed and much thought has been devoted to the subject so that we find ourselves today in the midst of an intensive study of the clinical significance of the leucopenic syndrome.

Our knowledge is still so chaotic that one hesitates to discuss it in more than a very informal manner. The many excellent case reports in the literature, however, together with a few cases personally observed, have offered material for a critical survey from which a few important facts have been gleaned. One hundred cases have been collected and analyzed and the clinical data obtained from them forms the basis of this discussion.

As one reviews a group of these cases it is at once apparent that the utmost confusion exists in the nomenclature proposed by the various observers. Before the subject can be discussed intelligently some attempt must be made to use a fairly definite terminology. In the leucopenias that are of clinical importance the outstanding characteristic is a diminution of the granulocytic cells,—neutrophils, eosinophils and basophils. It would seem logical therefore to refer to them as granulopenic leucopenias or granulopenias, and for practical purposes to group them as follows:

I. Primary granulopenia
   - A. Acute granulopenia (Agranulocytosis, agranulocytic angina, malignant neutropenia)
   - B. Chronic granulopenia
   - C. Recurrent granulopenia (Cyclic agranulocytosis)

II. Secondary granulopenia
   - A. Sepsis
   - B. Anemia

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C. Systemic infection
   1. Typhoid and paratyphoid
   2. Malaria
   3. Influenza
   4. Mumps
   5. Tuberculosis
   6. Dengue fever
   7. Kala-azar
D. Allergy (?)
E. Focal infection (?)

Such a classification is founded on much the same basis as the classification of the anemias that has served so satisfactorily during the evolution of our knowledge of their origin and nature. It is similar to the one proposed recently by Piersol and Steinfield. Under the primary granulopenias are grouped those cases in which the deficiency of granulocytes in the bone marrow and the circulating blood is obviously the fundamental pathological lesion and the other manifestations are the result of that deficiency. Under the secondary granulopenias are grouped those cases in which the decrease of granulocytes is the result of some other pre-existing state. Those of the latter group are all well known except the last two which are still open to question. With the exception of those occurring in sepsis and anemia they are all relatively benign. The primary group, on the other hand, represent the little known but very malignant cases which have aroused so much recent interest. The division of those cases into acute, chronic and recurrent groups is based on clinical manifestations only. It is with these primary granulopenias that this study has been principally concerned.

INCIDENCE

A few interesting facts are found in a study of the incidence of the primary cases. The first report of a group of such cases was that of Schultz in 1922. A few cases followed in the succeeding five years so that in 1927 Kastlin was able to collect 43 cases. Today there are several hundred in the literature. Such an astonishing increase would seem too great to be the result only of greater interest and diagnostic acuity and suggests a real an absolute increase. The great majority of the cases have been reported from Germany, Austria, France, Canada and the United States. Only three cases appear in the British literature. In 87% of the so-called acute primary cases reviewed the granulopenia has appeared suddenly in the course of other illnesses, often of chronic type and often while the patient was under medical supervision. Thirty per cent of those in which the vocation could be determined have occurred in physicians, nurses or physicians' wives. Females were involved more frequently than males in the proportion of about 3.5 to 1. The majority of the cases occurred in the fourth, fifth and sixth decades. There was no apparent seasonal variation. No instance was found in which there was a suggestion of contagion.

The pathogenesis of the primary granulopenias has been the subject of a great deal of study and speculation. It has been established that arsenic, benzol, x-rays and radium may have a selective toxic action on the granulopoietic centers and are capable of producing a typical primary granulopenia. That other substances may have a similar effect is probable but has not yet been proven. But these toxic effects explain only a small number of the cases. Many unsuccessful attempts have been made to incriminate various micro-organisms. The view that the suppression of the granulocytes precedes the bacterial invasion and the necrotic lesions has been almost universally accepted now, as has also the view that the suppression is due to a defect in granulopoiesis rather than to an excessive destruction of the white cells, except perhaps in the cases of severe sepsis. It seems probable that a constitutionally deficient bone marrow, or at least one previously damaged by disease, is an important contributing factor. But whether the fundamental defect is in the marrow response to the usual stimuli or whether it is in the mechanism for the stimulation of granulopoiesis will only be determined by subsequent observation.

The pathological changes in the uncomplicated cases are astonishingly few. In the majority of autopsied cases the bone marrow shows on microscopic section marked diminution or complete absence of granulopoietic foci with few or no granulocytes, myelocytes or myeloblasts. There are few or no granu-

locytes in the spleen and except in the cases secondary to sepsis there is not a septic splenitis. The necrotic lesions of the mucous membranes and skin show a remarkable absence of the usual inflammatory reaction.

The clinical manifestations of the acute form of primary granulopenia, which constituted 72% of the reviewed primary cases, are fairly constant. The onset is abrupt with general malaise, severe muscle and bone ache, fever varying from 101 to 105, often chills, and usually a distressingly sore throat. Examination reveals little except a toxic individual with marked reddening of the throat and perhaps a few small white patches on the tonsils or gums or pain about the anal opening. The toxicity increases rapidly, the throat becomes redder, the patches become large, grayer and show no normal red areola about them. The patient becomes drowsy, the fever increases, a patchy pneumonia may appear and in the fatal cases death occurs in from three to seven days. There are no hemorrhages in the typical cases. The spleen may be palpable and there may be moderate adenopathy. The peripheral blood picture shows a normal red cell count and hemoglobin content, a normal platelet count, normal lymphocytes, though they may be reduced in absolute numbers, and a characteristic marked leucopenia, always below 3000 per cmm. and often as low as 500 or less with few or no mature granulocytes.

The so-called chronic primary granulopenias include all cases that constantly have less than 3000 granulocytes per cmm. of circulating blood. Clinically they show an abnormally easy fatigability, marked weakness and loss of inertia. They get on fairly satisfactorily however, until an unusual demand is made on their bone marrow. If such a demand is sufficiently great to exhaust their very low bone marrow reserve, the symptoms of the acute type appear and the illness follows the course of those cases, often to a rapidly fatal termination.

Only a few cases exhibiting the typical recurrent granulopenia with intervening normal granulocyte content have beeen observed but they are extremely interesting. At regular intervals and without apparent cause the granulocytes diminish or disappear from the peripheral blood stream, symptoms of acute granulopenia appear, but spontaneous recovery seems always to occur after five or six days.

The diagnosis of all of these cases of primary granulopenia is, of course, made on the basis of the peripheral blood count. Occasionally an acute leukemia with a low peripheral count or an aplastic anemia may cause confusion. If the differential diagnosis cannot be established by observation of the blood a bone marrow puncture is justifiable and should be done.

OBJECTS OF TREATMENT

Treatment of all of the granulopenias, secondary as well as primary, if the clinical manifestations warrant, has two principal objects: to stimulate granulopoiesis in the bone marrow and to control infection. For the stimulation of granulopoiesis we have available at least three methods, the relative merits of which are now being determined. The oldest is the transfusion of small amounts of whole blood—not over 300 cc. Even though the mortality in the cases in which this method has been used alone is 64% and though there is much antagonism to its use, there is considerable evidence to indicate that a few transfusions in the fulminating cases may have some value. The second method is irradiation of the long bones. Taussig has collected a group of 64 cases treated by this method alone with a mortality of 53%. It is probable that the granulopoiesis which occurs is the result of stimulation by nucleic acid liberated in the destruction by the irradiation of some of the cells still present in the marrow. If such is the mechanism of its action it is apparent that it has its greatest value in the cases in which there still are granulocytes present. Irradiation must be done by a skilled roentgenologist who can very accurately measure and control the dose which he uses. The most recent method and probably the most correct, physiologically, is the use of adequate amounts of the pentose nucleotide as developed by Jackson. Nucleotide in its strictest sense means the combination of nucleic acid with a base. The sodium salt of

nucleic acid was used as a therapeutic agent to stimulate leucopoiesis 30 years ago and enjoyed considerable favor for a time but was soon forgotten. But when Jackson demonstrated in 1924 the presence of considerable amounts of a nucleic acid derivative in the form of pentose nucleotide in the normal blood stream, principally in the nuclei of the white blood cells, the probability that it was an important part of the physiological stimulus for the formation of granular cells was apparent and interest in it was renewed. He described this substance as being " a complex molecule made up of two pyrmidine and two purine nucleotides linked together. These nucleotides are in turn made up of a purine and pyrmidine base together with pentose and phosphoric acid. These compounds may be broken down further to nucleotides with a loss of phosphoric acid and still further to the purine or pyrmidine bases with loss of pentose." Doan in 1926 demonstrated experimentally the ability of nucleinates to induce leucocytosis and Reznikoff in 1929 used the purine bases, adenine and guanine, clinically in leucopenia states and obtained some response. Jackson then developed a pentose nucleotide from yeast and used it in granulopenias with brilliant results. His most recent report shows a mortality of 26%. The substance is now readily available in suitable form for clinical use. It is administered intramuscularly in doses of 0.7 gram one to four times daily as indicated by the severity of the illness. In the desperate cases it may even be diluted with normal saline and given intravenously. The usual method of administration is 0.7 gm. twice daily until the granulocytes have returned to a normal level and then once daily for 6 to 8 days. The typical response is a coincidental fall of temperature and increase of granulocytes on the fourth or fifth day with subsequent recovery. Relapses have occurred in some of the recovered cases but, according to Jackson, response will again follow renewal of treatment. That stimulation of granulopoiesis does occur we have been able to corroborate in our own cases. As with most therapeutic methods the earlier treatment is instituted the better is the chance of successful result. One or two other methods of stimulation of granulopoiesis have been used but clinical reports are not yet available.

CONTROLLING INFECTION

Attention must also be given to the matter of controlling infection. It is possible that whole blood transfusions may be of some value in preventing the entrance of infecting organisms into the blood stream. It is important to keep the oral and nasal membranes as free of organisms as possible, particularly in the chronic and recurrent cases. Every effort must be made to protect the patient from exposure to infections, particularly of the upper respiratory type. The food and fluid intake during the acute states should be maintained at as high a level as the clinical condition will permit.

In the care of the recovered cases and the chronic and recurrent cases any unusual strain on the bone marrow must be avoided carefully, as well as infections or other conditions which normally cause decrease of the peripheral blood cells. The removal of foci of infection must only be done with a great deal of care. Particularly must the extraction of infected teeth be approached with the utmost caution. The normal white blood cell level of every patient under observation should be determined. Every throat infection which seems unusual in its manifestations and every rectal lesion which has an unusual appearance should indicate a white cell count without delay, for it is only by early recognition and prompt treatment that we can hope to deal successfully with this peculiarly malignant clinical syndrome when it does appear.

CHRONIC SINUS DISEASE

Ferris Smith, Grand Rapids, Mich. (Journal A. M. A., Feb. 11, 1933), states that the present, generally practiced management of chronic sinus disease is unsatisfactory to both the patient and the consultant. It is vitally important that the rhinologist follow a management which will afford proper relief in cases presenting general symptoms of chronic sepsis, in those with local signs and symptoms, and in the cases with secondary bronchitis and asthma. He uses the method described by Sewall of ligating the ethmoidal and sphenopalatine vessels to render the intranasal field practically bloodless. He has performed over 500 operations by this method with five deaths. Two of these fatalities were of elderly asthmatic patients who died of sudden cardiac failure, one eight hours following operation and one twenty-six hours later. One patient died of necrosis of the septum with marked sepsis. One succumbed to a necrosis of the cribriform plate with secondary meningitis about six weeks following operation. One died of streptococcic meningitis ten hours following operation. The author does not feel that the deaths of the latter and the two cardiac patients can properly be charged to the surgical procedure.

The Relative Position of the Radiologist in the Medical Profession*

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This presentation is one of aims, objects, and ideals. We find ourselves standing in that ill-defined borderland between the two periods into which a philosopher might divide the span of life: we look backward at that part when the individual is young and full of spirit, when endeavor is directed toward a rough-and-tumble scuffle with immediate problems without much consideration of the odds, and when a contemplation of the future is little more than a romantic anticipation; we look forward to that period beyond youth in which conduct is tempered by a philosophy unwittingly acquired, and the future is regarded by the light of ideals and a code of ethics evolved from experience as a protection against those destructive influences that result from a disregard of the principles which govern the welfare of the entire medical profession. This contemplation justifies a restatement of the proposition that the welfare of radiology as a specialty depends upon a great contribution of individual effort to raise the standards and to preserve the professional status already attained by the pioneers in this specialty. Specific reference might be made to a few whose professional prestige and economic stability are assured and who possess the ultimate in things desirable. By reason of this personal security, these few might find it difficult to interest themselves in the welfare of the profession in behalf of those not so fortunately endowed. Nevertheless, the urge of the ideal should move each one to make his contribution to the general cause.

Another specialty was born to medicine in Wurzburg on November 8, 1895, when Wilhelm Conrad Roentgen, working with a Crookes tube covered with a shield of cardboard, observed a luminescent effect upon a piece of platinocyanide paper lying close by.

Since 1900 roentgen rays have proved their usefulness in the spheres of science with increasing radii. Technic is ever being modified, and new devices to improve the quality of roentgen work are constantly appearing. The power of these rays to penetrate tissue and to cast shadows of different density was recognized early as a great aid in determining the position of fractured bones. Gradually other applications of roentgen rays were discovered, until now roentgen diagnosis extends to practically all fields of medicine and surgery. After the biologic action of roentgen rays on tissue cells became apparent, their use for therapeutic purposes was developed, and this use is now scientifically established.

Even though each individual represents the practice of radiology in some peculiar way, this practice can be divided into three general types: (1) that of the man who has his private laboratory and owns his own equipment, with usually a part-time hospital association; (2) the practice of the man who is employed by a hospital which owns the equipment and sets the remuneration for the radiologist; and (3) the practice of the man who is associated with a group of specialists. According to the temperament of the radiologist there are advantages and disadvantages in each type of practice, but for the most part, the problems peculiar to any one of them affect radiology in general.

TYPES OF PRACTICE

The radiologist about to establish a practice is confronted by the problem of which of the three types referred to above would be the most satisfactory for him. The most universal problem affecting this specialty is the enormous capital required for the establishment of a substantial radiological service. This provokes deep reflection upon the much discussed subject, "the trends in radiology"; that is, whether or not radiology as a specialty has a long life expectancy. Concerning this expectancy it is pertinent to remark that the growth of radiology during thirty-seven years has brought up many problems as to just where radiology belongs. One of these problems is whether each physician should make the roentgen examination

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of his own case in his own specialty, or whether the work should be referred to one specially trained and experienced in all the branches of radiology. The increasing cost of equipment and the development of complicated technics has of late proved the need of trained radiologists to watch over this equipment and to conduct at least the most complicated roentgen examinations. Because of the dangers of roentgen therapy in unskilled hands, and the need of training and experience in this field, it has gladly been yielded by the medical profession to the radiologist.

Lately many physicians in general practice have installed x-ray equipment in their offices for the purpose—which may be justifiable—of making minor examinations for possible fractures of extremities. Yet frequently one sees such unfortunate results from these examinations, as an unrecognized dislocated semilunar bone, the unrecognized impaction of a vertebra, or a normal epiphyseal line interpreted as a fracture. Another purpose for such establishment—one for which there is no justification—is for collecting fees comparable to those of a well equipped laboratory in charge of a trained radiologist. The patient suffers from these examinations in two ways: first, he is charged a considerable fee for an inadequate examination; and secondly, the roentgen laboratory to which such work belongs is deprived of an income which would enable it to obtain more efficient equipment and personnel, thereby denying or retarding better service to both physicians and patients in the community. The large number who operate, or who have operated, a radiological service as a private enterprise feel that this is the most satisfactory method; yet the capital required and the possibility that the investment may be depreciated by the establishment of a competitive service of a sort under the control of the sources from which the referred work should come, causes one to pause for serious consideration lest he mortgage his future and the future of those dependent upon him — a mortgage which may never be raised during his lifetime.

To discourage this trend in the distribution of x-ray equipment, and perhaps for other reasons, some men, against their own best principles, have in their institutional associations become victims of circumstances which cause them to compete with themselves and with their contemporaries in the bargain counter variety of services rendered. For example, they place on display to their staffs all of their wares from which may be selected a combination of diagnostic procedures to be undertaken on a patient at a service charge materially below that at which one in private practice could make any single examination in the combination. It may be contended that this is a private matter between the institution and its staff. Perhaps it is; but the practice has in it the disagreeable effect of causing others unwillingly to devise means of meeting an unfair competition. Moreover, it is in no sense a contribution to radiology for a radiologist to lump together his wares as a means of selling his services.

Considering further the tendency of the general practitioner in medicine to establish his own x-ray service, we find that some radiologists, though they profess to limit their practice to their specialty, keep their hand in at general medicine or surgery. Specific reference might be made to those who do certain intravenous procedures in connection with their work, to others who reduce fractures under the fluoroscope for their consultants, and to many who contribute other equally important services. All of these measures are undertaken by the radiologist to broaden the scope of his usefulness to his consultants as he looks toward the preservation of his own specialty.

From the standpoint of private practice, the cost of high voltage therapy equipment is delaying the availability of this necessary type of treatment in many communities. A suggested solution of this problem is that two or more radiologists combine resources to obtain this equipment and that those affected pool their knowledge in supervising the deep roentgen therapy. Such a plan can be worked out to the benefit of the community and the medical profession.

If it is granted that the radiologist with a private laboratory is on a happy basis of equality with his consultants, a position which can be established by diligent service and maintained by able examples of his

handiwork, then a most vital consideration for him is that of income. In this day of universal complaint against the mounting costs of medical care, the specialist in laboratory medicine is at a disadvantage unless his patients are of that small group of people who do not have to count the costs. Thus the question of fees for radiologic service must be considered. What, in the final analysis, is the basis for these fees? In almost all communities there is a tradition that sets the fee for a piece of work done in general medicine, and if the doctor has sufficient local renown he acquires a fairly stable economic position, the level of which is determined by the number of patients from whom he collects his fee. The attitude of the general practitioner toward the fee charged for radiologic service varies with the man, but in comparing the fee with his own he often reacts unkindly. With the surgeon the situation is somewhat different; yet the radiologist usually does not dare to make a charge comparable to that of a surgeon for a type of work involving the same degree of skill, training. and experience.

BASIS OF FEES

Again the question arises, what is the basis for the fees in medicine? Is it the years of experience? Is it the period of training and the skill acquired? Or is it the the income to which an able medical man feels that he is entitled? If these questions should be answered in the affirmative, and if there is reasonable justification for continuing the career of the radiologist as a specialist, I am unable to recognize the justice of the great difference that exists between the income of the average radiologist and practically all specialists in other branches of medicine. A monograph on this subject is in preparation by the secretary of the State Medical Society of Wisconsin; but the detailed study was not available for this presentation. Already, however, it shows some surprising comparisons which should apply in the adjustment of the economic status of medical men in various specialties in the profession, if such an adjustment is ever undertaken. So much for the radiologist in private practice.

The man who desires to associate himself with a hospital and whose experience, backed by sound training, is sufficiently competent to enable him to head the roentgen service as a consultant, must find a tremendously strong institution, otherwise his income will be limited during his whole lifetime to a pittance upon which he cannot enjoy many of the things that he is equipped to enjoy, and to which he is entitled. This necessitates his establishing an auxiliary private office, a situation in which he is usually in competition with himself; and he is faced also by the consideration of the capital investment involved.

This question of an established radiological department with a specially trained chief as a consultant brings to mind a particularly disreputable condition in some communities where certain hospitals, in an effort to meet the requirements set by the American College of Surgeons, have resorted to the policy of having a professed radiologist stop for a few minutes each day to read x-ray films made without his supervision. This is obviously a mop with which to whitewash the department for the benefit of the inspector who occasionally visits these institutions. This may be one of those insurmountable difficulties met with the only means at hand, but it would seem to be an uncomfortable position for a reputable radiologist who spends a large part of his time in one of these "hit and run" practices for the purpose of camouflaging the inadequate roentgen service of a hospital. Such a practice deprives radiology of that dignity to which it is entitled and offers a source of competition that increases experiences already sufficiently arduous without those preventable inconveniences being introduced by the very individuals who should be concerned with their elimination.

The foregoing brings to mind the practice of a large institution in which the specialties use the x-ray diagnostic service as an adjunct, without recognizing the possibilities of the value, to the patient at least, of correlating their functions with the work of an able radiologist who might render a consulting service from a point of view certainly much broader in this particular field than can be attained by the specialists in other fields or by the men in general practice. It is, undoubtedly, a serious reflection on radiology

when one of the larger institutions in this country contends that the chief of each service should be the roentgen interpreter for his department. The roentgenologist in that institution has the apparent function of no more than a filing clerk. The other disagreeable aspect of this practice is that the fees for the x-ray service are not considered like those for a consultation, but the charge made, if any, is more or less on a material cost basis which those in private practice find it impossible to meet.

Finally comes the consideration of an association with a group of specialists. Fortunately, in such a connection, the rank of the radiologist, both professionally and economically, often approaches a satisfactory degree of equality with his associates; but the man engaged in any sort of laboratory work requires a never-say-die personality as a characteristic to maintain himself on the plane of a consultant and to have an income satisfactorily comparable to that of the men in surgery and in other branches of medicine. It seems to make little difference that the training, experience, and general competence of the radiologist may be as good as theirs; there is almost always a necessity for diligence on his part to maintain his rank among his associates.

Occasionally, whether in private practice, in a hospital, or in a clinic, the radiologist as a medical consultant is discussed. With most physicians this relation is well established. The frequent professional contacts with these men is one reason why the radiologist is happy in his chosen field. The most satisfactory relations are usually with those men in the general practice of medicine and surgery who have the broadest experiences and the largest clientele. They generally appear to recognize both the advantages and the limitations of an adequate roentgen service and are genuinely anxious to acquire the information available through a consultation with a competent roentgenologist. Unfortunately for radiology as a specialty, this happy relationship is not quite universal even with radiologists of wide reputation for their ability. There are a few physicians, some of acknowledged skill in their own specialty, who appear to regard the radiologist not as a medical consultant, but as a technician doing an ordered piece of work. As a rule such physicians tend to over-rate their own importance and undoubtedly they take this same superior attitude toward other physicians with whom they come in contact.

A most unsatisfactory relationship often arises between the radiologist and the doctor with the occasional case, or between him and the younger specialist in another field who may have had a smattering of x-ray training in a medical school or as an interne. This brings up the consideration of how much radiology the medical student should be taught, and what sort of x-ray service should be provided in a rotating interneship of the one year variety. Both of these subjects are relevant to those who are teaching radiology in medical schools without much regard for the best plan of teaching or for what is to be taught. There is the necessity of giving the internes some type of instruction. Who should do this training? Who should prescribe the scope of this training? Very soon the internes leave the hospital as full-fledged "x-ray conscious" medical practitioners who affect the position of this specialty in one way or another accordingly as they are trained.

CONCLUSION

From an examination of medical literature, one would draw the conclusion that a majority of the men who write and publish are "x-ray wise." Out of 100 contributions selected at random from current literature other than publications on radiology, 72 in a definite manner referred to the use of radiation in some aspect or other. Most of these references were emphasized by the reproduction of x-ray films. In but a few instances reference was made to the relation between the author of the article and a consulting radiologist. In a musing moment one might think what a convenient and unselfish handmaiden the medical author must find the specialty of radiology, particularly in those instances in which all this supporting roentgen material is not out and out corpus delicti of grand larceny.

These disturbances to the radiologist's

peace of mind will probably always be a part of his life. The rough spots should be overlooked as often as possible; yet occasionally one must assert himself, not so much to prove that he is a radiologist, as to prove that he is a man, not a mouse.

Jejunal Feeding in the Treatment of "Stubborn" Duodenal Ulcer; and Other Indications for Jejunostomy

By E. H. MENSING, M. D.
Milwaukee

There are clinical and laboratory observations that point toward inflammation caused by mechanical, chemical and bacterial agents as the underlying cause of ulcer. A few are:

1. Foci of infection: The work of Rosenow has been confirmed by others. All medical men today recommend the removal of foci of infection as part of the treatment for ulcer. We have all seen cases of ulcer which have become symptom-free following medical treatment and which have become activated on the removal of infected teeth.

2. The association of appendicitis with haematemesis: The cessation of haematemesis following removal of the infected appendix is a clinical fact. The acute duodenal ulcers causing the haematemesis undoubtedly are related in some way to the infection in the appendix.

3. Localized duodenitis: The finding of a localized duodenitis without ulcers in patients who have symptoms of chronic duodenal ulcer is an accepted fact.

4. Ulcers and dental sepsis: In Europe, Konjetzmy has studied many resected stomachs and has found definite inflammation in every specimen. Aschoff speaks of the "ulcer-bearing gastritis." It is commonly agreed that the ulcers in Europe are larger and that they are associated with more extensive gastritis and duodenitis than one finds in this country. Perhaps it is more than a coincidence that dental sepsis is so common in Europeans. However, this may possibly be related to the more coarse food that they eat. In spite of the increased dental care the American public is receiving, ulcer is on the increase, which, of course, may be ascribed to the "salad habit," better diagnosis, increased anxiety and nervous tension, etc.

5. Gastro-jejunal ulcer and infective foci: Hurst of London says that the most important exciting cause of gastro-jejunal ulcer is the presence of infective foci in the teeth, sinuses, appendix and gall bladder. But we all know of cases in which x-ray and clinical findings show no chronic foci of infection.

6. Laboratory experiments: Scientific workers have shown that the lowered resistance of an inflamed mucosa plus acid erosion and mechanical irritation results in ulcer. Professor Carlson told the writer that he is able to produce ulcer in rats by first producing a duodenitis or gastritis.

NEUROGENIC THEORY

Cushing has recently stimulated interest in this phase of the etiology. He believes that high-strung, vagotonic individuals are prone to hyperacidity and other digestive disturbances. According to him a release of the vagus from paralysis of the antagonistic sympathetic fibers leads to hypersecretion, hyperchlorhydria, hypermotility and hypertonicity.

PYLORIC FACTORS IN THE GENESIS OF ULCER

Some workers are advocating that pyloric dysfunction occurring in predisposed, neurotic individuals is the underlying cause of ulcer.

In this regard I should like to ask some questions.

Do we have real proof that pylorospasm antedates ulcer? We know that pylorospasm subsides quickly after the institution of almost any form of treatment that applies rest to an irritable ulcer area, even though the patient's neurotic constitution has not changed. How does one explain the periodicity of attacks in duodenal ulcer?

Furthermore, how do these advocates explain the recurrence of ulcer following pyloroplasties with excision of one-half of the sphincter and how do they explain gastro-

jejunal ulcers following gastro-enterostomy and resection? How do they explain the formation of ulcers of the cardia and body of the stomach?

Some believe that the duodenum and jejunum may undergo spasm on being irritated, and the petechial haemorrhages that occur may result in ulcers. However, even those who believe that spasm plays a role in the genesis of ulcer do not hold that it is the sole factor.

On the other hand, one sees cases of ulcer that have healed and remained healed where emotional strain and overwork continue to prevail.

CHRONICITY AND RECURRENCE

Experimental and clinical findings indicate that the chronicity of ulcer is dependent upon many factors:

1. Focus of infection has not been removed.
2. Ulcers, occurring as they do, in zones of greatest motor activity are less likely to heal satisfactorily. Morton has confirmed this observation experimentally.
3. The force of ejection of acid chyme or the motor drive of the stomach is apparently a factor, since the size and function of the gastric outlet plays a role either by influencing motor drive or rate of emptying of the stomach, which influences the acidity of the gastric chyme.
4. Irritation of the ulcer by coarse food.
5. Acid erosion or irritation is a most important factor.
6. Mucosal susceptibility is a factor. The jejunal mucosa is more susceptible to acid than the duodenal mucosa, and an inflamed duodenal mucosa would be more susceptible than a normal one.
7. An ulcer healed by an extensive scar without a normal mucous membrane covering, is more likely to break down and result in recurrence and chronicity than is an ulcer that is healed over by a mucous membrane approaching the normal glandular structure.
8. Emotions play an important part in influencing gastric activity. Elimination of emotional factors should favor healing. A continuance of emotional strain causes abnormal gastric activity.
9. Disturbances of function of the acid-neutralizing media such as mucin formation and the normal regurgitation of alkaline duodenal juice into the stomach.

To recapitulate, we have undiscovered foci of infection, acid erosion, intense motor activity, pyloric drive, coarse food, mucosal susceptibility, quality of healing, emotional stress and a disturbance of gastric acidity regulation, as factors which tend to cause an ulcer to become chronic, or if healed, to cause it to break down again.

Are we not correct in stating that a gastric or duodenal ulcer case in whom all the foci of infection have been removed and who is treated by eliminating acid and strain on the motor mechanism, is more likely to obtain healing with less scar and better mucous membrane covering and hence be less subject to recurrence? This concept forms the basis of our treatment of "stubborn" cases by means of continuous jejunal feedings.

Mann explains the intermittency of symptoms in duodenal ulcer as being due to the breaking down of the thin layer of mucous membrane-covering from trauma or digestive juices.

PRINCIPLES OF JEJUNAL FEEDING

Medical treatment with frequent feedings cannot put the affected part at rest even though it may tend to do so, nor can it suppress acid secretion. Furthermore, the removal of an infected appendix or gall bladder is not included in this form of treatment.

Surgical treatment, particularly in the cases occurring in the younger men, who have considerable duodenitis with pylorospasm and high acidity, is often unsatisfactory. It is these cases that so commonly develop recurrences as well as gastro-jejunal ulcers.

Jejunal feeding should put the duodenum at rest. We are able, by observing physiological principles, to eliminate acid, pyloric drive, hunger contractions and food irritation.

By simulating nature, wherein the chyme is injected from the duodenum into the jejunum in small spurts, we are able to overcome some of the difficulties of jejunal feeding. We have devised an electrically-

driven pump for the purpose of giving food continuously in small amounts. By using the bland, non-irritating, balanced Ivy mixture, consisting of water, cane sugar, peptone, cooked wheat-flour, milk, cream, egg yolk and vitamins, the patients should gain in weight.

By feeding continuously, one eliminates the hunger contractions. P. H. Hollinger and E. H. Kelley working in Ivy's laboratory with a gastric pouch, jejunal fistula dog, have shown that when hunger contractions were produced in the dog, the stomach relaxed almost immediately upon the institution of jejunal feedings. During the feeding the cephalic or psychic phase of gastric secretion could not be elicited by tempting the dog with a juicy hamburger. Over a period of nine hours only 21 c.c. of juice were secreted. This represents the basal secretion due to a hormone. This secretion can be checked by administering atropine. Our patients receive small doses of atropine every 4 hours.

The gastric phase of gastric secretion is eliminated by withholding everything by mouth.

The intestinal phase of gastric secretion may be eliminated by continuous feeding. Ivy has shown in his gastric-pouch dogs that there is no secretion of acid from the pouch for a considerable period following the jejunal feeding. The latent period is longer for undigested food than for partially digested food. Hence, by feeding into the jejunum at least nine inches from the duodenal juncture and by feeding continuously the undigested food contained in the Ivy mixture, we are eliminating this important phase of gastric secretion.

In order to avoid psychic secretion and contractions we place the patient in a private room away from the sight and smell of food, and during the first week we recommend frequent use of barbital derivatives in the feedings.

OTHER INDICATIONS FOR JEJUNOSTOMY

1. Duodenal ulcer with massive haemorrhage. It is doubtful whether the usual treatment for bleeding ulcer, namely restriction of all foods, puts the motor mechanism at rest. The hunger contractions that result, as well as the accumulated blood in stomach and duodenum must result in considerable activity. The rest afforded by a jejunostomy is important. In three cases of massive haemorrhage we ligated the involved vessels. In two we ligated the gastroduodenal artery and in the other the pancreatico-duodenalis superior. All recovered.

2. Inoperable ulcers of the stomach, particularly in the cardia and posterior wall.

3. Acute perforation. Perforation like haemorrhage means activity.

4. Chronic perforating ulcers of stomach and duodenum. Because Mann and others have demonstrated that healing is poorest in the chronic perforating type of ulcer, due to endarteritis and thrombus-formation in the base, we perforate the craters of these ulcers with a cautery, then purse-string the perforation and follow with a jejunostomy.

5. Gastro-jejunal ulcer.

6. Inoperable carcinoma of the stomach. Pain, distress and vomiting are considerably alleviated. One patient gained 30 pounds in weight and was comfortable for nine months.

7. Gastric and duodenal ulcers in obese individuals.

8. As a prophylactic measure following difficult operations upon the stomach and duodenum.

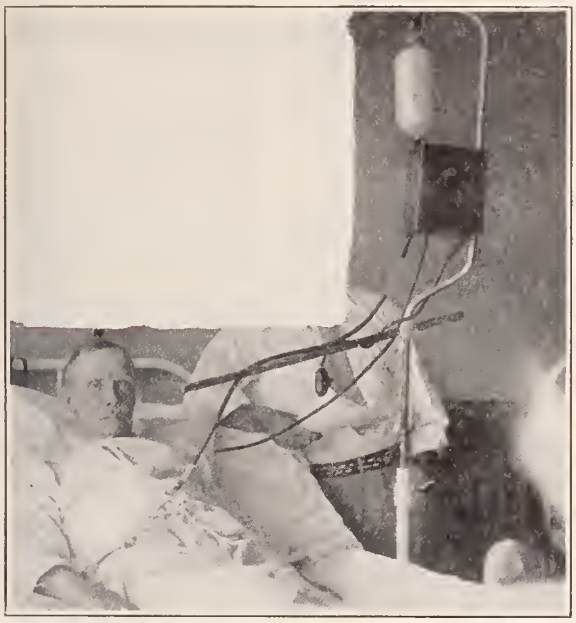
9. To save bile when long-continued bile drainage is desired, in order to create a fistula which is later to be transplanted into the duodenum. By connecting the jejunostomy with the biliary fistula one is able to utilize the bile for that individual.

10. Intractable vomiting.

11. Intestinal obstruction. A high jejunostomy with the tube introduced caudal for a considerable distance, is often indicated to decompress the distended intestine above an obstruction. The suction feature of the feeding pump can be used to withdraw the contents and the ejector feature can be used to reintroduce the contents from above the obstruction into the collapsed bowel below.

RESULTS IN DUODENAL ULCER

We have performed this operation in 54 cases of duodenal ulcer. Eighteen were of the bleeding type, 6 were acute perforations



and 9 were of the chronic perforating type. In 43 cases we removed the appendix and in 13 cases we removed the gall bladder. All of the cases had had at least three previous courses of good medical management before jejunostomy was even considered.

Our immediate results were entirely satisfactory. Symptoms subsided and bleeding ceased in a few days. Acid determinations taken after jejunal feedings had been discontinued showed a definite lowering in all of the cases. There were no deaths.

One patient was operated in February for a large, chronic perforating duodenal ulcer, and in September was re-operated for a postoperative hernia at which time the ulcer was found to be completely healed.

The time that has elapsed in most of these cases is less than a year, only 20 cases having gone over a year since treatment was instituted. To date none have had return of symptoms with the exception of two recurrent cases, who had undergone previous pyloroplasties. In both of these cases the symptoms are due to extensive adhesions around the pylorus. (Since writing this paper, four patients have returned with a recurrence of symptoms. Two had so much distress that gastric resections were performed and we found no evidence of ulcer activity in either one. Both patients had had several previous operations, and we concluded that the symptoms were due to the crippled condition of their stomachs. We have had one slight recurrent haematemesis case without any other symptoms, and one massive haemorrhage case where a posterior wall duodenal ulcer recurred eight months after the jejunostomy.)

CONCLUSIONS

Assuming that we have healed the ulcer by this means, the question immediately arises: What have we done to prevent another ulcer from forming?

If we accept the opinion of most surgeons, we have not corrected the underlying condition. To overcome that, they say, we must permanently pervert the physiology of the stomach.

On the contrary, is it not true that ulcers show a natural tendency to heal and does not the autopsy room frequently show this? Medical men often see cases, particularly the early ones, that have healed and the patients have remained well.

Cannot the tendency for ulcers to recur be explained on the basis of quality of healing, without accepting the unqualified dicta "once an ulcer, always an ulcer", "ulcer diathesis" etc.?

We believe that our results justify further treatment by this method. We cannot evaluate final results until a number of years have elapsed.

I wish to thank Professor A. C. Ivy of the Northwestern University Medical School for his kindly cooperation and invaluable advice.

MATERNITY WARD OF GENERAL HOSPITAL

According to Joseph B. DeLee, Chicago, and Heinz Siedentopf, Leipzig, Germany (Journal A. M. A., Jan. 7, 1933), hospitalization of maternity cases is increasing everywhere, but the puerperal mortality is not decreasing anywhere. Numerous authors call attention to the high institutional mortality compared with that of deliveries in the home. Meddlesome midwifery and puerperal infection seem to cause the greater part of the mortality, either singly or in combination. Dr. Siedentopf and Dr. DeLee have collected more or less documented reports of thirty-eight epidemics of puerperal infection, of which thirty-five were in the maternity wards of general hospitals. Numerous authorities agree with Dr. DeLee that women are safer from infection at home or in a specialized maternity building, and some go even further than he does in the strictness of isolation. On the basis of this study, Dr. DeLee concludes that meddlesome midwifery must be abated or made safe. Something is wrong with the maternity wards of general hospitals, and a great deal ought to be done about it. His recommendation is architectural and administrative isolation of the clean maternity, until more is known about the nature of puerperal infection.

Report of an Extreme Cleft of the Hard and Soft Palate Closed With the Use of Author's Tension Plates

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The purpose of reporting this case is to give proof of the advantage of using my tension plates to stabilize the mucoperiosteal tissues of the hard and soft palate in their new position when performing the Langenbach operation for the repair of a cleft of the palate.

Unless one is assured of a contact with the borders of the mucoperiosteal flaps on each side of the palatal cleft without tension, and a free and easy flow of the circulation, the result of the operation is very unfavorable.

The tissues in their new position, being deprived of their circulation from the strain of tension, soon undergo starvation necrosis, accompanied by a mixed infection. Sloughing of tissue follows especially at the junction of the hard and soft palate at the suture line. This area is the aponeurosis of the musculature of the velum which in itself has little defense against bacterial invasion because of its limited blood supply. Consequently, any surgical interference for the repair of a cleft palate in this area necessitates extreme care and consideration in order not to abuse and traumatize the tissue of the aponeurosis. Suturing of the contact border, and more so the attempt to place tension suture, adds a heavy burden on this limited blood supply area. *If the circulation in this area is shut off*, sloughing is inevitable, and the gray, dead, stinking mass of necrotic tissue is manifested in a few days following the operation. Within a week this slough gives way, and a gap with ulcerated and thickened indurated borders is very noticeable. Healing then follows with excessive cicatrical borders of the cleft remaining.

Unfortunately, when such a condition happens following an operation for the repair of a cleft of the hard and soft palate, the end result in a succeeding operation, even though the cleft is closed, is anything but satisfactory from a functional viewpoint. The velum will always be a firm, stiff and inelastic drum-like curtain stretching across the postpharyngeal vault that is limited in function though far better than no velum or a palatal cleft.

Naturally to the oral surgeon the repair of a palatal cleft is one of the most trying operations. At its best, it is difficult to perform—the small orifice—the extensive hemorrhage—the anesthetic delivered at the field of operation, and the interference of the assistant, though skilled in the work as an able and conscientious operator, makes the operation a rather difficult one to perform. Yet, when the operation is done according to sound principle, the result is one of gratification, not alone to the surgeon, but the patient is filled with the spirit of joy and happiness, and the strain of anticipation in the fear of failure passes into peaceful tranquility.

Since the introduction of my tension plates twenty years ago, I have had the opportunity to appreciate the advantages of these plates when properly used. Unfortunately, too many of my confreres have attempted to use these plates without an understanding of the surgical technic I have described in various articles for the repair of palatal clefts, and in my book on "Hare Lip and Cleft Palate." When the cleft is extensive and very wide, my tension plates are exceedingly advantageous to a successful operation.

The following case is one that demonstrates and clearly outlines a successful operation in closing a cleft of the hard and soft palate that was considered inoperable by a number of surgeons because of the extensive width of the cleft.

Bennie B. Age 14 years. General condition favorable for an operation. His palate had an extensive wide cleft extending through all of the soft palate and two-thirds of the hard palate. See Fig. 1.

In order to describe the operation, I will

Fig. 1. Schematic drawing that illustrates the extent of the cleft involving a part of the hard and all of the soft palate.

quote from my book the various steps of the surgical technic:

1. Separating the oral mucoperiosteal tissues from the palatal bone.

2. Separating the middle and upper layers of the soft palate from the posterior edge of the hard palate.

3. Freshening and preparing the edges of the mucoperiosteal flaps and the lateral halves of the soft palate.

4. Placing wire ligature and author's tension plates.

5. Placing and tying the coaptation sutures.

SURGICAL TECHNIQUE

(1) *Separating the oral mucoperiosteal tissues from the palatal bone.* This procedure is accomplished by cutting the soft tissue at the borders of the cleft down to the bone with a sharp right-angle knife, and then separating the mucoperiosteal tissue from the bone with a periosteal elevator. The stripping of the soft tissue from the bone must be done with extreme care. The elevators must at all times rest firmly against the bone in order to avoid the danger of the elevator blade cutting through the soft tissues or thinning the flap by splitting it. The separation of the soft tissues should extend along the border of the cleft, gradually working the elevator laterally and anteriorly until sufficient flap is raised. The same procedure is applied to the other side. It is not always possible to avoid wounding the anterior palatine and especially the posterior palatine artery. Should one of these vessels be injured, it will cause severe and prolonged hemorrhage. It is, therefore, better to completely divide the vessel so that it will contract at the severed ends, thereby overcoming protracted bleeding.

When the soft tissues covering both sides of the palatal bone are separated sufficiently anteriorly, laterally, and up to the posterior border, the operator is then ready to execute the second step in the operation.

(2) *Separating the middle and upper layers of the soft palate from the posterior edge of the hard palate.*

At the posterior border of the horizontal plates of the palatal bone, the soft palate is attached with the following layers:

1. The oral layer, which unites with the soft tissues covering the hard palate.

2. The middle layer, which is a tendon called the aponeurosis.

3. The upper layer, which unites with the soft tissues covering the nasal surface of the hard palate.

The middle and upper layers must be separated from their attachment at the posterior edge of the palatal bone. This will permit all of the palatal soft tissues to be separated from their bony attachment and to be brought down to obtain approximation of the borders of the cleft. This is an important step in the operation and must be executed with extreme care in order to avoid tearing the tissue at the junction. The author prefers to detach the middle and upper layers from their attachment with a pair of right-angle scissors. The separation can be extended laterally to permit a liberal approximation in the midline without tension.

(3) *Freshening and preparing the edges of the mucoperiosteal flaps and the lateral halves of the soft palate.*

When the borders of the cleft of the hard palate are cut at the beginning of the first step of the operation to permit stripping the mucoperiosteal tissue from the bone with periosteal elevators, there is no necessity for further paring as the edges are already denuded of epithelial covering. The edges of the lateral halves of the soft palate, are, however, covered with mucous membrane. The author here splits the borders on each side to a depth of approximately one-half inch. This is an important procedure as the upper and lower margins can be turned apart and a larger area of freshened tissue can be approximated to insure better and firmer union.

After the margins of the mucoperiosteal flaps and the lateral halves of the soft palate are prepared, the operator is ready for the next step of the operation.

(4) *Placing wire ligatures and the author's tension plates.*

In the early days of cleft palate surgery, a large percentage of failures were caused by the coaptation sutures cutting through the soft tissue. The lateral tension of the soft tissues caused them to pull away from the center. Various kinds of suture material have been employed including silk, horsehair, linen, catgut, wire, etc. The author believes that the difference in the value of the above named suture material is of little consequence providing that the operator does not depend upon the coaptation ligature to overcome lateral tension.

These plates are made from noncorrosive metal, gauge 22, in various sizes. See Fig. 2.

After the mucoperiosteal flap and the soft palate on each side of this cleft are prepared, the borders of the soft tissues are grasped with tissue forceps and the borders drawn together to determine whether there is sufficient freeing of the flap to obtain approximation without tension. If the tissues do not approximate easily without tension, it is necessary to execute further lateral dissection until this is accomplished.

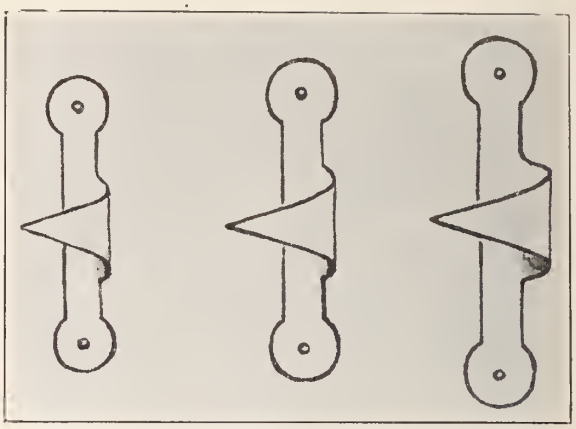


Fig. 2. Author's tension plates in three sizes.

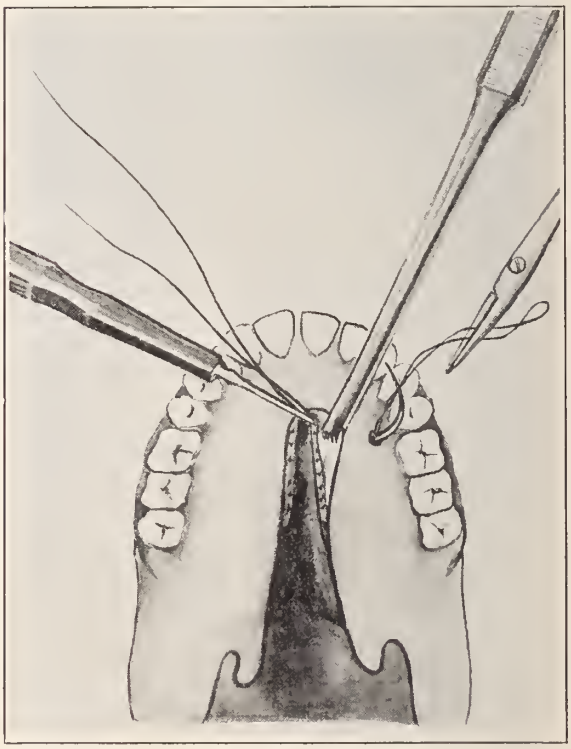


Fig. 3. Demonstrating the author's technic of placing pilot suture after the mucoperiosteal flaps have been separated from the bone.

The surgeon is now ready to place the wire ligatures and the tension plates. Fig. 3 illustrates the first step in passing the pilot linen suture through one side of the palatal flap. The mucoperiosteal flap is steadied with a tissue forceps. The pilot suture carrier threaded with a loop of linen thread is passed beneath and through the flap and the loop is then held with a small artery forceps. The suture carrier is withdrawn, pointed to the opposite side, and carried through the soft

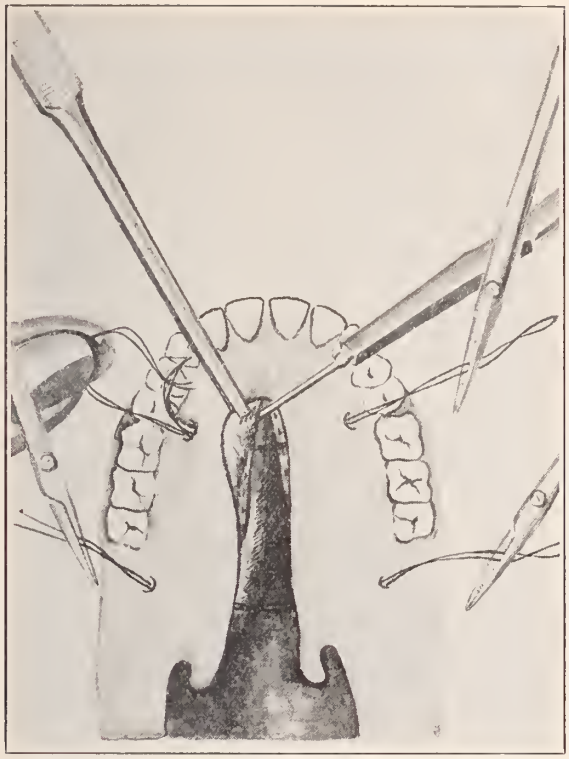


Fig. 4. Showing the anterior and posterior palate sutures in place.

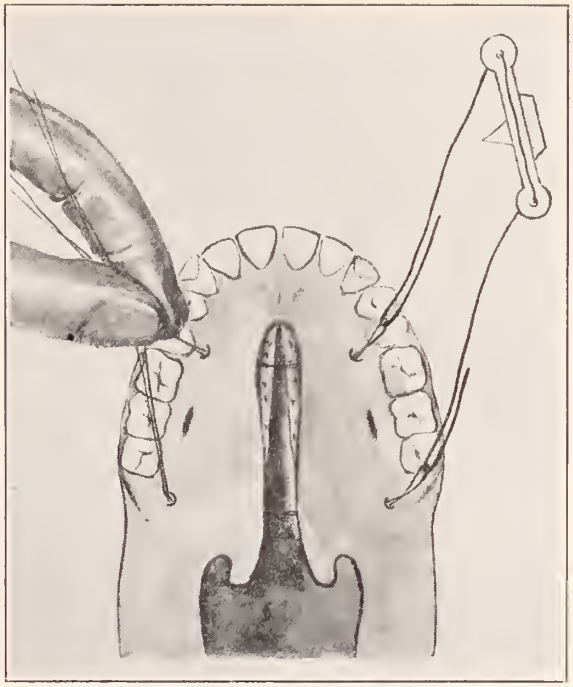


Fig. 5. Pilot sutures being pulled through the soft tissues so as to place the wire with the tension plate in position.

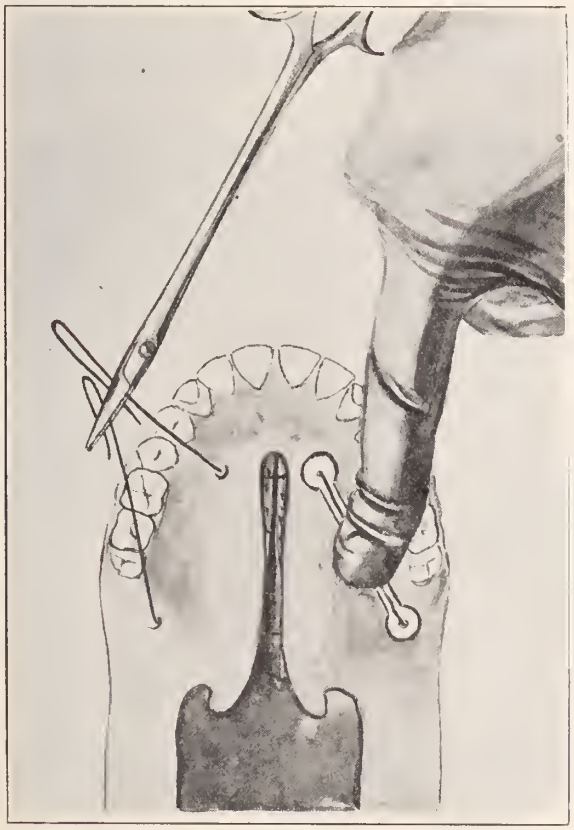


Fig. 6. The left tension plate is forced in position.

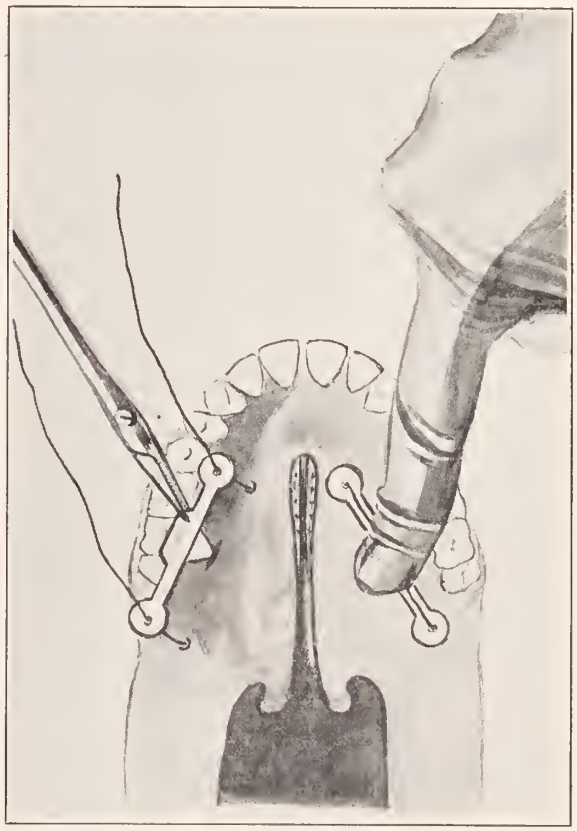


Fig. 7. Placing the right tension plate in position.

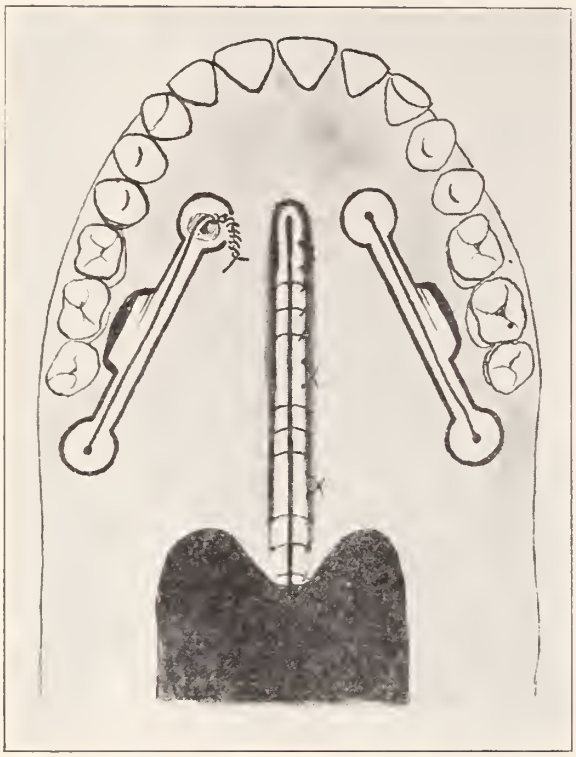


Fig. 8. Tension plates locked in position by twisting the wire, and the borders of the cleft sutured.

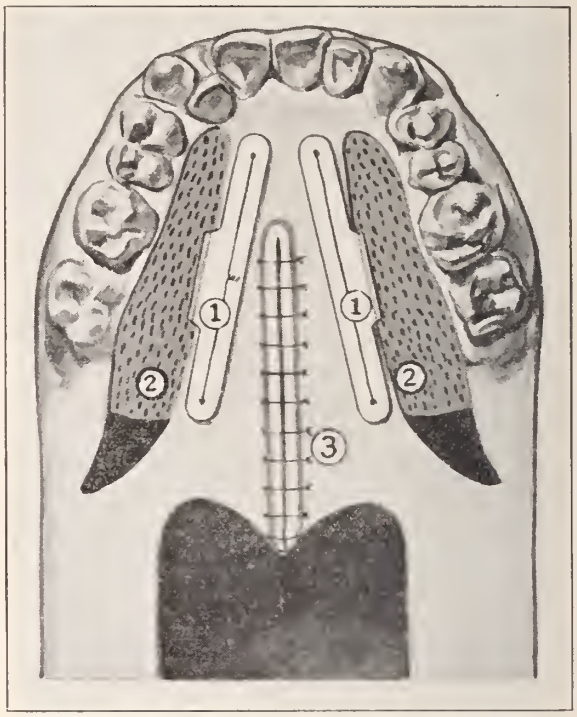


Fig. 9. Showing lateral incisions with tension plates in position, and the edges of the cleft sutured.
(1) Tension plate.
(2) Palatal bone.
(3) Mucoperiosteal flaps.
This picture illustrates what was done in order to close the cleft as is illustrated in Fig. 1.

tissue. Both ends of the linen thread are then drawn out of the eye of the suture carrier and held with an artery forceps. Fig. 4 illustrates the anterior and posterior loops in position.

One tension plate is fitted with wire ligature looped at each end to hook into the anterior and posterior linen loop, and the pilot sutures are then withdrawn in order to place the wire ligature and tension plate. The tension plate on the opposite side is then placed in position as illustrated in Fig. 5.

In order to fit these plates it is necessary to make a small incision near the gingival border of the last molar to permit the point of the flange of the plate to enter into the soft tissue and lie between the mucoperiosteal flap and the bone. The ends of the wire are then twisted together.

The fitting of these tension plates requires careful adjustment. They should be previously curved to conform to the contour of the soft tissues. Once they are seated in their position and locked, the borders will approximate. See Figs. 6, 7, and 8. The lateral incisions where the flange enters will now be

Fig. 10. A photograph of a plaster cast showing the cleft closed as is illustrated in Fig. 1.

opened from the tension that is applied. If there is need of overcoming further tension, the incision can be lengthened sufficiently to insure complete approximation of the borders. If, however, the borders do not come in contact because of the extreme width of the cleft, I then find it necessary to make an incision extending from the heel of the alveolar process backwards and forward. The length of the incision depends on the width of the cleft in order to slide the flaps easily together, to be held in place with the tension plates.

In the above case, the incisions were made as illustrated, and the mucoperiosteal flaps came together when the tension plates were locked in place. See Fig. 9.

There was no stress on the coaptation sutures in the midline. Healing was uneventful. Six days following the operation, the coaptation sutures were removed. Four days later the tension plates were removed.

The gaping wounds caused by the lateral incisions had by this time become filled with new tissue. Fourteen days following the operation, the patient was dismissed from the hospital.

The new palate was completely formed with a long velum. See Fig. 10. The patient's speech was remarkably improved, and I advised that he be put in the care of a teacher to train the child to pronounce all the sounds of the alphabet as accurately as possible.

Subacute Bacterial Endocarditis: Case Report

By CHARLES E. CONSTANTINE, M. D.
Racine

Endocardial vegetations are characteristic of subacute bacterial endocarditis. These vegetations vary considerably in size, but a careful review of the literature failed to reveal a case in which the vegetation reached the size of the one found in the author's case, and for this reason it was thought worth while reporting.

Miss L. N., a white girl of 16, entered St. Luke's Hospital on September 13, 1930. There was no family history of chorea, inflammatory rheumatism, or other diseases of interest. The patient had influenza when one year old. At 11 years of age she had an attack of inflammatory rheumatism which kept her in bed three months. Her tonsils and adenoids were removed shortly after recovery from this illness. At 14 she had an attack of chorea which was very severe and which lasted all of three months. The convalescence from the attack of chorea was very slow, and even after returning to school she complained of being weak and tired and of having frequent "fainting spells".

Her last illness started sometime in June, 1930. She began to complain of rather indefinite pains over the whole of her abdomen. She lost her appetite. At times there was nausea, vomiting, and diarrhea. No accurate record of her temperature was kept while at home, but, according to the information supplied by members of the family, her temperature was elevated most of the time and on several occasions it was found to be 103 F. The disease progressed slowly, the patient stayed in bed, there were no new symptoms, except that there was a gradual loss of weight and strength. During the last month of her illness she suffered a great deal from dyspnea and orthopnea. She also had several attacks, described by her parents as "choking spells", during which there would be more than the usual difficulty in breathing and which would require fanning and aromatic stimulants for relief.

Physical examination revealed a very anemic looking girl of 16. The orthopnea was pronounced. Examination of head and neck showed nothing of interest. The heart was enlarged—L. B. D. being 14 cm. to the left of the midsternal line. The sounds were of fair quality. There was an occasional irregularity in the rhythm due to premature contractions. A blowing systolic murmur was heard over the apex and was transmitted to the axilla. Pulse 120, respiration 30, blood pressure—systolic 96, diastolic 50. There were numerous small areas over both lungs where moist rales could be heard. The liver edge was palpable two fingers' breadth below the right costal margin. The spleen was tremendously enlarged, filling the entire left half of the abdomen. Reflexes were active and equal on both sides. There was moderate pitting oedema over the ankles and tibiae.

Laboratory examination: Blood Wassermann test was negative. A small trace of alubumin was found in the urine. The hemoglobin was 50%, red blood cells 2,630,000, leucocyte count 21,000 with 92% polymorphonuclears. No blood cultures were made.

During the stay at the hospital patient's temperature ran from 98 F to 101 F, and her pulse 80–124. She was restless and irrational at times. She took very little food. The dyspnea and orthopnea increased in severity in spite of the digitalis therapy which was instituted on admission. September 18, 1930, on her fifth day at the hospital, the patient had an attack of coughing and shortness of breath during which she expired.

Auricular vegetation, showing pedicle.

Auricular vegetation, showing pedicle.

COMMENT

Permission for an autopsy was obtained, and the findings of interest were as follows: a massive spleen studded with abscesses; numerous infarcts in the liver, kidneys, and both lungs. The heart was enormously distended. The valves were smooth, free from vegetations, and competent. The left auricle was found to be practically entirely filled by a solitary vegetation which was attached by means of a short pedicle to the interauricular septum. This vegetation was cauliflower-like in appearance, grayish yellow in color, and measured *6cm. x 4cm. x 3cm.* Sections of this vegetation showed a more or less homogeneous mass of hyalinization with areas of basic staining material. There were no tissue elements, only occasional clusters of invading inflammatory cells present. The surface showed a thick covering of long chain streptococci.

The only comment I would like to make about this case is that a vegetation of the size of the one just described carries a two-

X-ray film taken two days before patient died, showing enormous hypertrophy and dilatation of heart.

fold menace to its host. It not only can be the source of numerous emboli, which are very serious in themselves, but, in addition to that, because of its size and position can act as a very effective obstruction to proper circulation of the blood. There is no doubt in my mind that the element of obstruction played an important role in producing the symptoms in this case, and, in all probability, in accelerating the death of the patient.

Stillbirths in Wisconsin for 1930

By MR. L. W. HUTCHCROFT
Statistician, State Board of Health
Madison

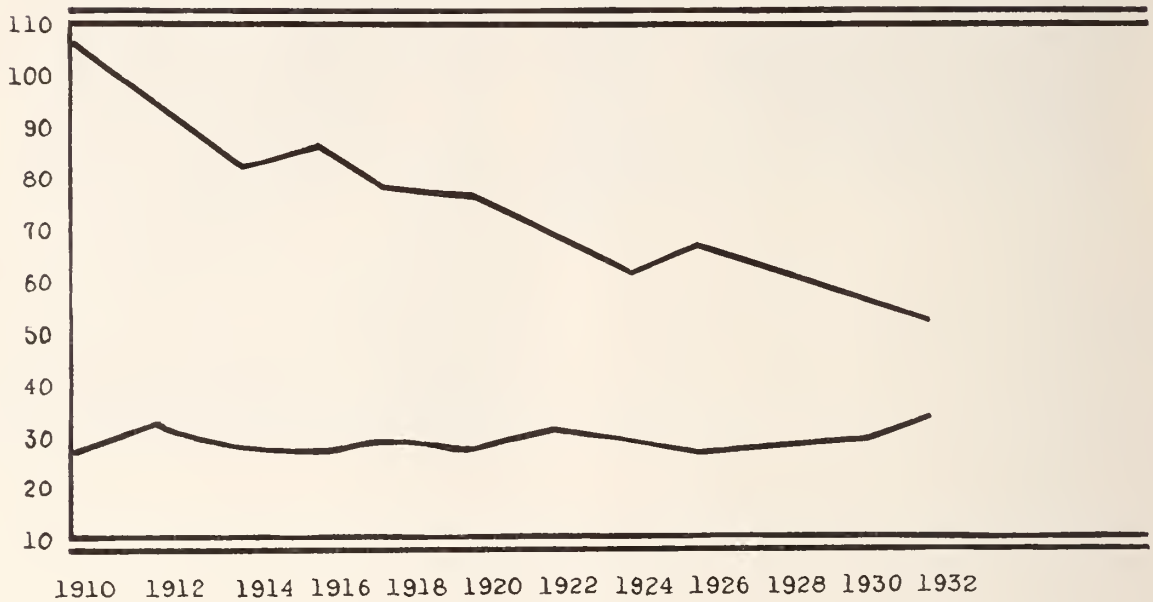
The extent to which children are born dead and an understanding of the causes of stillbirths is a very live subject, especially at the present time with a rapidly declining birth rate. It is recognized by everyone who has made a study of the subject that stillbirths represent a tremendous loss each year in potentially valuable human life. In a few states intensive statistical studies have been made to determine, when possible, the chief causes of stillbirths and to point out how some of them at least can be prevented.

Assuming that all stillbirths after the fifth month of gestation are reported, the ratio for 1930 was one stillbirth for each 33 live births, or a stillbirth rate of slightly more than 3 per cent, for each 100 live births reported. If we had the same rate in Wisconsin as for the birth registration area, our quota of stillbirths each year would be approximately 2,500 instead of 1,600 to 1,700. It is generally recognized that there is a close relationship between stillbirths and deaths during the first week after delivery, so we may expect that the very high infant death rate during the first few days after birth will be reduced if ways can be found to reduce the stillbirth rate. A large per cent of the children who died during the first week and even during the first month of life die from causes directly traceable to conditions prior to or at the time of birth.

The role which syphilis plays in causing stillbirths has often been underestimated in our opinion. The New York State Department of Health says that it would be conservative to estimate 20 per cent of their stillbirths as being due to syphilis. In a study of 705 fetal deaths made by Williams for stillbirths in the United States where autopsies were performed and a microscopic examination made of each placenta, he found that 26.4 per cent of the stillbirths were caused by syphilis and 16 per cent had white parents. Using these reports as a measuring stick, we must conclude that nearly 400 infants are born dead in Wisconsin each year because of syphilitic infection of the mother or foetus. Most of this loss of valuable human life could be prevented by anti-syphilitic treatment of the mother during pregnancy. Syphilitic women who are pregnant should receive treatment no matter how late during the pregnancy the disease is discovered. Even one or two treatments with an approved product before the birth of the child increases materially the chances for a healthy baby. When arsphenamine has been given the mother during pregnancy, and treatment of the child is begun immediately after birth, congenital syphilis may be avoided. The number of women who have given birth to two, three, four, five and even six stillborn children as shown from the tabulation of these births by counties and also the classification by cause presents a fertile field for determining in every case of multiple stillbirths if the mother is syphilitic or not.

From a study made by two physicians based on 240 stillbirth autopsies, they found that about one-sixth or 16 per cent were cases where birth injury played a large part in causing the stillbirth. Based on these figures at least 280 of the stillbirths reported in Wisconsin during 1930 were caused by trauma, but the informants gave traumatism as the cause of the stillbirth in only four cases. If we add to this total all the cases of malpresentation and difficult labor, totalling 162, our record would still be far short of what careful students of the subject believe birth injury to be a direct cause of stillbirths.

Stillbirth and infant mortality rates in Wisconsin 1910 to 1931



This discrepancy can easily be accounted for when we consider that 27 per cent or over one-fourth of the stillbirths reported in 1930 gave no reason or even probable reason for the child being born dead. An attempt was made to reduce the number of unknown or not stated causes of stillbirths by checking the death certificate for each case but the results were not satisfactory for the reason that the physician in attendance usually merely entered "stillbirth" in the space for the cause of death without explanation. Whenever the cause of the stillbirth is known or strongly suspected, physicians are urged to enter the cause or the probable cause on both the birth and the death records.

Where maceration is given as the cause of the stillbirth, we have no evidence if the foetus was macerated at or during delivery or not. It is generally found that about sixty per cent of these cases are fresh macerations, but since maceration, unless explained, indicates that the death of the foetus occurred before labor, we believe the per cent of fresh macerations given above is too high.

Ehrenfest in his book "Birth Injuries of the Child" published by D. Appleton and Co., states that at least 40 per cent of all autopsies properly performed on stillborn infants and those dying within a few hours after birth, intracranial traumatic lesions of some sort are discovered. He considers that many of the infant deaths ascribed to asphyxia are due to serious trauma, since the appearance of the child in these cases closely resembles that of deep asphyxiation.

Regardless of the prenatal care given, it must be admitted that quite a large per cent of stillbirths such as those due to improper implantation and development of the fetus, accidents in utero, malposition of fetus and cord, certain accidents in pregnancy and labor, and deformities are not preventable with our present knowledge. Communicable diseases of the mother or of the fetus, or both; various toxemias of the mother, injuries and many of the accidents in pregnancy and labor are preventable and if all of the stillbirths due to these preventable causes could be eliminated, our stillbirth rate could easily be reduced one-half.

STUDY AS TO CAUSE

From a study of stillbirths by cause as given by the attending physicians at time of birth, our report for 1930 shows 4.7 per cent as due to toxemias of pregnancy, including albuminuria and nephritis; 10.8 per cent resulted from malformations; 7.4 per

cent from diseases of the placenta including placenta praevia; 17.5 per cent from abortions, miscarriage and other premature births; 8.2 per cent from prolapse and compression of cord; 6.1 per cent from malpresentations; and 5.5 per cent from difficult labor, including deformed pelvis. Since we follow the plan in Wisconsin of requiring that only premature births after the fifth month of gestation be reported, it follows quite naturally that many, if not most, abortions and miscarriages are not reported. We believe it is conservative to state that every fifth and sixth pregnancy ends in spontaneous abortion which does not take into account the very early cases or the abortions criminally produced. With over 54,000 live births reported each year in Wisconsin, we probably have more than 9,000 premature births, abortions and miscarriages exclusive of the criminal cases.

The chief causes of stillbirths where careful records have been kept seem to be complications of labor, syphilis, toxemias of pregnancy, diseases of the placenta and membranes, prematurity and malformations, stated in the order of their importance. The act of being born is the greatest hazard the infant has to face. The causes, of course, assigned by autopsy are quite different from those assigned by clinical diagnosis.

The age of the mother at the time of birth of the child appears to be an important factor in determining whether the child will be born alive or stillborn. The stillbirth rate is high for very young mothers and is lowest for mothers from 20 to 29 years of age. As the mothers grow older after age 30 the stillbirth rate increases till at ages 45 to 50 the rate per 100 births is from 3 to 4 times the rate from 20 to 29.

The stillbirth rate for all births during 1930 was 28 per one thousand live births reported while the rate for illegitimate births was nearly twice as high, 44.6 per one thousand. With 56,217 live white births reported in 1930, 287 Indian births and 139 negro births, we find that the stillbirth rate for the white population was 28 per one thousand live births, 59 for Indians and 28 for negroes.

708 of the stillbirths reported during 1930 or 42 per cent of the total, occurred at hospitals and 428, or 25 per cent were at home. In 32 per cent of the cases the attendant did not state if the baby was born at a hospital or not.

The stillbirth rate for the urban area which includes only births in cities with a population of 10,000 or more was 30.8 per one thousand births reported and for the balance of the state, called the rural area, the rate was 28.5. The comparatively high stillbirth rate for cities is probably due to the hospital facilities they provide to which pregnant women from rural areas are brought for delivery. It is quite possible, too, that stillbirths at hospitals are better reported than if the birth occurred in the home. We also must consider that cases where trouble is expected seek hospital attention.

SUMMARY

1. In Wisconsin and in the United States stillbirths cause a greater loss of life than neonatal deaths.

2. The stillbirth rate has shown no decline since 1910 while the infant mortality rate has been reduced over 50 per cent and the death rate during the first month of life has declined over 7 per cent.

3. Most prominent among the known causes of stillbirths are the complications of labor, syphilis and toxemias of pregnancy.

4. Stillbirths are relatively more numerous among males.

5. The stillbirth rate for illegitimate children is almost double the rate among legitimates.

6. For 1930 in Wisconsin the stillbirth rate for negro infants was no higher than for the white race, but the stillbirth rate for Indians was nearly twice as large.

7. The stillbirth rate for the urban population is about 10 per cent higher than for the rural area.

8. The risk of a stillbirth where there are twins or other plural births is much higher than among single births.

9. The stillbirth rate is lowest among mothers who are giving birth to a second child, and increases with each successive

(Continued on page 200)

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OFFICIAL PUBLICATION OF THE STATE MEDICAL SOCIETY OF WISCONSIN

EDITORIALS

WHY?

MANY members have asked, with reference to legislative hearings, why our Secretary appears alone to present the position of the Society. We make this of editorial comment for the reason that the answer is one in keeping with the high purpose of our State Society.

The Committee on Public Policy believes that the organized profession has a distinct responsibility in legislative matters. That responsibility is to the end that legislative committees shall be apprised of the probable effect and factual data surrounding such measures as involve the practice of medicine and the public health. It believes that the responsibility of the Society is discharged, however, when the Secretary makes an appearance giving all the known facts and citing the group opinion of the profession as a whole.

It seems to us that the position is well taken in that it places responsibility where it rightly lodges—with the legislators; it avoids confusing issues with personalities, and that it avoids in appearance, as in practice, that type of lobbying that is rightly distasteful to the legislature and public alike.

The medical profession asserts no vested rights paramount to the public interests; seeks no legislation by force of numbers; asks no favors and will confine its presentations to reason. With the aid of members explaining local situations and effects, we are confident that this policy is best designed to further the true and indivisible interest of profession and public in the steady advancement of the health of our citizens.

TRANSURETHRAL RESECTION OF THE PROSTATE

"Be not the first by whom the new is tried,
Nor yet the last to lay the old aside."
—POPE.

THE over enthusiasm that follows the introduction of a new procedure into any field of medicine, or other fields of endeavor, tends to swing the pendulum too far. As transurethral resection of the prostate with the modifications of recent years was such a radical departure from the generally accepted methods of operation in vogue and the results of resection in many instances so spectacular, it may readily be seen why the over swing of the pendulum was bound to follow.

The erroneous impression has been gained by the profession at large, and the public to some extent, that resection is a minor procedure; it must be noted, however, that some of its most ardent supporters have never wished to convey this impression.

Transurethral resection is a major surgical procedure, complications should be expected and do follow. The patients should be carefully and properly prepared just as for operative prostatectomy.

A review of some of the reported disasters show clearly that the method was at fault; on the other hand, one would be inclined to question the operator's selection of the method for that particular case in the first instance and his management of the case in the second.

A review of the extensive recent literature would indicate that transurethral resection, as an accepted procedure, is no longer a debatable point, that in a large percentage of cases of prostatic obstruction, probably the great majority, the method is adaptable and procedure of choice, the selection of cases being based upon the type of pathological obstruction present and the associated pathology, thus affording a sound basis for its application.

It is to be hoped that developments in the technic will broaden its range of application. In the light of our present knowledge, the author does not believe that transurethral resection will entirely supplant the operation of prostatectomy. G. H. E.

YOUR OBLIGATION

IN STARTING each new year, the first duty you owe to your profession is to pay promptly the annual dues of your County and State Society.

In these trying times of economic stress every physician has suffered his full share of the burden. These conditions have all the more hastened propaganda for the socialization of medicine and the subsidizing of medical practice. This fact indicates the greater need for professional unity of thought and action. Our ideals and principles must be maintained.

It is indeed unfortunate that our Society has no considerable endowment for the maintenance of our varied activities and interests —rather are we compelled to depend largely upon membership dues. Members must, therefore, remit early in the year to carry on our work efficiently. To the profession, County Society dues are second only in importance to the personal needs of food, clothing, etc.

The Medical Society tends to improve the competency of its constituents. By organization alone can we maintain our ideals and principles. The profession has proved its right to control its own affairs. Here again efficient organization is paramount.

The County Society is yours. Its activities, aims and interests are yours to make of them what you will. The Society, at all times, welcomes constructive thought and action and participation. Our attainments would be so much greater if each member took an active part in Society affairs, rather than to depend to so large an extent upon the few to carry the burden of routine activities.

—Bulletin of the Kings County Society, New York.

COMMERCIALIZED MEDICINE

SO-CALLED "state medicine" has been so pushed to the fore in all recent discussions involving the social significance of medicine, that we are inclined to the belief that our vision is becoming obscured to a possibly more immediate serious threat to the public welfare.

Wherever the commercialization of medicine has been in effect, the competition between services has always been on the offering of more service for less money. The public, unable to differentiate between grades of service, more frequently relies upon the advertising. It has been our observation that wherever we have found commercialized medicine, there too have we found the emphasis on cheapness and nothing said about adequacy on any scientific standards.

Periods of economic pressure on a whole people, serve to place great emphasis on costs. Such periods offer opportunities for many physicians to enter into various schemes of commercialized medicine. That some will yield because of the economic pressure is inevitable but we venture the prediction that the well trained physician who yields to this stress of the times will find himself in an unenviable position before the public in the years to come. The public does not relish being fooled and a day of reckoning is a certainty for those who lend themselves to schemes which would capitalize the public's demand for economy by furnishing a commercialized cheapened service when life itself is at stake.

THE PRESIDENT'S PAGE

Reginald H. Jackson

MEDICAL VISION

TO ALL men deeply concerned with their work in life there comes in time the appreciation that in their particular field vision, in order to intelligently foresee the future, should include a knowledge of the past and REALIZATION of the PRESENT. In the words of Havelock Ellis

> *"The present is in every age merely the shifting point at which past and future meet and we can have no quarrel with either."*

Traditionally our profession has been too content to glory in the laurels of the past and too prone to envision the future as solely a continuation of the same road of scientific achievement in the prevention and conquest of disease. In furtherance of this ideal physicians have grouped themselves together into societies, largely officered by those members who were conspicuous for their scientific attainments or success in practice.

Today we realize that evolutionary social economic forces were already in active motion unknown to or unenvisioned by many of our former leaders. Forces which unopposed were bound to be relentless in their destruction of many of the cherished ideals of the medical profession. Today the principal function of the officials of organized medicine is to be watchful of the introduction and prevent the passage of legislative measures which may be inimical to the public interest.

Tomorrow will see medical leadership advance to the position where it will not hesitate to introduce legislation which will further advance the joint interests of the public, and the profession that lives to serve them. It will no longer be incompatible with professional dignity for individual members, officials, or organized units of our profession to be conversant with and have a working knowledge of the methods of organized procedure in the making of contacts so essential in providing information and factual data looking towards the settlement of the increasingly complex scientific professional problems brought to the surface of an ever shifting social and economic fabric.

Tomorrow County Medical Societies should be at the center of all medicosocial endeavor if they are to discharge their public obligation. We are entering a phase of organized medicine wherein the future welfare of our people will demand an offensive as well as a defensive type of county society organization. It is at least as important to advance conditions favorable to promoting the group health as it is to attend the individual needs of our patients.

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Manitowoc	C. L. R. Mac Collum, Manitowoc	E. C. Cary, Reedsville.
Marathon	W. A. Green, Wausau	Verne E. Eastman, Wausau.
Marinette-Florence	T. J. Redelings, Marinette	C. H. Boren, Marinette.
Milwaukee	P. M. Currer, Milwaukee	Theo. Wiprud, Ex. Sec'y, Milw.
Monroe	A. E. Winter, Tomah	H. H. Williams, Sparta.
Oconto	J. S. Dougherty, Oconto	G. W. Krahn, Oconto Falls.
Oneida-Vilas	C. D. Packard, Rhinelander	I. E. Schiek, Rhinelander.
Outagamie	G. T. Hegner, Appleton	R. V. Landis, Appleton.
Pierce-St. Croix	Julius Blom, Woodville	A. E. McMahon, Glenwood City.
Polk	G. B. Noyes, Centuria	Geo. B. Larson, Frederic.
Portage	H. M. Coon, Stevens Point	E. E. Kidder, Stevens Point.
Price-Taylor	E. A. Riley, Park Falls	E. B. Elvis, Medford.
Racine	W. C. Roth, Racine	Susan Jones, Racine.
Richland	B. I. Pippin, Richland Center	G. Benson, Richland Center.
Rock	F. E. Brinckerhoff, Beloit	E. C. Hartman, Janesville.
Rusk	L. M. Lundmark, Ladysmith	M. L. Whalen, Bruce.
Sauk	Roger Cahoon, Baraboo	A. C. Edwards, Baraboo.
Shawano	C. E. Stubenvoll, Shawano	L. W. Peterson, Shawano.
Sheboygan	A. W. Sieker, Plymouth	A. C. Radloff, Plymouth.
Trempealeau-Jackson-Buffalo	R. R. Richards, Blair	R. L. MacCornack, Whitehall.
Vernon	C. E. Lauder, Viroqua	P. H. Hansberry, Hillsboro.
Walworth	S. G. Meany, East Troy	H. J. Kenney, Delavan.
Washington-Ozaukee	O. J. Hurth, Cedarburg	P. M. Kauth, West Bend
Waukesha	Margaret Caldwell, Waukesha	J. F. Wilkinson, Oconomowoc.
Waupaca	R. K. Irvine, Manawa	F. J. Pfeifer, New London.
Winnebago	D. G. Hugo, Oshkosh	M. C. Haines, Oshkosh.
Wood	F. X. Pomainville, Wisconsin Rapids	W. G. Sexton, Marshfield.

SOCIETY PROCEEDINGS

BROWN–KEWAUNEE

The Brown–Kewaunee County Medical Society met at the Beaumont Hotel, Green Bay, on February 21st for the regular monthly meeting. Following a business meeting, Dr. Stanley J. Seeger, Milwaukee, president-elect of the State Medical Society, gave an address on "Carcinoma" illustrated with lantern slides. A discussion followed the address.

Announcement of a new nursing service on an hour basis instead of a day basis was made by a group of registered nurses.

Dr. P. R. Minahan of Green Bay presented a paper on "Medical Economics".

FOND DU LAC

Dr. M. G. Peterman of Milwaukee was the speaker before a meeting of the Fond du Lac County Medical Society held in the Hotel Retlaw on February 8th. Dr. Peterman spoke on "Convulsions in Children."

FOREST

A special meeting of the Forest County Medical Society was held on January 25th. The following officers were elected for the year 1933.

President, Dr. E. G. Ovitz, Laona; Vice-president, Dr. G. W. Ison, Crandon; Secretary, Dr. Oscar S. Tenley, Wabeno; Treasurer, Dr. E. W. Huth, Crandon; Delegates to state meeting, Drs. E. G. Ovitz and C. O. Decker; Censors for one year, Dr. Huth; two years, Dr. Tenley; three years, Dr. Decker.

KENOSHA

The following statement was issued by the Kenosha County Medical Society on February 16th:

"All members of the Kenosha County Medical Society are anxious and willing to cooperate with the health department and school authorities in making it unnecessary to close certain schools because of smallpox. Pupils requiring vaccination, whether they are receiving help from the city or not, will be given treatment by their family physician in his office on Friday, Saturday or Sunday.

"The work of vaccinating students will be accomplished over the weekend to prevent loss of time in school work. Parents are urged to notify their family physician immediately of the number of children to be vaccinated so that a sufficiently large supply of vaccine points may be secured from the local drug stores. The druggists of the city are cooperating with the medical society and have secured a large supply of the points.

"In the case of indigent persons requiring immunization from smallpox, members of the medical society will furnish the service free of charge."

LA CROSSE

Dr. M. A. McGarty of La Crosse was elected president of the La Crosse County Medical Society at a meeting in January. Other officers are: Dr. Guy Wakefield, West Salem, vice-president; Dr. Alf Gundersen, La Crosse, secretary, and Dr. Robert E. Flynn, La Crosse, director.

Members of the Economics Committee include Dr. E. H. Townsend, Dr. George R. Reay, Dr. R. L. Eagan, Dr. Gunnar Gundersen, all of La Crosse, and Dr. L. E. Hanson, of Holmen.

A meeting of the La Crosse County Medical Society was held on February 21st. Dr. James Sargent of Milwaukee was the speaker of the evening. Aside from his topic on "Urology", a great deal of time was devoted to the discussion of "Medical Economics."

The following resolution was adopted by the members of the Society:

"Whereas, the Governor in his budget message to the legislature has recommended that the cost of care for hospitalizing indigent sick at the Wisconsin General Hospital be paid for by the County referring such indigent sick, and

"Whereas, the forces opposing this recommendation are leading legislators into believing that this recommendation is being sponsored by Dane County and Madison doctors who presumably have grievances against certain University and Wisconsin General Hospital doctors, and

"Whereas, the Governor's recommendation vitally affects the entire care of the indigent sick in counties such as La Crosse County remotely removed from Madison,

"Be it and it is hereby resolved, that the La Crosse County Medical Society unanimously endorse the Governor's recommendation in regard to the Wisconsin General Hospital and be it further resolved that our local Senator and Assemblymen be informed regarding this action on the part of this Society."

MANITOWOC

Dr. Rock Sleyster, Wauwatosa, was the guest speaker at the February meeting of the Manitowoc County Medical Society.

Drs. John M. Kelly, R. W. Hammond, and A. M. Farrell were selected as a committee of three to be known as the Manitowoc County Chest Clinic Committee and will have charge of all matters pertaining to future clinics to be held in the County.

Luncheon was served following the meeting to the large group in attendance. E. C. C.

MILWAUKEE

The following program was presented at the joint meeting of The Medical Society of Milwaukee County and the Pediatric Society, held on February 10th at the Milwaukee Athletic Club:

Ten-minute Case Reports: "Narcolepsy"—R. M. Greenthal, M. D.; "Convulsions Produced by Malaria"—M. G. Peterman, M. D.; "Icterus Neonatorum Gravis with Recovery"—Karl E. Kassowitz, M. D.; "Intracranial Injuries in the Newborn"—Clifford G. Grulee, M. D., Editor, The American Journal of the Diseases of Children."

Discussion of Dr. Grulee's paper was led by Dr. Carl Henry Davis, who was followed by Drs. G. H. Fellman, M. G. Peterman, H. J. Olson, and A. B. Schwartz.

Dr. Davis showed motion pictures of residual conditions following intracranial injuries.

Following the scientific program, the meeting adjourned to the Social Hour. There were 190 in attendance.

At the March 10th meeting of the Society, held at the Milwaukee County Hospital, Wauwatosa, Dr. Solomon Strouse, Associate Clinical Professor of Medicine at the Rush Medical College, was the guest speaker. Dr. Strouse's subject was "An Analytical Study of the Clinical Laboratory in Relation to the Clinic."

Dr. E. H. Mensing presented a paper on "Peritonitis—The Pathologic Physiology Involved in Its Treatment."

RACINE

The regular meeting of the Racine County Medical Society was held at the Racine Elks Club, February 16, at 8:15 P. M.

"The Treatment of Empyema in Children" was discussed by Dr. Joseph Brennemann, Professor of Pediatrics in the University of Chicago. The address was illustrated with lantern slides.

"The Diagnosis of Tuberculosis in Children by X-Ray," was addressed and illustrated with lantern slides by Drs. Eugene McEnery and J. Biegler.

ROCK

Dr. Henry W. Meyerding, Mayo Clinic, Rochester, addressed a meeting of the Rock County Medical Society at a meeting in Beloit on January 24th. His address "Diseases of the Spine" followed the dinner at the Hotel Hilton.

The Rock County Board of Supervisors has adopted the fee plan for the care of the indigent sick of Rock County, as recommended by the supervisor's committee and a committee of the Rock County Medical Society. The Committee's report was passed after it had been amended to the effect that "in operative and confinement cases and all overflow cases, the patient be allowed to select his own physician." Other cases must be handled by the county physician.

The plan specifies that bills tendered by physicians to the county shall be audited monthly by a committee of physicians and shall be presented to the county trustees for approval. The fee schedule as finally adopted includes the following: tonsil operations with local or general anaesthesia, outside hospital $15, inside, $12; major operations, including anaesthesia, $30; confinement cases, $12.50 outside hospital, $10 inside; x-ray fifty percent of the regular scheduled rate, using county equipment as much as possible; office consultation, authorized, 50 cents; city calls, $1; mileage on county calls, 25 cents one way, including day and night; major fractures, $25 to $35, excluding x-ray; minor fractures, $3 to $17.50, including treatment and care for four weeks. In all other cases 50 per cent of the minimum regular fee shall be used as a basis for settlement. Consultation in the home, if authorized, fee $1.50; minor injuries, 25 cents additional allowed for dressing upon notation by physician; medicine is given by the doctor in place of a prescription and where a notation to this effect has been made.

WINNEBAGO

The Winnebago County Medical Society held its January meeting at Sunnyview Sanitarium on January 20th, with a dinner at six o'clock.

Dr. S. A. Morton, Milwaukee, was the guest speaker, having as his subject "Fundamentals of Radiological Diagnosis of Chest Diseases.

Dr. J. W. Lockhart, Oshkosh, also addressed the Society.

Forty-five physicians attended the February meeting of the Society held on the 17th at Northern State Hospital. Dr. Peter Bell, superintendent, conducted a clinic. Four patients in the institution were presented as subjects and their case histories reviewed. Discussion was led by Dr. J. M. Conley of Oshkosh.

WOOD

At the February meeting of the Wood County Medical Society, which was held on February 21st, the following officers were elected:

President, Dr. F. X. Pomainville, Winconsin Rapids; Vice-president, Dr. K. H. Doege, Marshfield; Secretary and Treasurer, Dr. W. G. Sexton, Marshfield; Delegate Dr. F. X. Pomainville, and Dr. K. H. Doege, Alternate. W. G. S.

MILWAUKEE ACADEMY OF MEDICINE

The following program was presented at the meeting of the Milwaukee Academy of Medicine, which was held on February 21st:

"The Inheritance and Significance of Blood Groups," Arthur A. Schaefer, M. D.

"Transurethral Resection of Bladder-Neck Obstruction," Herman L. Kretschmer, M. D., F. A. C. S., clinical professor of genitourinary surgery, Rush Medical College, Chicago.

MILWAUKEE OTO-OPHTHALMIC

The following officers were elected at the meeting of the Milwaukee Oto-Ophthalmic Society on January 24th:

President, Dr. S. G. Higgins; Vice-President, Dr. T. A. Judge; Secretary-Treasurer, Dr. O. P. Schoofs.

On February 28th a joint meeting was held with the Milwaukee Neurological Society at the Wisconsin Club. Dinner was held at 6:30 P. M., followed by the scientific meeting.

Dr. Percival Bailey, Professor of Surgery of the Graduate School of Medicine of the Division of the Biological Sciences, University of Chicago, addressed the group on Acoustic Tumors.

MILWAUKEE ROENTGEN RAY

The Milwaukee Roentgen Ray Society met Friday night, February 17th at the Elks Club with a dinner at six-thirty and a scientific program at eight o'clock. A symposium on "Childhood Tuberculosis" was contributed to by the following:

"Clinical Aspects" by Dr. A. A. Pleyte.

"Roentgenologic Aspects" by Dr. H. B. Podlasky.

"Use and Limitation of the Paper Film" by Dr. Theodore Sokow, Kenosha.

"Recent American Literature" by Dr. A. M. Dorr.

"Recent Foreign Literature" by Dr. H. W. Hefke.

Dr. J. P. Koehler, Commissioner of Health of Milwaukee, and members of a committee appointed by him to investigate advisability of making an x-ray survey of the Milwaukee school children, were guests of honor.

Officers elected for the ensuing year are: Dr. F. W. Mackoy, President; Dr. S. A. Morton, Vice-President, and Dr. J. E. Habbe, Secretary-Treasurer.

THE WOMAN'S AUXILIARY

MRS. FRED A. NAUSE, JR., Sheboygan, *President*
MRS. EBEN J. CAREY, Milwaukee, *President-elect*
MRS. WALTER FORD, Sheboygan, *Secretary*
MISS RUTH BUELLESBACH, Madison, *Executive Secretary*
MRS. R. G. ARVESON, Frederic, *Treasurer*
MRS. JAMES C. SARGENT, Milwaukee, *Press and Publicity Chairman*
MRS. JAMES F. PERCY, Los Angeles, Calif., *National President*
MRS. ROCK SLEYSTER, Wauwatosa, *National Convention Chairman*

National Convention, Milwaukee, June 1933

Health Essay Contest

The Woman's Auxiliary to the State Medical Society is sponsoring a Health Essay contest for sophomores in high schools in the counties in which there are county auxiliaries. The object of the contest is to stimulate in our young people an interest in, and a knowledge of, authoritative health information.

The final rules for the contest follow:

1. Essays are to be based upon any articles or article appearing in February or March issues of Hygeia, which pertain to health, and the relationship of the medical profession to the individual, the family, and the community.
2. Only *sophomores* in high schools located in counties in which Auxiliaries are organized, are eligible to enter the contest.
3. Contest opens March 15th, 1933, and closes April 15th, 1933.
4. Essays are not to exceed 500 words—minimum 400 words.
5. Essays may be written in ink, or typewritten, on one side of the paper with liberal margins. Papers should bear the name, school, and home address of the writer in the upper right hand corner of each page.
6. Prizes:
   First Prize $10.00
   Second Prize $5.00
   Third Prize 2.50
7. The advisory Council of each Auxiliary is to judge the essays from their county, or counties, select the best three of those submitted and forward them to The State Medical Society, 119 E. Washington Avenue, Madison, Wisconsin, for final selection. Manner of grading essays is as follows:

   Grasp of subject matter 60%
   Method of presentation 30%
   Appearance 10%

In addition the best essay from the county, or counties, in which Auxiliaries are organized, other than counties represented by these three winners, will receive $2.50. The first three prize winners, have the privilege of coming to Milwaukee and broadcasting their prize winning essays over the Milwaukee Journal Station, WTMJ.

Final Judges: Dr. Reginald Jackson, President, State Medical Society; Dr. C. A. Harper, Secretary, State Board of Health; Mr. George Crownhart, Secretary, State Medical Society.

CONVENTION NEWS

Plans for the Auxiliary activities during the A. M. A. Convention at Milwaukee in June are well under way. Mrs. Rock Sleyster, Convention Chair-

man, has had several meetings with her executive committee and lists of working committees have been made. Mrs. Sleyster and Mrs. Louis Warfield, General Arrangements chairman, are most anxious for the cooperation of all county auxiliaries in these plans, for of course all of the Wisconsin women are hostesses for this national convention.

All suggestions will be most welcome to committee chairmen. If you know of any particular way in which you feel that we can be of peculiar service to our guests you are urged to write to Mrs. Rock Sleyster, Wauwatosa, or Mrs. Louis Warfield, 2537 N. Farwell Avenue, Milwaukee, or to the General Entertainment chairman, Mrs. S. J. Seeger, Bradley Road, Milwaukee. The other Chairmen are as follows: Hospitality, Mrs. F. R. Janney, 1761 Church Street, Wauwatosa; Hotels, Mrs. Wm. Liefert, 4103 N. Murray Avenue, Milwaukee; Transportation, Mrs. Harry Hawkins, 3286 N. Shepard Avenue, Milwaukee; Information, Mrs. Maurice Perlson, 4137 N. 13th Street, Milwaukee.

The committee is very happy to announce that arrangements for Auxiliary headquarters have been made with the Pfister Hotel who have been most generous in giving to us the entire seventh floor as well as an auditorium on the roof without charge. They are co-operating further by making a special effort to accommodate auxiliary members in every way possible and are reserving rooms there for ladies coming to the convention without their husbands.

OUR NATIONAL PRESIDENT

Mrs. James F. Percy was born in Nebraska, went with parents to Southern California when five years of age and received her education in the public schools of Los Angeles. Her early activities were concerned with the development of oil interests in which her father was engaged. Part of this experience required familiarizing herself with the legal side of business practice, she lived thus in a business and legal atmosphere. She became an active worker in women's organizations especially those devoted to music and the drama. In both of these pursuits she has maintained an earnest and enthusiastic interest until the present day.

Since her marriage to Doctor Percy in 1925 she entered with equal devotion into the exacting demands that usually fall to the lot of the physician's wife. Through friendship and admiration for Mrs. John O. McReynolds of Dallas, Texas, she was attracted to the Woman's Auxiliary of the American Medical Association. Following the A. M. A. Meeting at Dallas she resolved to try to interest the Los Angeles County Medical Association in the formation of a County Auxiliary. This resulted in her being requested to assume Chairmanship of an Organization Committee. Her first efforts met with enthusiastic support. She was elected its first President and at the end of the first year there was an enrolled membership of 474. In May, 1930, she was elected State President and at the Detroit meeting of the Auxiliary to the A. M. A. was made fourth Vice-President. This was followed at Philadelphia by the second Vice-Presidency and at New Orleans she was made first Vice-President. Because of her admiration and friendship for our late President, Mrs. Walter Jackson Freeman, and in loyalty to the Auxiliary this office was reluctantly accepted.

Mrs. Percy has a constructive love for organization work which she keenly enjoys.

MILWAUKEE COUNTY

The Milwaukee County auxiliary deviated from its usual course of monthly educational programs and at the February meeting enjoyed a most delightful musical program given by three of the members: Mrs. Rudolf Teschan, soprano; Mrs. Lester Wieder, cellist; and Mrs. Joseph J. Tolan, pianist. Following the program nearly all of the one hundred and twenty-five ladies present played bridge and had the opportunity of becoming better acquainted with one another. At the business meeting that preceded the program the Public Relations committee reported having placed nine speakers from the Medical Society's Speakers Bureau to speak in lay organizations in January and they have two requests on file for speakers in February.

PORTAGE COUNTY

The newly organized auxiliary of Portage County is already realizing the worth of distributing Hygeia in their county have plans under way to place it in the schools of the county which do not at present have access to the magazine. Mrs. F. R. Krembs has been named as chairman of the committee to take charge of the Health Essay Contest in their schools.

The members of the Auxiliary to the Portage County Medical Society met on February thirteenth at Hotel Whiting at Stevens Point.

RACINE COUNTY

Approximately twenty-five members attended the February meeting of the newly organized auxiliary of Racine County. Milton J. Knoblock addressed the group on "City Relief" and Dr. Ira Thompson discussed "The Health Aspects of City Relief".

The president, Mrs. E. C. Pfeifer, has named all of the committees and Mrs. Louis E. Fazen, president-elect, presented the auxiliary with a beautiful gavel of ivory head and ebony handle.

ROCK COUNTY

Rock County Auxiliary was the second auxiliary to organize in Wisconsin and it is beginning its fourth year as an active organization.

At a dinner meeting at the Spanish Tavern, Beloit, on January 24th, Mrs. Harry E. Kasten, Beloit, was elected president; Mrs. Wayne Munn, Janesville, vice-president; Mrs. Russell Wilson, Beloit, secretary; and Mrs. Charles E. Smith, Beloit, treasurer. The retiring president, Mrs. T. O. Nuzum, Janesville, gave the annual report of the auxiliary.

At a board meeting at the home of the new president, the program for the year was outlined and committee appointments made by Mrs. Kasten.

On February 28th the meeting of the Auxiliary was held at Pinehurst Sanatorium, Janesville.

SHEBOYGAN COUNTY

At the February luncheon meeting of the Sheboygan County auxiliary Dr. Otho Fiedler addressed the members on "The Care of the Indigent". At the business meeting which followed, plans for the Health Essay Contest were discussed and measures taken to contact all principals of high schools in the county. Although their quota for Hygeia subscriptions is only five, this auxiliary has turned in twenty others which are to be circulated among the eighty ungraded schools in the county.

WINNEBAGO COUNTY

Twenty-three members were present at the luncheon meeting of the Winnebago County Auxiliary held on January twenty-third. After a short business meeting each member gave a two minute talk on a medical current event.

NEWS ITEMS AND PERSONALS

At a meeting of the Wisconsin State Board of Health held on January 31st, Dr. Gustav Windesheim of Kenosha was re-elected president of the Board. He has served as president of the Board for the past four years. Other officers re-elected are Dr. Joseph Dean, Madison, vice-president, and Dr. C. A. Harper, Madison, secretary.

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Dr. Frank C. Walch, Clintonville, addressed a meeting of the Berlin Rotary Club on January 30th.

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Dr. Thomas H. Flarity was elected president of the Beloit Physician's and Surgeon's Club at its luncheon meeting in the Hotel Hilton on January 20th. Dr. S. W. Forbush was elected vice-president and Dr. F. E. Brinckerhoff, secretary and treasurer.

At a meeting of the club on February 17th, Dr. August Sauthoff of Mendota addressed the organization.

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Dr. James J. Robb, Green Bay, has severed his connection with Drs. Fairfield and Bartran, and has opened an office in the Northern building.

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At a meeting of the Association of Commerce of Waupaca in January, Dr. A. R. Bellerue was appointed a member of a committee to investigate a proposal for the building of a municipal hospital there.

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Dr. F. C. Wood of Waupaca, was named city physician at a meeting of the city council in January.

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The new Municipal Hospital at Reedsburg was dedicated on the evening of January 27th. Construction of the three-story hospital was authorized at a special election in February, 1932. Furnishings for the seventeen rooms, which accommodate thirty-one patients, were donated by the citizens and organizations of Reedsburg.

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Dr. M. A. Bailey of Fennimore resigned as mayor of the city, because of the fact that he was unable to devote the time required. He was elected last spring for a two-year term.

Dr. E. R. McNair, a graduate of Rush Medical College in 1929, has opened offices in the old post-office building in Orfordville. He is the son of Mr. and Mrs. Edward McNair of Brodhead and for the past four months has practiced in Lansing, Michigan.

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Dr. J. C. Elsom of Madison addressed the students of the city schools at Wisconsin Rapids on January 25th. This address was the second of a series of programs being conducted by the local Safety Council and the board of vocational education. The subject of his talk was "Good Health."

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Following a year of study in Europe, Dr. Ralph L. Towne has opened an office at 108 W. College Ave., Appleton. Dr. Towne had previously practiced in Kansas City, Mo., and in Montana.

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Dr. P. A. Hoffmann, father of Dr. Leo A. Hoffmann of Campbellsport celebrated his eightieth birthday anniversary on February 5th.

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"The Relation of the Hospital to the Community" was discussed by Dr. Paul H. Fesler, superintendent of Wesley Memorial Hospital in Chicago, at a meeting of the Six O'Clock Club of Beloit on February 8th.

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Dr. J. W. Lockhart of Oshkosh was speaker before a meeting of the Oshkosh Rotary Club on February 6th. Dr. Lockhart spoke on "The Mission of the Medical Profession."

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Through the efforts of the Brown County Hay Fever Prevention Club, an amendment to the noxious weed law has been introduced in the Assembly providing that ragweed be classified as a noxious weed.

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Dr. M. H. Fuller of Green Bay gave a lecture on "The Causes and Care of Eye Injuries" illustrated with motion pictures before the nurses and Sisters of St. Mary's Hospital, Green Bay, on February 7th.

Dr. Clifford A. Grand, a graduate of University of Minnesota School of Medicine in 1931, has opened an office in the Masonic Temple at Ashland.

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Members of the Society from out of the city who visited the offices of the State Medical Society during February included the following: Dr. H. F. Fredrick of Westfield; Dr. A. E. Rector of Appleton; Dr. Gunnar Gundersen of La Crosse and Dr. J. A. Diamond of Frederic.

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Dr. W. D. Stovall, Madison, discussed the prevention of communicable diseases before a meeting of the Todd School Parent-Teacher Association of Beloit on February 13th.

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Heart diseases caused 530 more deaths in Wisconsin, and accidents 582 less in 1932 than in 1931, the State Board of Health announced in February.

In a similar comparison, tuberculosis deaths decreased 92 last year and nephritis decreased 61, but deaths from cerebral hemorrhage increased 67 and from pneumonia 29.

The seven leading death causes in this state remained in their former order of importance except that cerebral hemorrhages moved ahead of accidents, the Board stated.

During the past year, heart diseases caused 6,554 deaths, cancer 3,504, cerebral hemorrhage 2,629, accidents 2,014, nephritis 2,005, pneumonia 2,002, and tuberculosis 1,354.

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Dr. Alfred S. Burdick, president of the Abbott Laboratories of North Chicago, Illinois, died on Saturday, February 11th of pneumonia at the age of 66. Since 1921 Dr. Burdick had served as president of the Abbott Laboratories.

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Dr. Louis Fauerbach, Madison, spoke on "Communicable Diseases of Children" at a meeting of the Lowell pre-school and kindergarten mother's club on February 13th.

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Dr. Beatrice O. Jones, Chicago, a graduate of Rush Medical College recently licensed in Wisconsin, has opened an office at 1517 Washington Avenue, Racine.

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Dr. Rock Sleyster, Wauwatosa, treasurer of the State Medical Society, left on February 25th for California. He expects to return on April 3rd.

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Dr. Otho A. Fiedler, Sheboygan, past president of the State Medical Society, addressed the Sheboygan Woman's Club at its meeting on February 14th. The subject of his talk was "The Medical Care of American People."

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Dr. F. T. Nye, 79, former Beloit physician and former president of the H. P. Strong Emergency hospital, died at his home at Irvington, Alabama, in February. He left Beloit in 1919 and moved to Irvington to practice medicine.

Dr. and Mrs. E. E. Neff, Madison, vacationed in Palm Beach, Florida, in early February. Before going to Palm Beach, they went on their annual hunting trip on the game preserve at Sea Island, Georgia, where both bagged several wild turkeys.

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Mrs. Christina Farnsworth, 86, mother of Dr. A. L. Farnsworth of Baraboo, died at her home in Caledonia where she had long been a resident. She is survived by five sons and three daughters, her husband having preceded her in death forty-seven years ago.

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Dr. H. B. Gifford of Juda was the recipient of many gifts and letters of congratulations from friends in the community, Monroe and Janesville on the occasion of the fiftieth anniversary of his graduation from Rush Medical College. On April 17th, Dr. Gifford will have completed thirty-eight years of continuous practice in Juda.

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A fine of $100 or sixty days in jail was the sentence imposed by Municipal Judge Silas Spengler of Oshkosh upon E. Dotson Woodfill medicine agent for unlawfully assuming the title "Dr." Woodfill was taken into custody late in December, 1932, after an investigation by Mr. Walter A. Drews, Investigator for the State Board of Health. The Judge denied a motion for a new trial.

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Physicians of Burlington and surrounding towns met at the Burlington Memorial Hospital, Racine, on February 15th, and formed the Medical Society of the Burlington Memorial hospital. The purpose of the association is to cooperate with the hospital board and for the discussion of problems arising from time to time.

Dr. W. A. Prouty, Burlington, presided as chairman of the meeting with Dr. G. W. Newell, Burlington, as secretary.

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Dr. Carl J. Weber of Sheboygan addressed the St. Clement's Parent-Teachers' Association on February 17th. His subject was "The Causes of Nervousness in School Children."

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MILWAUKEE

The following physicians were elected to office on the staff of St. Luke's Hospital at a meeting held on Jan. 27th:

President, Dr. H. J. Gramling; Vice-President, Dr. J. F. Zivnuska; Secretary and Treasurer, Dr. H. E. Webb; Chief of Surgical Service, Dr. E. L. Baum; Chief of Medical Service, Dr. S. L. Krzysko.

The following physicians were named to the active staff:

Drs. J. J. Adamkiewicz, E. L. Baum, J. O. Dieterle, H. J. Gramling, E. H. Gramling, W. W. Hume, George Kelly, J. B. Matthews, S. A. Baranowski W. J. Carson, Karl Friedbacher, J. J. Gramling, J. E. Habbe, W. A. Joseph, S. L. Krzysko, E. H. Mensing, and W. V. Nelson.

Other physicians connected with the hospital are Drs. Henry Olson, R. C. Pfeil, F. W. Riehl, E. M. Rice, H. S. Roby, A. I. Rosenberger, James C. Sargent, U. A. Schlueter, W. L. Stranberg, E. H. Sutter, H. D. Sykes, E. L. Tharinger, H. E. Webb, F. S. Wasielewski, and J. F. Zivnuska.

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Mrs. Mathilda Schmidt, mother of Dr. Hugo E. Schmidt, died at the home of Dr. Schmidt on January 30th, at the age of eighty-one years.

Mrs. Schmidt was morn in Milwaukee and had lived there most of her life.

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Dr. and Mrs. Roland S. Cron left Milwaukee early in February for a western trip. Their destination is the Geokake Ranch, Scottsdale, Arizona, where they expect to remain for about a month.

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Dr. and Mrs. Chester C. Schneider and children left Milwaukee about the middle of February for a month's stay in Florida.

Dr. and Mrs. E. L. Tharinger, also, are enjoying a Florida vacation.

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Dr. Theodore L. Squier left early in February for Richmond, Virginia, where he expects to remain for fo r or five weeks, doing postgraduate and research work.

—△—

A series of talks was given by Dr. Samuel Plahner at the Grand Avenue Congregational Church during the month of January. His subjects were as follows:

January 8th, "Principles of Individual Psychology"; January 15th, "The Riddle of Human Relations"; January 22nd, "Personality Problems in Marriage and Parenthood"; January 29th, "Responsibilities of the Home and School."

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At the annual meeting of the medical staff of the Milwaukee Hospital, held January 27th, Dr. C. A. Evans was re-elected chief-of-staff; Dr. Henry B. Hitz, vice-chairman, and Dr. John S. Gordon, secretary.

Drs. F. W. Madison, A. H. Lahmann, John Huston, A. W. Johnson, R. M. Hall, and J. L. Garvey were elected to the hospital staff.

—△—

Mr. L. C. Austin, superintendent of St. Sinai Hospital, was the principal speaker at a meeting of the health division of the Central Council of Welfare Agencies, held on January 24th.

Mr. Austin's subject was "The Effect Of The Depression On Private Hospitals."

Mr. Theodore Wiprud, executive secretary of The Medical Society of Milwaukee County, is chairman of the health division.

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At a meeting of delegates of the Central Council of Social Agencies, held on February 10th, Dr. John P. Koehler, spoke on "The Work Of The Health Department During The Depression."

Dr. James C. Sargent, president of The Medical Society of Milwaukee County, spoke on "Modern Trends In Medicine" at the Y. M. C. A. on January 23rd. On February 7th, he addressed the staff members of the Milwaukee Public Library on the same subject at a luncheon meeting, and on the evening of February 7th he appeared before the Sisters and staff of St. Joseph's Hospital, at which time he spoke on "Medical Economics."

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On January 10th, Dr. D. W. Roberts representing the Speakers' Bureau of The Medical Society of Milwaukee County, was the guest speaker at the meeting of the Wauwatosa High School Parent-Teacher Association. He spoke on "Mental Hygiene Of Adolescence."

"What You Should Know About Your Heart" was the subject of Dr. L. M. Warfield's address to the Men's Club of St. John's Lutheran Church on January 17th, also given under the auspices of the Speakers' Bureau.

—△—

Dr. Henry B. Hitz was recently elected vice-president of the Wisconsin Archeological Society.

—△—

Mrs. Claude S. Beebe and daughter, Mrs. Adela, left Milwaukee about the middle of February to spend the balance of the winter season at Miami Beach.

—△—

Dr. Millard Tufts, chairman of the public nursing committee, addressed the League of Nursing Education at the Johnston Emergency Hospital on February 24th, on the subject of "The Nurse and The Doctor—Common Problems."

—△—

Dr. H. P. Robinson has announced the removal of his office to 4453 N. Oakland Avenue.

—△—

Friends and colleagues of Dr. Karl Schlaepfer are happy to learn that he is much improved in health, having been confined to the Deaconess Hospital for several months.

Dr. and Mrs. Schlaepfer and family left on February 18th for a several months' stay at Naples, Florida.

—△—

The Speakers' Bureau, sponsored by the Medical Society of Milwaukee County, was represented by the following members during the month of February:

On February 1st, Dr. Millard Tufts addressed the Bureau of Home Nursing on "Are You Overweight?"

Dr. E. O. Gertenbach appeared before the 4th and 5th Districts of the Wisconsin State Nurses Association on February the 7th, at which time he spoke on "The War On Appendicitis."

Dr. W. P. Blount gave an illustrated talk on "What Happens To Broken Bones" as the meeting of the State Street School Parent-Teacher Association on February 8th.

"How To Avoid Diabetes" was the subject of the

address delivered by Dr. Francis D. Murphy at the Bureau of Home Nursing on February 8th.

Dr. Carl W. Eberbach was the principal speaker at the meeting of the Cudahy Woman's Club, held on February 13th. Dr. Eberbach's subject was "The Goiter Problem In The Great Lakes District," and was illustrated by lantern slides.

At the general assembly of the Messmer High School on February 16th, Dr. R. W. Blumenthal addressed the pupils on "Your Health."

The Bureau of Home Nursing had as their guest speaker at their meeting on February 22nd, Dr. Philip J. Eisenberg, who spoke on "The Tragedy Of Appendicitis."

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Mr. Theodore Wiprud, executive secretary of The Medical Society of Milwaukee County, addressed the senior students of the Marquette University School of Medicine on the 9th and 16th of February.

On February 9th, Mr. Wiprud's subject was "Medical Practice In a Changing World," and on February 16th, "Organized Medicine Meets Current Problems."

—△—

Dr. James C. Sargent, president of The Medical Society of Milwaukee County, addressed the La-Crosse County Medical Society on "Careful Diagnosis and Conservative Management Of The Urinary Tract Stones," on February 21st.

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Final plans for the postgraduate course in gynecology and obstetrics, to be given during March and April, have been completed.

The first session, which is open to all physicians enrolled for the course, will be held at the Milwaukee Academy of Medicine on March 20th. The speaker for this opening session will be Dr. Arthur Curtis, professor of obstetrics and gynecology, Northwestern University Medical School.

The following local men have been chosen as instructors:

Obstetrics—Dr. H. J. Olson, Dr. A. H. Lahmann, Dr. R. W. Roethke.

Gynecology—Dr. H. W. Shutter, Dr. R. E. McDonald, Dr. R. S. Cron.

This course, as well as all other postgraduate courses which have been given, is sponsored by the educational committee of The Medical Society of Milwaukee County.

—△—

Dr. and Mrs. J. F. Zivnuska left for Miami, Florida, about the middle of February where they expect to vacation for several weeks.

—△—

Members of The Medical Society of Milwaukee County were guests of the Milwaukee County Dental Society at their meeting held at the Hotel Schroeder on February 22nd.

Dr. Paul A. O'Leary, chairman of the section of dermatology and syphilology of the Mayo Clinic, was the guest speaker. Dr. O'Leary's subject was "Lesions Of The Mouth, Associated With Cutaneous Diseases, Including Syphilis."

The following health talks, sponsored by the State Board of Health, and delivered by Mr. Theodore Wiprud, Executive Secretary of the Medical Society of Milwaukee County, will be broadcast over the Milwaukee Journal Radio Station, WTMJ, during the month of March:

March 3, "The Way Of The Vegetarian";
March 10, "Raising Cain";
March 17 "The Middle-Aged Woman";
March 24 "Do Your Feet Hurt"?
March 31, "He Stoops To Conquer."

BIRTHS

A daughter to Dr. and Mrs. C. J. Corcoran, Milwaukee, on January 15th.

A son to Dr. and Mrs. Donald C. Ausman, Milwaukee, on January 31st.

A daughter to Dr. and Mrs. Saul I. Waxman, Milwaukee, on February 3rd.

A son to Dr. and Mrs. J. V. Herzog, Elkhorn, on February 5, 1933.

A son, Ethan Dolf, to Dr. and Mrs. E. B. Pfefferkorn, Oshkosh, on February 17th.

A son to Dr. and Mrs. Mark E. Nesbit, Madison, on February 12th.

A son to Dr. and Mrs. John McCabe, Milwaukee, on February 10th.

A son to Dr. and Mrs. W. P. Blount, Milwaukee, on January 21st.

MARRIAGES

Dr. E. R. Ryan, Milwaukee, to Miss Lucille Shenners, sister of State Senator W. H. Shenners, on February 4th.

DEATHS

Dr. Charles Egan, Highland, died on January 23rd at his home.

Dr. Egan was born in County Clare, Ireland, June 25, 1848, and came with his parents to this country a year later. He attended the University of Wisconsin and was a graduate of Rush Medical College in 1875. He practiced in Highland twelve years and in 1887 was appointed house physician at the Racine Asylum. After seven years in Racine, Dr. Egan spent three years in general practice at Osage and Charles City, Iowa, and then returned to Highland where he remained until his death.

He is survived by his widow and two daughters.

Dr. Abram M. Leland, Whitewater, died suddenly at his home on February first.

Dr. Leland was born July 21, 1865, at Whitewater. He received his early education in the public schools and Whitewater Normal. Later he attended the University of Wisconsin, the Milwaukee Medical College from which he graduated in 1900. After graduation he came to Whitewater to practice and, except for a short time in Waukesha and Monroe, spent his entire life in Whitewater.

He is survived by his widow and one daughter.

Dr. W. T. Pinkerton, Prairie du Chien, died on January 31st at Prairie du Chien Sanitarium where he had been staying for rest and treatment.

Dr. Pinkerton was born in Dayton, Indiana, November 13, 1855. When he was ten years of age, he came with his family to Richland County. His education was received at Rush Medical College and the University of Louisville Medical College, from which he graduated in 1879. He had practiced in various places in Wisconsin before coming to Prairie du Chien Sanitarium as medical director in 1904. He held this position for twenty-seven years but in 1931 resigned and had since engaged in private practice.

Dr. Pinkerton was the founder and organizer of the Prairie du Chien Sanitarium school for nurses, established in 1906. He was also one of the organizers of the local Chamber of Commerce.

He was a member of the Crawford County Medical Society, the State Medical Society, and the American Medical Association.

He is survived by his widow, one son, Robert E. Pinkerton of San Francisco; a daughter, Mrs. A. C. King of Richland Center.

Dr. R. H. Rice, Milwaukee, died on February 8th at the Marquette University Hospital Annex.

Dr. Rice was born in Morrison, Wisconsin in 1869. His preliminary education was obtained at the Oshkosh Normal School after which he attended the College of Physicians and Surgeons in Chicago, from which he was graduated in 1897. Following his graduation, Dr. Rice continued his study of medicine in Europe, specializing in diseases of the eye, ear, nose, and throat.

He was a member of the medical school staff of Marquette University for sixteen years.

He was a member of the Medical Society of Milwaukee County, the State Medical Society, and was a fellow of the American Medical Association. He was also a member of the American Academy of Ophthalmology and Oto-Laryngology.

Surviving Dr. Rice are five brothers, Dr. E. M. Rice, with whom he was associated; the Right Reverend Msgr. W. J. Rice of Oshkosh; Dr. D. S. Rice of Stevens Point, and John and Mathew Rice of Greenleaf, Wisconsin, and a sister, Miss Mollie Rice of Greenleaf.

Dr. E. J. Donohue, Antigo, died at his home on February 15th of nephritis. He had not been in good health for the past year but continued his practice until about five months ago.

Dr. Donohue was born in Manitowoc on July 17, 1880. At the age of three years the family moved to Antigo. He was a graduate of Northwestern University Medical School in 1898 and spent a year as interne at St. Anthony's Hospital at Chicago, after which he returned to Antigo and became associated with his brother, Dr. M. J. Donohue. He was deeply interested in promoting hospital services for the community and was one of the first contributors to the new Langlade Memorial Hospital recently opened.

Dr. Donohue was a member of the Langlade County Medical Society, the State Medical Society, and was a fellow of the American Medical Association.

He is survived by his widow, five sisters and two brothers.

Dr. Frederick C. Gessner, Oconomowoc, died at St. Mary's Hospital, Rochester, Minn., February 11th. He had been in ill health for several months and had been receiving treatment. Following an operation, he died of bronchopneumonia.

Dr. Gessner was born in Frankfort, Germany, in the year 1871. He received his medical training in Berlin and Milwaukee, graduating from the Wisconsin College of Physicians and Surgeons in 1901. He was a member of the staff of Milwaukee County Hospital for Mental Diseases for seven years, following which he engaged in private practice in Milwaukee for ten years. For the past fifteen years he served as associate chief-of-staff of the Oconomowoc Health Resort.

He was a member of the Medical Society of Milwaukee County, the State Medical Society, and the American Medical Association.

He is survived by his widow.

Dr. Wilhelm Becker, Milwaukee, died very suddenly at his home, 4156 N. Murray Avenue, Shorewood, on Friday, February the 17th, at the age of 63 years.

Dr. Becker was born at Fritzlor, Germany. At the age of sixteen years he moved to New York, where he lived for a few years before coming to Milwaukee.

He was graduated from the old Milwaukee Medical College in 1897. Following his graduation he studied medicine abroad for two years, after which he served as assistant to Dr. W. A. Evans at the Chicago College of Physicians and Surgeons, later coming to Milwaukee as a faculty member of the Milwaukee Medical College, where he taught pathology and bacteriology.

Surviving Dr. Becker is his wife, Mrs. Hedwin H. Becker, who also is a physician. She was on the staff of school physicians in Shorewood for two years, and for three years served as Commissioner of Health in Shorewood.

SOCIETY RECORDS

New Members

P. H. Hansberry, Hillsboro.

M. O. Eiel, 16 N. Carroll St., Madison.

O. O. Meyer, Wisconsin General Hospital, Madison.

Joseph C. Dean, Dean Clinic, Madison.

Lester J. Bayer, Merrill.

Marcus E. Wyant, Sun Prairie.

James D. Glynn, Lancaster.

E. A. Linger, Oconto.

R. C. Faulds, Abrams.

H. F. Ohswaldt, Oconto Falls.
Fern A. Rice, Delavan.
Edgar W. Huth, Crandon.
D. H. Lando, 2130 E. Locust St., Milwaukee.
D. W. Curtin, 606 W. Wisconsin Ave., Milwaukee.
M. M. Bunch, 536 W. Wisconsin Ave., Milwaukee.
E. B. Elvis, Medford.
H. J. Farrell, 208 E. Wisconsin Ave., Milwaukee.
E. N. Krueger, 213 N. Oneida St., Appleton.
F. T. Gorton, Portage.
Emmett T. Ackerman, Gays Mills.
E. J. Barrett, Sheboygan.
Oscar S. Tenley, Wabeno.
Wm. G. Meier, Jr., 813 St. Clair Ave., Sheboygan.
Evan E. Carl, 606 W. Wisconsin Ave., Milwaukee.
W. A. Schweitzer, 2907 N. Holton St., Milwaukee.
W. Salinko, 1656 S. 8th St., Milwaukee.
J. S. Hansberry, Wonewoc.
Paul T. O'Brien, Menasha.

Resignations

J. A. E Eyster, Madison.

» » » CORRESPONDENCE « « «

AN UNFAIR "POKE"

Employers Mutual Liability Insurance Co. of Wisconsin

Wausau, Wisconsin

February 7, 1933.

Mr. J. G. Crownhart, Secretary,
The State Medical Society of Wisconsin,
Madison, Wisconsin.

Dear George:

You took a rather unfair "poke" at us when you stated in the December 1932 issue of the Wisconsin Medical Journal on page 865:

> "The Wausau Mutual is the same company that caused the introduction of a bill in the 1931 legislature providing that nurses in industrial plants should be exempt from the provisions of law establishing standards for treating the sick, that such nurses might administer not only first aid and apply dressings but might prescribe 'family remedies and medicines allowed by law to be sold without a prescription for injured or sick employes or to their immediate families'. *The bill was killed.*"

The underscored four words in that paragraph would indicate that a determined effort was made by the Employers Mutual to have the bill referred to in the preceeding paragraph enacted as a law.

This impression is precisely contrary to the facts as they were correctly stated in the Wisconsin Medical Journal for August, 1932, on page 568 where the following paragraph appeared:

> "When a committee hearing was called on this measure, the nurses in industry themselves were present to oppose the bill and the hearing had not progressed beyond the first speaker before permission was asked to withdraw the measure. The representative of one of the largest insurance carriers in Wisconsin (Employer Mutual) then suggested to your secretary that in the joint interest of the employer and employee your State Society could afford a great public service if it would promote a suggested set of standing orders that might be signed by the plant physician for the nurse in industry. Your society was prompt to accept the suggestion and in 1931 President Harper appointed as such a committee * * *"

We think it only fair that you publish this letter to correct the impression given by the article quoted above which appeared in your December issue of the Wisconsin Medical Journal. I know you will be only too glad to correct any false impression that may have been given.

Yours very truly,

H. J. Hagge,
President.

FINANCING MEDICAL CARE

To the Editor:

Illness is not distributed evenly over the years. A prolonged serious illness in a family is a calamity, one of the greatest that can occur, especially if the breadwinner is stricken. Here the income is cut off, while at the same time debts are piling up. As a rule nothing has been saved to meet such an emergency. Bills for professional services contracted at such a time usually are not paid, or at best only in part, even though the doctor has rendered a very valuable service. A family may run along for years with little if any expense for medical care. Then out of a clear sky a serious illness comes. The laity should be educated to save systematically for medical care. To guard against this irregularity as to time and amount of bills for professional services, I propose the following plan:

The members of the County Medical Society shall contract to give a certain discount on all bills for professional services and also as annual free health examination by appointment to those who have a health and savings account in one of the local banks with the following provisions:

1. Each month a certain percent of income shall be deposited. Married man to deposit twice as much as a single man.
2. This money to be left in the bank for a period of five years drawing interest at 3% compounded semi-annually, unless needed to pay

(Continued on page 200)

THE JOURNAL BOOK SHELF

BOOKS RECEIVED FOR REVIEW

Practical Obstetrics. By P. Brooke Bland, M. D., professor of obstetrics, Jefferson Medical College; chief obstetrician, Jefferson Medical College Hospital, Philadelphia. Assisted by T. L. Montgomery, M. D., associate in obstetrics, Jefferson Medical College. Illustrated with 516 engravings. Price $8.00. F. A. Davis Company, 1914 Cherry St. Philadelphia, Pa.

Diseases of the Eye. By Sir John Herbert Parsons, ophthalmic surgeon, University College Hospital; surgeon, Royal London (Moorfields) Ophthalmic Hospital; late ophthalmic surgeon, Hospital for Sick Children, Great Ormond Street. Sixth edition. With 21 plates and 348 text figures. Price $5.50. The Macmillan Company, New York, N. Y.

Procedures in Tuberculosis Control. By Benjamin Goldberg, M. D., F. A. C. P., associate professor of medicine, University of Illinois; formerly medical director and member and secretary, Board of Directors, City of Chicago Municipal Tuberculosis Organization. 54 illustrations. Price $4.00 net. F. A. Davis Company, Philadelphia, 1933.

Food in Health and Disease. By Katherine Mitchell Thoma, B. A., director of dietetics, Michael Reese Hospital, Chicago. Price $2.75. F. A. Davis Company, 1914-16 Cherry St., Philadelphia, Pa.

The Action of the Living Cell. By Fenton B. Turck. Price $3.50. The Macmillan Company, New York, N. Y. 1933.

The History of Dermatology. By Wm. Allen Pusey, A. M., M. D., professor of dermatology emeritus, University of Illinois; sometime president of the American Dermatological Association and of the American Medical Association. Price $3.00. Charles C. Thomas, Springfield, Ill.

BOOK REVIEWS

Any scientific publication reviewed in this column may be obtained for inspection. Orders for such inspection should be directed to the Medical Library Service, 424 N. Charter Street, Madison, Wis.

Asthma, Hay Fever and Related Disorders. By Samuel M. Feinberg, M. D., assistant professor of medicine and attending physician in Asthma and Hay Fever Clinic, Northwestern University Medical School; attending physician, Cook County Hospital, Chicago. Illustrated. Price $1.50 net. Lea & Febiger Co., Washington Square, Philadelphia.

This little book is designed as a guide for patients under treatment for asthma, hay fever, and related disorders, to enable them to cooperate with their physicians. Several books along these lines have lately been written and some of them have been reviewed in this Journal. The present volume appears to be well adapted for patients under treatment along lines advocated by the author. C. R. B.

Procedures in Tuberculosis Control. By Benjamin Goldberg, M. D., F. A. C. P., associate professor of medicine, University of Illinois; formerly medical director and member and secretary, Board of Directors, City of Chicago Municipal Tuberculosis Organization. 54 illustrations. Price $4.00 net. F. A. Davis Company, Philadelphia, 1933.

This comprehensive text is designed particularly for students of tuberculosis and specialists in the field of public health and preventive medicine. The author has dealt with the control of tuberculosis in the broadest general sense, although at times he voices his personal reaction, as for example in the preface he states "the old boarding house type of sanatorium is tending to disappear". From his wide interests and experience in this field he is peculiarly qualified for judgment in this, as in other details.

The analysis of the tuberculosis problem among primitive races, particularly in so far as it has been affecting the Negro, the Indian and the Mexican, in this country, constitutes a very vivid picture which would awaken interest in any public-minded reader. The author points out the broader humanitarian interests which can never be dissociated from good statesmanship.

There are a number of details wherein differences of opinion may arise and a number of points which might to advantage have been stressed. For example, the industrial consideration gives very scant attention to silicosis, which now interests a large section of the medical profession and which constitutes one of the important problems in tuberculosis. We cannot too heartily concur in the insistence upon the availability of the trained nurse as the social worker, particularly in this field. The legislative details and the space utilized for the discussion of the physical plant in dispensaries and the numerous charts might well have been condensed for other purposes. It seems entirely beside the best interests from a psychological standpoint to confront the patient with the necessity for entering a room for "open cases". The profession has united in its opposition to the designation of tuberculous patients as "open" or "closed". One is disturbed to find that the author considers the personnel only equally important to the location of the tuberculosis dispensary. Vigorous

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exception is taken to the legends in use as stated on page 80, since standard texts have for years been utilizing different symbols. The Wassermann reaction should, of course, be included among the routine, even more regularly than the basal metabolic studies. The x-rays are preferably stereoscopic rather than flat plates, although there may be advantages in the system as outlined by the author. In discussing the occupations offered to the patient there are two trades which admittedly carry a hazard, not only to the operator but also to the individuals coming under their attention, namely beauty culture and barbering. It is strongly urged that the criteria for establishing arrest and innocuousness of contact are as yet too loose to warrant such liberties. Perhaps for lay readers the term "opening and shutting of the lung" used on page 176 may be admitted; but it seems a rather unwarranted liberty in a professional light. In one place tobacco is strictly interdicted and again rules are given for its use.

The staff organization seems to have interested the author greatly and his suggestions would certainly afford an ideal arrangement. The opportunities afforded both to patient and to the staff would be greatly enhanced by the organization of the consulting staff in connection with a teaching institution. The dietary suggestions find too great repetition when included under the home and the sanatorium care. The surgical considerations are not completely given and the author has doubtless fulfilled his purpose by the superficial outline stated. One is disturbed to find the inclusion of a proprietary preparation, such as Hemo-S (Chappel), as noted on page 252. The strength of the sanatorium as a teaching unit will depend in a large measure upon its representation in pathology and the suggestion of a museum and pathologic exhibit with a proper development of bacteriology, physiology and chemistry cannot be too strongly emphasized. Particularly are these details important, if we admit the availability of the institution for teaching. Considerable space is given in the discussion of a proper curriculum for medical education, the budget and sanatorium planning. Lastly the author makes a strong plea for the inclusion of the sanatorium as part of the general hospital and much may be stated in favor of this position.

In general, the organization of this text is orderly and with the few minor exceptions stated entirely adequate. Typographical errors creep in, as, for example, the omission of the page number under the reference on page 169 and the spelling of sanitarium instead of sanatorium on page 181. As stated above it is a volume that will serve a very useful purpose to those peculiarly interested in the subject, but its field of usefulness is a distinctly limited one by reason of its primary purpose and context. W. S. M.

Sex and Internal Secretions by a group of 22 authors. Editor-in-Chief Edgar Allen. The Williams & Wilkins Company, Baltimore, 1932, 951 pages, $10.00.

This volume is more than the assembling of 19 chapters by 22 authors; since the group is carefully selected from among American workers who have cooperated in the program of study of sex under the Committee for Research in Problems of Sex authorized by the National Research Council. The editor has secured excellent cooperation in having the various phases of the subject well divided and yet correlated. Each field in the study is discussed by a man who is very familiar, from first-hand investigation, with the subject which he treats. Literary style, of course, varies, but the real understanding of the field makes the book of great value as a reference work. It is in no sense a text book, but really a guide to the literature in this field, chiefly that of the past decade. The text is thoroughly documented and contains many illustrations.

This work is not intended for clinicians especially, although it will be interesting to many of them. It is a volume which no close student of sex in the clinic or the laboratory will want to be without. The factors discussed include those of general biology, embryology, genetics, metabolism, the chemical properties of the hormones which are recognized, and the physiological processes so far as they are understood. E. L. S.

Office Surgery. By Fenwick Beekham, M. D., visiting surgeon, Bellevue Hospital; visiting surgeon, Hospital for the Ruptured and Crippled; consulting surgeon, Lincoln Hospital; clinical professor of surgery, N. Y. University and Bellevue Medical College. 94 illustrations. J. B. Lippincott Company, Philadelphia.

This book deals with surgery that can be done in the office and makes no differentiation between minor an major surgery as is so often made. It is brief and concise and can be used for quick office reference. It covers the subjects usually considered in minor surgery. E. R. S.

The Action of the Living Cell. By Fenton B. Turck. Price $3.50. The Macmillan Company, New York, New York. 1933.

In this book the author presents his theory, based on thousands of experiments, of the cause of shock. Some thirty or more years ago the author made certain observations which led him to discredit the then held neurogenic theory of shock. He concluded that shock was produced by the action, on body cells, of a toxin liberated by injured or dying cells. He called this toxin CYTOST. This cytost, he claims, stimulates tissue growth when given in small quantities but in sudden large doses causes the phenomenon known as shock. He obtained cytost by extracting necrotic tissues. He used this extract in extensive studies to determine its effect on cells in tissue cultures and on living animals. He found that the potent factor of cytost was not destroyed when heated to 300 degrees Centigrade. When heated to 700 de-

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Thank You Doctor

The baby is doing splendidly and Tom and I are so pleased.

When you first told me that Junior would have to have bottle feedings I thought I was due for a lot of trouble and work because I remembered what a time my sister had when her baby was on the bottle. She sent for a formula that was advertised to be recommended by many authorities, but something was wrong. She used to spend hours in her kitchen mixing this, that and the other thing. And in spite of all her trouble, her baby fretted and cried and didn't gain properly.

This S.M.A. you have prescribed for my baby is a new one to me. In fact, I have never seen it advertised. But, believe me, it works like a charm and it is *so* simple to prepare—no fuss or bother at all.

Junior reaches to take the bottle right out of my hands and drinks it all up. And he's the *best* child. Always happy when he's awake, and sleeps the whole night through.

And talk about a picture of health! I believe he would take first prize in any baby contest.

I'm going to bring him down to your office Wednesday as you suggested. That S.M.A. folder you gave me says even a breast fed baby should be under the supervision of a physician and I think myself that it's better to *keep* the baby well than to wait until trouble starts.

We certainly want to thank you for bringing our baby along so well, Doctor. It increases our confidence in you as our family physician. Tom has already "said it with dollars", but I wanted to thank you personally, too.

And I'm going to persuade Mrs. Brown,—that's my neighbor with the baby that's not gaining—to come along on Wednesday so you can prescribe the proper diet for *him* too.

Trial supply of S.M.A. Because S.M.A. has won favor un-***offered without charge*** der typical conditions we are quite willing that you should try it in your own practice and under your own control. To make this easy we offer you a generous trial supply without charge or obligation. Simply attach the coupon to your prescription blank or letterhead.

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Attach coupon to Rx blank or letterhead. 51-33

grees the potency was lost. Age did not destroy the potency, for mummy dust and cremation ash retained all the potencies of fresh tissue juice. He briefly refers to histomine which he claims is similar to cytost but not identical with it. Experiments are cited to prove this fact. The book is written in an interesting style and the authors theory is well supported by interesting experimental data. The book gives a little the impression that it is the story a well mastered hobby. T. H. B.

The History of Dermatology. By Wm. Allen Pusey, A. M., M. D., professor of dermatology emeritus, University of Illinois; sometime president of the American Dermatological Association and of the American Medical Association. Price $3.00. Charles C. Thomas, Springfield, Illinois.

This work is the first history of dermatology which has appeared in the English language and it tells the story in such a way that the reader is enabled to really appreciate the part that cutaneous medicine has played in the development of medicine as a whole. The material is presented in nine chapters according to the natural chronological periods during which science and learning made their advances. In each chapter one finds brief, concise biographies of the outstanding men of the period and these are so interwoven with the story as a whole that the net result is a most interesting as well as instructive narration. A novel and valuable feature of the work is the historical index which is given in addition to the usual general index.

—R. L. McI.

STILLBIRTHS, 1930

(Continued from page 181)

birth to a maximum among mothers who have given birth to 12 or more children.

10. For the first-born the stillbirth rate is nearly as high as for the seventh in order of birth.

11. The stillbirth rate is lowest where the mothers are from 20 to 29 years of age.

12. Where special studies have been made, it has been found that the stillbirth rate is highest between 3 and 6 P. M. In fact, all the stillbirth rates between noon and midnight were higher than the rates between midnight and noon. Obstetricians state that operative interference, which is frequently unnecessary, is probably responsible for the high rates in the afternoon.

13. For the prevention of stillbirths we must have more careful medical examinations during the last month of pregnancy; thorough treatment of the syphilitic pregnant woman; medical supervision during pregnancy; and more research into the toxemias of pregnancy and the fundamental causes underlying foetal deaths.

CORRESPONDENCE

(Continued from page 195)

physician's bills for professional services. Bills to be O.Ked by depositors before payment by the bank to the physician.

3. In case of disagreement between depositor and physician as to the bill, the matter to be referred to a grievance committee.
4. Money in the account at the end of 5 years may be withdrawn, except a certain minimum which is to be kept as a reserve.
5. In case the depositor leaves the community, the entire fund may be withdrawn six months after he has established his residence elsewhere.
6. In the event payments are stopped while there is still income, the money in the fund may be used to pay physician's bills for professional services, but no discount will be allowed and no free annual physical examination given.
7. Payment of all physician's bills not guaranteed from this percentage.

ADVANTAGES OF THE PLAN

1. It enables a man to save regularly for illness without inconvenience, and to distribute the cost of medical care over a long period of time.
2. It allows his savings to increase or decrease with income.
3. It provides ready funds for physician's bills so that the cost may be reduced to the depositor for services rendered. It is pointed out that one will call a doctor when needed without hesitation if funds are available.
4. The plan does not interfere with free choice of physician.
5. It avoids the evils of insurance plans.
6. It provides periodic health examinations which will uncover a large number of conditions which will need treatment. Preventive measures can then be applied early in cases needing them, and therapeutic measures instituted in cases that would otherwise be neglected. Health examinations will become general in no other way.
7. It allows a man to choose what medical service he wants without demanding "the works" every little while, because he has paid for it, as in insurance schemes. Thus it avoids unnecessary examinations and expense.
8. It acts as a savings account in case the money is not used for medical services.
9. The plan will simplify the collections of physicians; and will, I believe, result in fewer worthless accounts and a better income for

PHYSICIANS' EXCHANGE

Advertisements for this column must be received by the 25th of the month preceding month of issue. A charge is made of $2.00 for the first appearance of copy occupying 1 inch or less of space and $1.00 for each succeeding insertion of the same copy. Kindly accompany copy with remittance to cover number of insertions desired. Advertisements from members of the State Medical Society will be accepted without charge. Such copy will be taken out after its second publication unless otherwise requested. Where numbers follow advertisements replies should be addressed care Wisconsin Medical Journal.

FOR SALE—Centrifuge with one 15cc head, one 50cc head, hood, glass tubes and shields. E. H. Sargent's incubator 9017; oven 6237; Duboscq Colorimeter 2561; Sanborn's Handy Kymograph; Handy (Portable Basal Metabolism); E. Leitz' Inc. MacKenzie Ink Polygraph Dressier Modification No. 585; wrist syphymograph with breast plate. Best offer or trade for electric cautery; tonsillectomy suction apparatus. Address M. J. Robertson, M. D., Bayfield, Wis. MA

LOCATION WANTED—By general surgeon with some orthopedic experience. Capable of doing high grade surgery. Would consider partnership or will buy a good, going practice. Address No. 903 in care of the Journal. FMA

WANTED—Locum tenens work by capable physician; available for short or long period; Wisconsin license; references; will not compete. Address number 851 in care of the Journal.

POSITION WANTED—As locum tenens or to fill vacancy. Available at once. Graduate University of Wisconsin. Have Wisconsin license. Five years experience in general medicine. Two years at Philadelphia General Hospital. Address No. 900 in care of the Journal. JFM

FOR SALE—Dr. C. E. Armstrong's practice, residence, office fully equipped, complete line of drugs. In active practice 40 years. Died suddenly December 20, 1932. Location, Oconto, Wisconsin. 5,000 population, county seat surrounded by heavily populated high class farming community. Only three doctors, two of the older men having died in past year. Residence and office on Main Street, finest location in city. Residence can be converted into private hospital. Part cash, balance on time. Wonderful opportunity for good surgeon. Giles V. Megan, Attorney for Estate, Oconto, Wisconsin.

FOR SALE—$10,000 eye, ear, nose and throat practice in Wisconsin, also full equipment. Established twenty-seven years. City nearly 10,000. Excellent surrounding territory. Wonderful opportunity for man able to do all work. Address No. 902 in care of the Journal. FMA

FOR RENT—Office space with general practitioner, on best downtown corner in Madison. Address number 890 in care of the Journal. OND

FOR SALE—Fischer Diathermy. Address the Medical Society of Milwaukee County, Bankers Building, Milwaukee, or telephone Marquette 4131, Milwaukee.

WANT TO BUY—Basal Metabolism Apparatus. Address the Medical Society of Milwaukee County, Bankers Building, Milwaukee, or telephone Marquette 4131, Milwaukee.

WANTED—Complete eye, ear, nose, and throat equipment. Must be in good condition and reasonable. Address No. 901 in care of the Journal. FM

WANTED—Combination table and chair. Address Drs. Peterson and Wyant, Sun Prairie, Wisconsin. FMA

WANTED—Set of Dean Lewis' Loose Leaf Surgery. Address No. 904 in care of the Journal. FMA

ASSISTANCE TO MEDICAL WRITERS—Research, Abstracts, Translations (all European languages). Papers prepared. All work done personally. Ten years' medical literary experience with institutions and leading journals. Florence Annan Carpenter, 413 St. James Pl., Chicago, Ill.

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Abdominal Belts — Elastic Stockings
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For Graduates in Medicine
Eye, Ear, Nose and Throat
A house doctor is appointed July 1st and January 1st

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For Nurses and Graduates of High School
CLASSES LIMITED TO SIX
X-ray, Basal Metabolism, Electrocardiography and Physical Therapy

150 clinical patients daily provide material for classes. Positions with attractive salaries in hospitals and with group doctors await qualified Technicians. *For particulars regarding either course write*
CHICAGO EYE, EAR, NOSE AND THROAT HOSPITAL, 231 West Washington Street, Chicago, Illinois

the general practitioner. He will be paid for what he has done. If this occurs, the specialties will also benefit since the general practitioner will gladly refer to them work which he might otherwise try to do himself.

The plan is certainly worth a fair trial. May we try it in Wisconsin? It is not radical and does not endanger anything we have thus far developed in medical practice. It will enable the layman to save systematically for medical services, will decrease the cost of such services while increasing their efficiency, and will make the payment of doctor bills painless. For the profession, it will end the economic conflict between the general practitioner and the specialist, and elevate this key-man, the general practitioner, to the place where he belongs in the practice of medicine.

Marinette, Wisconsin, G. R. DUER.
Feb. 3, 1933.

COUNCIL RESOLUTION

AMERICAN MEDICAL ASSOCIATION
Chicago

Olin West, M. D., Feb. 17, 1933.
Secretary and General Manager.
Mr. J. G. Crownhart,
Madison, Wis.
Dear Mr. Crownhart:

We have just received your letter of February 16 to which is attached a copy of a resolution adopted by the Council of the State Medical Society of Wisconsin concerning the declaration of opinions with regard to social, legislative and economic relations of medical practice through approved channels of the American Medical Association.

I shall submit this to the Board of Trustees and in all probability the matter will come before the House of Delegates at the Milwaukee Session of the Association to be held in June.

Very sincerely yours,
OLIN WEST.

USE THEM REGULARLY

THE CUDAHY ENTERPRISE

Cudahy, Wisconsin, Feb. 24, 1933.

Publicity Director,
State Medical Society,
Madison, Wisconsin.
Dear Sir:

Examination of your mailing list will reveal that you have been sending your weekly health bulletins, issued by the State Medical Society, to this newspaper in care of Floyd J. Gonyea.

Please be advised that Mr. Gonyea is no longer connected with The Cudahy Enterprise. It is our wish that you send the weekly health bulletins direct to The Cudahy Enterprise, Cudahy, Wis.

We find the bulletins very satisfactory and use them regularly as an interesting feature of our news columns.

Sincerely yours,
RALPH WORKINGER
Editor, The Enterprise.

ABANDON SILICOSIS CLINIC

EMPLOYERS MUTUAL LIABILITY INSURANCE CO. OF WISCONSIN

Wausau, Wisconsin, February 4, 1933.

Mr. J. G. Crownhart, Secretary,
The State Medical Society of Wisconsin,
Madison, Wisconsin.
Dear Mr. Crownhart:

Referring to our several conversations since meeting with your State Council last November.

You will be interested to learn that we have revised our original program with respect to establishing an incorporated Examining Clinic in the City of Milwaukee in connection with our accident and disease prevention efforts. While we still feel our original plan would not have been detrimental to the best interest of the members of your Society, we do not want to proceed with any program that you so seriously object to.

The doctor who gave up his private practice on November 1 to take charge of the incorporated Examining Clinic we planned to organize, was temporarily placed on our payroll pending the adjustment of our problem and shortly thereafter resigned as a full time employee of our Company. At the January 17th, 1933, meeting of our Board of Directors he was appointed Medical Director of our Company. The office of Medical Director was created in our Articles of Incorporation at the time the Company was organized in 1911. Except for a brief period Dr. A. B. Rosenberry served in the capacity of Medical Director from that date until his death.

The duties of our Medical Director have always consisted of the examination of reports in all serious injury cases and consulting with and advising local practitioners treating such injured persons. The Medical Director's salary has always been rather modest since it compensates him for part time attendance to his official duties and he was permitted to engage in private practice.

Our present Medical Director is in direct charge of all medical problems of the Company relating to occupational diseases. He is consulted on cases of this nature not only by the representatives of our company but by physicians and surgeons having in their charge such cases covered under our policies. He prescribes the technique which is to be used in the taking of chest films in silicosis and tuberculosis claims. He reads all such x-ray films and consults in person and by correspondence with the examining physician having such cases in charge for us where necessary. He also prescribes the type of examination and prepares the form which is to be used in connection with such examinations as are made throughout the territory operated in.

Because of the serious hazard involved in dusty trades, our company is interested in having employees of its policyholders examined by our Medical Director who is particularly well qualified to make physical examinations in connection with tuberculosis and silicosis. Our policyholders may

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Amytal has a wide range of usefulness . . . is several times as active as barbital . . . ordinary hypnotic doses produce little or no demonstrable effect on blood pressure and respiration . . . it augments the action of analgesics such as amidopyrine, acetphenetidin, and acetylsalicylic acid.

Prompt Attention Given to Professional Inquiries

Principal Offices and Laboratories, Indianapolis, Indiana

send their employees for examination to our Medical Director or elsewhere so long as the examining physician follows the technique and the basic methods employed and prescribed by our Medical Director.

Just as our policyholders have the privilege of having their employees examined by others so does our Medical Director have the privilege of engaging in private practice. His official duties for our Company will not require full time attention, nor is he obliged to confine his private practice to the examining of employees of our policyholders. He is free to take on such other work as he sees fit.

The need for pre-employment and periodic check-up examinations is now well recognized by both lay and medical men, particularly in the case of employees engaged in dusty trades. Our Company feels that it must insist upon all prospective policyholders with any occupational disease hazards of a dust nature, having their employees examined before our policies become effective. This is necessary in order that any potential liability may be properly charged to the insurance company responsible. In addition, we also feel that periodic check-up examinations of employees in dusty trades is necessary for the preservation of the health of the work and also to avoid the infection of fellow employees by those unfortunates who may have contracted tuberculosis or other infectious disease.

The Medical Director's salary is paid by our Company since his services deal with problems in which all policyholders are interested. The cost of making physical examination by the Medical Director, in his private practice must, however, be borne by those of our policyholders whose employees he examines. This is true also in those cases where our policyholders' employees are examined by some practitioner other than our Medical Director.

It has always been our purpose to honestly and sincerely work in the closest harmony and cooperation with organized medicine and this we shall continue to do.

Yours very truly,

------ --------,

President.

Large Group of Bills Affecting Medical Practice Before Wisconsin Legislature

With the end of February, and the eighth week of the legislative session, more measures were before the legislature affecting medical practice than in any single previous session. Three of these bills were measures of the State Medical Society, one from the State Board of Medical Examiners, one a recommendation of the State Medical Society included in the Governor's Budget Bill, and thirteen were introduced by request of Dr. John J. McGovern. The measures of Dr. McGovern are not sponsored by either the Medical Society of Milwaukee County or the State Medical Society of Wisconsin. There follows a partial list of measures with brief explanatory remarks. Most of these bills have not had the hearing as this issue went to press and further details of their contents will be made known to the membership through legislative bulletins.

Where a bill is labeled "S" it means that it has been introduced in the Senate and must be voted upon there first before it reaches the Assembly. Where a bill is followed by the letter "A" it means that the bill has been introduced in the Assembly and must receive favorable action there before receiving the vote from the Senate.

BILL 45, S

By request of the Wisconsin Optometrist Association. The effect of this bill is to give optometrists the right to use the title "Dr." so long as somewhere in the same advertisement they used the word "optometrist." The bill is now pending in the Senate Committee on Education and Public Welfare. It was opposed by Dr. C. A. Harper, the State Health Officer, on the grounds that such use of the title would tend to mislead the public. The measure was also opposed by the State Medical Society of Wisconsin.

This bill was still in the Senate Committee on Education and Public Welfare on Feb. 27th.

BILL 64, S

This is the Governor's Budget Bill and includes the provision that cost of care of public patients at the Wisconsin General Hospital at Madison shall be a direct charge upon the county sending the patient. A complete copy of the stenographic record of the hearing on this measure before the Joint Committee on Finance has been mailed to every member. Additional copies are available by addressing the office of the State Medical Society. This recommendation of the Governor has the support of the State Medical Society. Senate action is expected the second or third week in March.

BILL 134, S

Introduced by Senator Polakowski, Socialist member of the Senate, provides for compulsory health insurance. This measure will be reported in greater detail at a later date.

In making Wahlgren Optical Company their source of optical prescriptions and supplies, Wisconsin Oculists are dealing with a house which has every qualification for and which is rendering the kind of service that satisfies.

Wahlgren Optical Company

5 S. Wabash Avenue Phone State 4633
CHICAGO, ILLINOIS

An Independent—Never in Competition With You.

THE "SLING" PRINCIPLE OF SUPPORT

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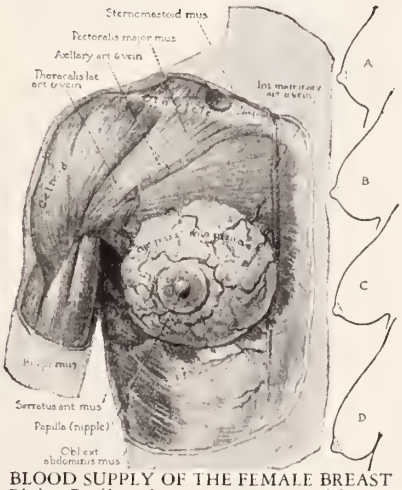
CAMP TRADE MARK

Physiological Supports

Model 5042—For lighter pendulous breast with little or no deposits of fat.

Sagging breasts require support, but never constriction. Pendulous glands and weakened tissues should be lifted to their natural level and relieved of strain, but not subjected to undue cramping or binding. The therapeutic correctness of the "sling" principle employed by S.



BLOOD SUPPLY OF THE FEMALE BREAST
Right—Profiles of common types of breasts from small breast of young girl to pendulous one of older woman.

Model 5030—For medium-size sagging breast; extra re-enforced, pre-shrunk.

H. Camp and Company breast supports is acknowledged by physicians.

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Sold by better surgical and drug houses, and surgical sections, corset departments, of stores. Write for new Physicians' Manual.

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S. H. Camp & Company
Manufacturers
JACKSON, MICHIGAN
Chicago 1056 Merchandise Mart
New York 330 Fifth Ave.
London 252 Regent St. W.

BILL 139, S

By Senator Kelly of Fond du Lac by request. Under the laws of the United States a person of mixed blood is not considered to be white unless the white blood is more than fifty per cent. A Mrs. Kellogg of Fond du Lac County went to India many years ago as a missionary. She married a Brahman while there. The son was educated in England and the United States and graduated from the University of Minnesota Medical School with postgraduate training at Mayos. He is an intern in a Milwaukee hospital at present. The present Wisconsin laws require first citizenship papers as a prerequisite to licensure. By reason of blood, this physician may never be a citizen of the United States and is ineligible to licensure in Wisconsin. The purpose of the bill is to permit his being licensed.

This is a most unusual case and the bill is not opposed by the State Medical Society.

BILL 161, S

By Dr. John J. McGovern of Milwaukee. The apparent intent of the bill is to prohibit itinerant practice of medicine. Actually it will have the effect of throwing the doors wide open. The bill is not favored by the State Medical Society.

BILL 165, S

By Dr. John J. McGovern of Milwaukee. Provides that no governmental unit shall appoint a physician or panel of physicians to treat the sick except the indigent. Provides against the group practice of medicine including clubs, or other associations. Permits a county medical society to assist in a more efficient organization for the treatment and prevention of diseases. This bill is not one authorized by the State Medical Society.

BILL 169, S

By Dr. John J. McGovern of Milwaukee. This is a rather long measure modifying medical practice under the compensation act. It apparently authorizes a physician to send an injured individual to a private hospital upon his own initiative; would permit the injured man free choice of physician and free choice of hospital; if the injured man has no choice of physician or hospital provides that the county medical society shall select a physician for him; it makes the duty of the employer to notify the county medical society immediately after accident of injured and to state the nature of the disability and whether the employee has made a choice; it prohibits the employer or insurance carrier from suggesting or furnishing the name of a physician or a hospital to the injured man. It grants other broad powers to the county medical society to regulate practice under the compensation act, to formulate fee schedules and to determine upon fees in disputes. This bill is not sponsored by the State Medical Society.

BILL 171, S

By Dr. John J. McGovern of Milwaukee. Provides that when an employer under the compensation act desires the examination of an injured employe, the examining physician shall be one provided by the county medical society. This bill is not one sponsored by the State Medical Society.

BILL 172, S

By Dr. John J. McGovern of Milwaukee. Eliminates the exception for the practice of Christian Science under the medical practice act and makes medical treatment mandatory in the case of infectious diseases or where the person is in imminent danger of loss of his life. No religious consolation may be given for any money benefit direct or indirect.

This bill is not one sponsored by the State Medical Society.

BILL 182, S

This bill was introduced by the Committee on Judiciary of the Senate and is a so-called revision bill. Its sole purpose is to make clear the meaning of the present law. No objection to this measure.

BILL 188, S

Would eliminate private practice of medicine at State of Wisconsin General Hospital. This measure will probably not come before the Senate in the immediate future. Members will be advised of further details concerning this bill at a later date.

BILL 207, S

By request of Dr. John J. McGovern of Milwaukee. Changes the composition of the State Board of Medical Examiners from three allopaths, two homeopaths, and two eclectics, and one osteopath to a new Board of seven members without designation as to school.

BILL 256, A

By request of the State Medical Society of Wisconsin. Would add a physician member to the County Health Committee who directs the work of the county nurse of such counties as employ nurses. The physician would have a term of one year and would be selected from a list of three selected by the County Medical Society.

BILL 275, A

By request of the State Medical Society of Wisconsin. Would establish a State Medical Grievance Committee composed of the State Health Officer, the Secretary of the State Board of Medical Examiners, and the Attorney General to investigate or hear complaints upon professional practices which are inimical to the public health. This Committee would have power to warn and reprimand.

Syrup Citrol

The most frequent use of SODIUM CITRATE today is as an expectorant in the early stages of acute bronchitis and tracheitis by increasing the secretion of the mucous gland. It immediately exercises a sedative action on the inflammatory mucous membrane . . . When a cold or cough exists the acid base equilibrium is always impaired.

SYRUP CITROL corrects this basic defect.

Formula

Alcohol 2%

Each fluid ounce represents:

Sodium Citrate . . 40 grs.
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Syrup Ipecac . . . 32 min.
Syrup Tolu q. s. to make 1 oz.

DIRECTIONS

Infants . . . 15 min.
2-3 years . . ½ teaspoonful
4-10 years . 1 teaspoonful
Every three to four hours.

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Write for Booklet or Phone WINNETKA 211

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FOR DIABETES.... BRIGHT'S DISEASE ....HIGH BLOOD PRESSURE...AND ALL DISEASES of NUTRITION

A cheerful, homelike institution, located in one of Milwaukee's finest residential districts. Fully equipped and staffed for modern treatment of all Nutritional Diseases. Seventeen years of successful experience commend it to physician and patient alike. ✦ Write for rates.

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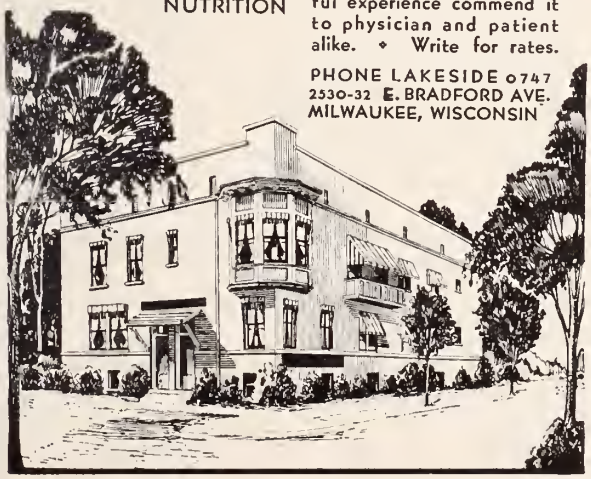

Why use drugs and cultures when there is a far more rational as well as effective way of changing the intestinal flora? Authorities confirm that the normal, protective germs in the colon will only grow on the right kind of carbohydrate "soil."

LACTO-DEXTRIN

(Lactose 73% — Dextrine 25%)

offers the two carbohydrate foods best suited for this purpose in their most effective combination.

Lacto-Dextrin is a food—not a drug—easy to take.

For sample and literature write Dept. SW 3/33

THE BATTLE CREEK FOOD CO.
Battle Creek, Michigan

BATTLE CREEK
LACTO-DEXTRIN

BILL 289, A

By request of the State Board of Medical Examiners. Provides for full citizenship as a prerequisite to licensure in Wisconsin. At present one may be licensed who has his first papers only. This measure approved by the House of Delegates of the State Medical Society.

BILL 294, A

By request of the State Medical Society of Wisconsin. This measure provides that when, in the estimation of the attending physician, an emergency operation is indispensable for the welfare of the indigent, and when authorization cannot be secured from the proper poor relief official because of the time element involved, such immediate hospitalization may be had. In other words the bill authorizes compensation for hospital care only for the emergency operative indigent case when authorization cannot be secured prior to the operation.

Notice must be given the proper officer within twenty-four hours, however, from the time that the case is received by the hospital. Compensation thus provided for the hospital must not exceed that which is reasonably necessary under the circumstances of the emergency.

BILL 306, A

By request of the Waukesha County Board. Provides a lien law for hospital and medical care in accident cases not falling under the Compensation Act.

BILL 370, A

Introduced by request of the Wisconsin Pharmaceutical Association and supported by the State Medical Society. Provides that hypnotic drugs of the barbitrate group shall not be sold except upon prescription.

Hotel Reservations for June Meeting of the American Medical Association at Milwaukee

Dr. H. J. Heeb, Chairman of the Committee on Hotels for the next meeting of the American Medical Association, June 12th to 16th, announces that Milwaukee hotels are ready to accept reservations for the meeting week. Reservations may be made direct with the hotels or preferably by advising Dr. Heeb at 740 N. Second Street of the accommodations desired.

Wisconsin members are asked to use hotels other than those in the downtown district that members of the American Medical Association who come from all parts of the United States may have the use of these central accommodations. The hotels suggested for Wisconsin members and rates follow:

		Without Bath	With Bath	Suites
Abbot Crest				
150 rms. and apts.	Sin.	$1.50–2.00	$2.50–3.00	
1226 W. Wis. Ave.	Dbl.	2.50–3.00	3.50–4.00	$7.00–10.00
Ambassador				
160 rms. and apts.	Sin.		2.50–4.00	
2308 W. Wis. Ave.	Dbl.		3.50–6.00	5.00–12.00
Belmont				
116 rms	Sin.	1.50–2.50	2.50	
751 N. Fourth St.	Dbl.	3.00	3.50–4.00	
Blatz				
80 rms.	Sin.	1.50–2.00	2.00–3.00	
145 E. Wells St.	Dbl.	2.00–2.50	3.00–4.00	4.00– 5.00
Carlton				
100 rms.	Sin.	1.00–1.75	2.00–3.50	
1120 N. Milw. St.	Dbl.	2.00–2.50	2.50–5.00	4.00– 7.00
Colonial				
87 rms. and apts.	Sin.		1.50–3.50	
826 N. Cass St.	Dbl.		2.00–3.50	3.50– 6.00
Globe				
56 rms.	Sin.	1.00–2.00	1.75–2.50	
803 E. Wis. Ave.	Dbl.	1.50–3.00	3.50–5.00	
Juneau				
115 rms.	Sin.	1.00–1.50	1.75–2.50	
807-815 E. Wis. Ave.	Dbl.	1.50–2.50	2.75–3.50	
Knickerbocker				
550 rms. and apts.	Sin.		3.00–4.50	
1028 E. Jun'u Ave.	Dbl.		5.00–8.00	8.00–12.00
La Salle				
165 rms. and apts.	Sin.		2.50–3.00	
729 N. Eleventh St.	Dbl.		3.50–5.00	5.00–10.00
Martin				
200 rms.	Sin.	1.00–1.50	1.50–2.75	
707 E. Wis. Ave.	Dbl.	2.00–2.50	2.50–4.25	
Maryland				
125 rms.	Sin.	1.50–2.00	2.50–3.00	
625 N. Fourth St.	Dbl.	2.00–3.00	4.00–5.00	5.00
Plaza				
200 rms. and apts.	Sin.		2.00–3.00	
1007 N. Cass St.	Dbl.		3.00–4.50	5.00– 7.00
Republican				
200 rms.	Sin.	1.50–2.00	2.00–5.00	
907 N. Third St.	Dbl.	2.50–4.00	3.00–6.00	8.00–15.00
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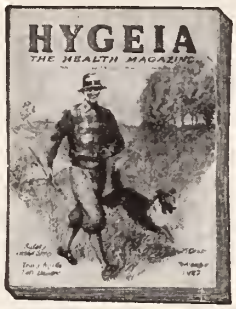

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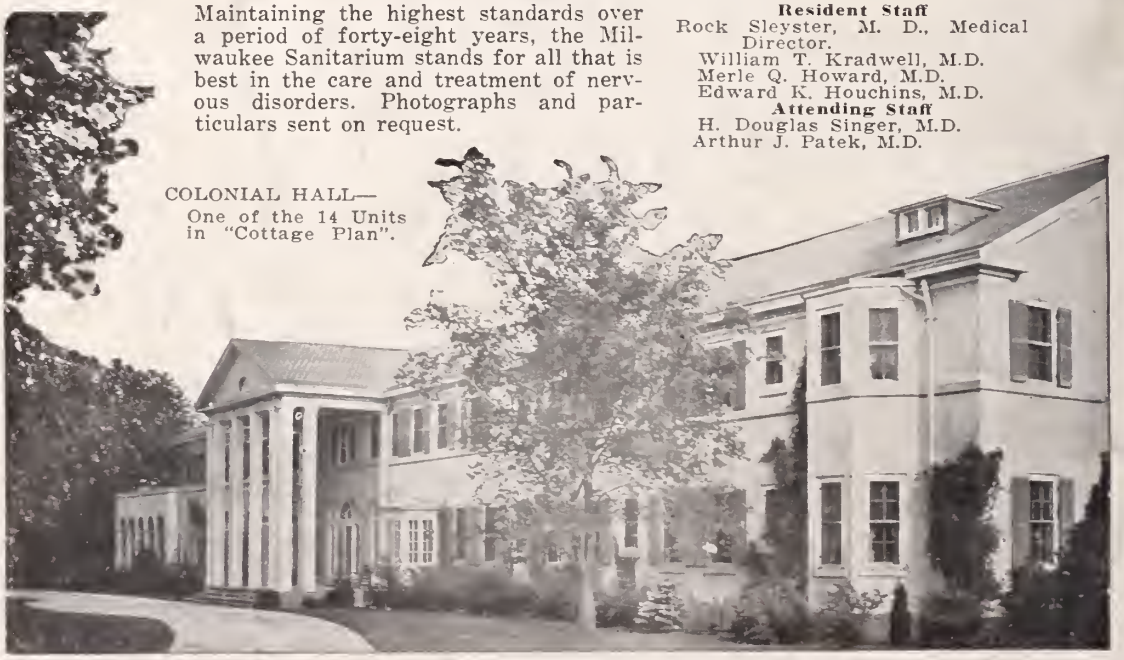

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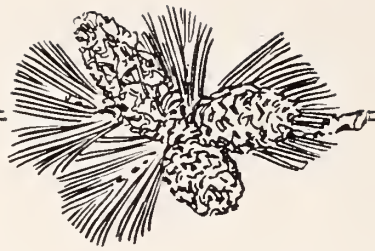

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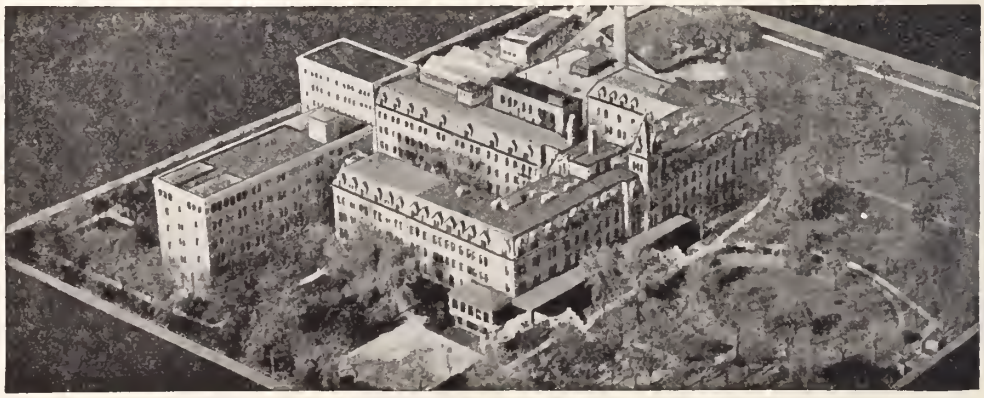

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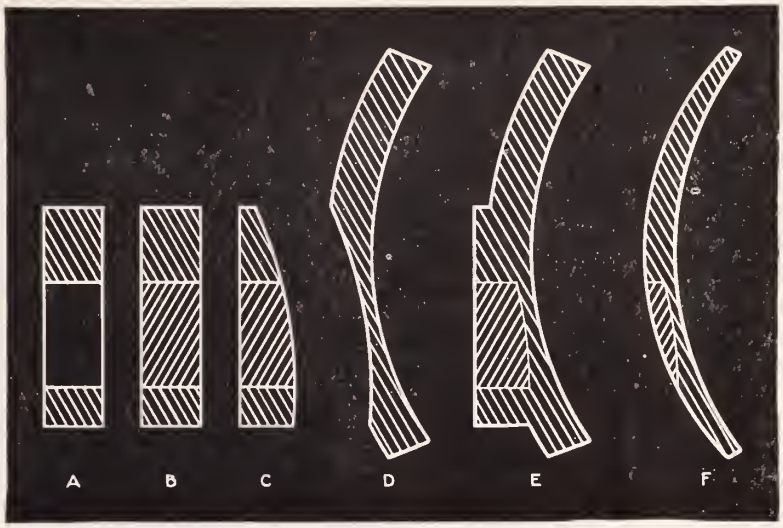

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Pharyngo-Esophageal Diverticulum*

By E. STARR JUDD, M. D.
and
CHARLES W. MAYO, M. D.
Rochester, Minnesota

The successful development of the treatment of pharyngo-esophageal diverticulum is interesting not only in itself, but because it is illustrative of progress in surgery in a comparatively brief span of years. The structure of the esophagus, and its anatomic relationship with vital nerves and blood vessels should fill us with respect for the courage that was necessary to lay the foundation for the present technic in handling this type of case.

ANATOMIC AND PHYSIOLOGIC ASPECTS

The normal esophagus is able to perform the duties of deglutition, but should pathologic change develop, it is sadly lacking in protective mechanisms. The two chief deficiencies are its poor blood supply and the absence of true serosa.[19] Thus, it differs from that portion of the intestinal tract which is below the diaphragm, where the blood supply is good and the reaction to traumatic irritation, as at lines of suture, is taken care of by the protective qualities of the peritoneum and the omentum.

Pharyngo-esophageal diverticulum as a pathologic entity is concerned chiefly with the lower part of the pharnyx and with the cervical portion of the esophagus, especially with the upper third of this portion. Unfortunately, from a technical standpoint, as Saint has shown the upper and middle thirds of the cervical division, and the lower third of the thoracic division, are the poorest in blood supply. He found that the vascularization of the esophagus in the dog closely resembled that in man, as described by Demel. The principal difference is in the lower third of the cervical portion, which, in man, is supplied by three constant branches from the inferior thyroid artery. The first is from the ascending portion of the inferior thyroid artery, the second is from the median bend, and the third from the lower ascending portion, close to the subclavian artery. The dog has no inferior thyroid artery and its thyroid artery corresponds to the superior thyroid artery in man. The upper and middle thirds of the cervical part of the esophagus in man are supplied by branches from the superior thyroid artery, with occasional twigs from the common carotid artery. [18]

In place of true serosa, the outer coat of the esophagus consists of connective tissue, which is continuous with those structures which surround it. The danger of operations concerned with the esophagus is not only the absence of a good protective covering but also the fact that when the organ is loosened in its bed, the cellular planes of the neck are opened and the risk from cellulitis and mediastinitis is increased.

TYPES OF DIVERTICULA

Understanding then, in part at least, the structural and anatomic complications of surgical procedures on the cervical portion of the esophagus, let us consider the matter of pulsion diverticula of the pharnyx, which in the descent of the sac involve this cervical region. These diverticula are hernias, involving mucous membrane and sub-mucosa, which evaginate through the posterior pharyngeal wall, between the upper and lower parts of the cricopharyngeus muscle (Fig. 1). The function of the upper, or oblique, part of this muscle is to seize the bolus of food and force it into the esophagus, whereas the lower, or circular, part acts as a constrictor to that viscus.[7] Incoordina-

* Read at the 90th Anniversary Meeting, State Medical Society, Madison, September, 1931. Revised to publication date.

Fig. 1. Pharyngo-esophageal diverticulum.

tion between these two parts of the same muscle is thought to be a factor in the etiology of diverticula of this region, and the pouch occurs just above the circular fibers, where considerable deposits of intermuscular fat may be seen.

It was formerly asserted that the point of origin lay below the constrictor fibers of the cricopharyngeus muscle, at the point of union between the esophagus and the pharynx, known erroneously as the "Lannier-Hackerman" area. Moynihan discovered that Lannier was really named Laimer, that Hackerman was Karl Haeckermann, and that the area described by them is not concerned with the origin of the usual pharyngo-esophageal diverticulum.

Since these diverticula rarely occur before patients are aged forty-five years it is safe to assume that decreased elasticity of tissue, associated with trauma, may be an additional factor in the etiology of the condition.

Moynihan described two other rarer types of diverticula, one of which is associated with embryonic imperfect development of branchial clefts; a diverticulum of the other type takes origin below the cricopharyngeus muscle, but it is a lateral pouch, sometimes bilateral, and occurs at the weak point in the union between the pharyngeal and esophageal musculature. This point can be located by finding a rather large pad of fat between the lowermost fibers of the cricopharyngeus muscle and fibers of the esophageal muscle which have become detached from their origin on the cricoid cartilage. It is at this point that the recurrent laryngeal nerve passes along, with a branch of the inferior thyroid artery and vein, and a bundle of lymphatic vessels. The etiology of this second type of diverticulum, described by Moynihan, is less definite than that of the diverticula which occur above the constrictor muscle.

Bell, as early as 1816, was of the opinion that pulsion diverticula are of pharyngeal origin. Zenker and Ziemssen proved this opinion to be correct, justifying the name "pharyngo-esophageal" diverticulum as descriptive and correct for such a condition, "pharyngo" signifying the origin and "esophageal" the main involvement. We believe it can be said that primary pharyngo-esophageal diverticula are all of the pulsion type. From the union of the pharyngeal and the esophageal musculature, downward, the traction type of diverticulum also may enter the field. They are easily distinguished from the pulsion variety, for diverticula of the traction type arise, for the most part, from the anterior portion of the esophagus, are most common near the bifurcation of the trachea, are frequently caused by the breaking down of hilar nodes, contain all coats of the esophagus in their covering, and are not of much symptomatic or surgical importance.

SURGICAL TREATMENT

Historic development of operative methods.—In 1767, Ludlow, a surgeon of Bristol, England, reported "A case of obstructed deglutition from praeternatural dilatation of, and bag found in the pharynx." Interestingly enough, the specimen was obtained at necropsy and was preserved in the Hunterian Museum. To Bell, 1816; Rokitansky, 1840, and Zenker and Ziemssen, 1877, we owe much for the advance in diagnosis and pathologic description of the pharyngo-esophageal diverticulum.

The earliest noteworthy surgical assault on the condition was made by Nicolandi in 1877, whose technic was limited to opening the sac and creating an external fistula. Unfortunately, his patient died of pneumonia in six days. Girard stated that Niehans, in 1884, was the first surgeon to perform the operation in one stage. The operation was asserted to have been performed on a patient who also suffered from goiter. This daring surgeon, fifteen days after preliminary thyroidectomy, excised a diverticulum by thermocautery between ligatures. Hemorrhage from the superior thyroid artery, however, carried the patient off on the twenty-fourth day. It remained for von Bergmann, in 1892, to report the first successful extirpation of a diverticulum, although a fistula persisted for several months. The sac was 6 cm. long. Kocher, in the same year, reported two other successful cases.

In 1896, Girard successfully treated two patients by invaginating and obliterating the sac by repeated application of purse-string sutures. This method has the disadvantage, if the sac is large, of forming a polypoid projection which may obstruct the lumen, and which has been known to choke a patient to death by being coughed up and then sucked down the larynx. Bevan, in 1921, modified this procedure by cutting through the sac with clamp and cautery, removing the outer portion and invaginating the inner portion by purse-string sutures.

Surgeons in esophageal work recognized the importance of establishing adequate drainage from the fistula that followed the operation done in one stage. Goldmann, in 1907, struck on the idea of an operation in two stages, the first stage of which had as its objects isolation of the sac and walling off of the operative site by granulation tissue to protect the mediastinum and fascial planes of the neck. In the second stage the sac was extirpated with comparative safety. Murphy is credited with bringing about general acceptance of this operation in America.

Diverticulopexy was first proposed by Schmid in 1912, who, without opening the sac, fixed the bottom of it at a higher level than its neck. His work was done on the cadaver. Hill carried it out surgically, on the human being, in 1918, stitching the fundus to the left side of the inferior constrictor muscle. König, in 1922, stitched it to the hyoid bone with success. Such procedures are commonly used now as the first stage of the two-stage operation.

Present technic.—A number of refinements in technic have been developed since, which have added much to the safety and satisfactory results obtained at present in the surgical treatment of pharyngo-esophageal diverticulum in two stages.

Although most surgeons use an incision which follows down the anterior border of the left sternocleidomastoid muscle, in 1923 C. H. Mayo advocated one in line with the natural crease of the neck which is usually well defined at the age when these diverticula occur. Approximately a third of the incision is behind the anterior border of the sternocleidomastoid muscle, and the skin and platysma muscle are dissected both ways from this line. As in the other incision scarcely any vessels are encountered, and it has the additional feature of leaving a less distinct scar (Fig. 2).

Knife dissection is used practically throughout. Adequate exposure is as important as in any other surgical procedure, and one may find it necessary to ligate the middle thyroid veins which go to the internal jugular vein, and to cut and ligate the inferior thyroid artery, although care must be exercised not to interfere with the circulation from this artery to the esophagus. Lahey usually cuts the omohyoid muscle at the tendinous portion and turns the anterior

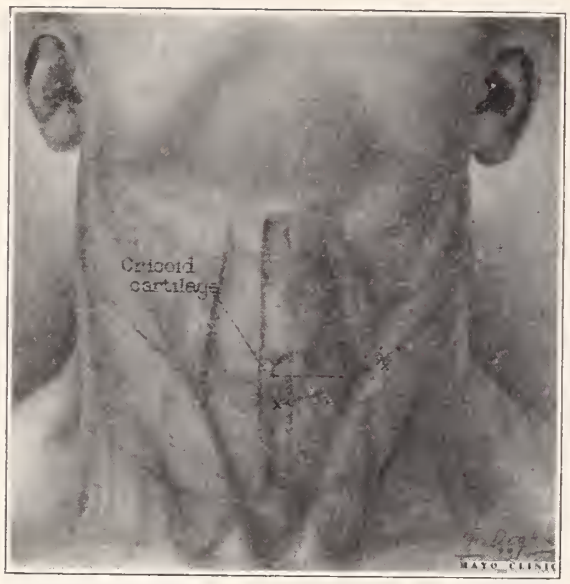

Fig. 2. Drawing showing relation of incision to underlying structure. The incision is made between points X ---- X. These are determined by locating a point on the sternomastoid muscle lateral to the cricoid cartilage. The incision is then extended ¾″ above and 1½″ below this point, following some convenient crease in the neck.

belly forward in order to bring up the thyroid gland more easily.

The sac lies deep and to the left (rarely to the right); the carotid sheath is lateral to it; the thyroid gland and trachea, mesial. It appears between the pretracheal and prevertebral fascial layers, is lighter in color than the surrounding tissue, and has a small plexus of veins over it (Fig. 3). Holding the sac carefully in forceps it is possible to separate it from the tissues in contact with it by sharp dissection. When the sac has been dissected free it is brought out of the upper angle of the incision (if the sac is large enough) and fixed to the skin. In connection with this step there are a few important points; namely, that sutures of fixation do not penetrate the wall of the sac, the fundus is placed higher than the neck of the sac to insure drainage, and there should be no tension on the sac which would tend to displace and distort the esophagus (Fig. 4). Large sacs are more easily dealt with than small ones. If the sac does not reach the outside of the incision after it has been freed, the usual technic is to fix it to some point, such as the prethyroid muscles or the sternocleidomastoid muscle.

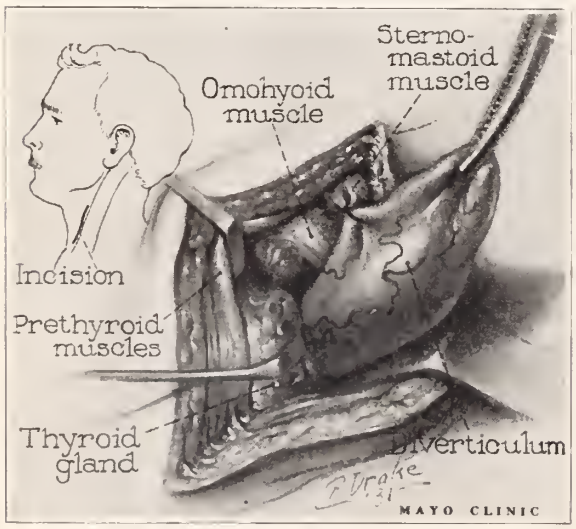

Fig. 3. Diverticulum has been freed and sutured to muscle.

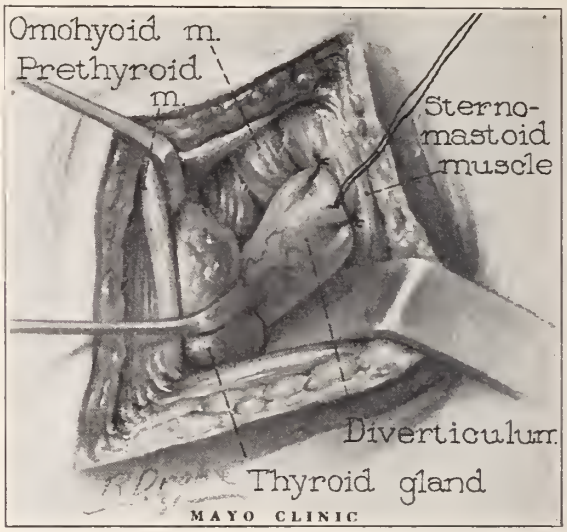

Fig. 4. Small diverticulum has been freed and sutured to muscle.

The second stage is done in approximately ten or twelve days after the first and consists in excision of the sac, blunt separation of the mucous membrane of the remaining stump about down to normal esophageal mucous membrane, and cutting off the excess amount. Lahey places gauze impregnated with ointment of boric acid over this point, fixing it in position.

Should leakage follow, or difficulty in swallowing develop, a small nasal tube or Rehfuss tube, left in place, has been found to be a satisfactory method of dealing with the situation and is generally well tolerated by the patient. Lahey, in 1928, brought out the use of a small tube, inserted and fixed

by purse-string sutures into the fundus of the sac at the end of the first stage of the operation, a procedure which he has found satisfactory in selected cases.

The first case of pharyngo-esophageal diverticulum treated at The Mayo Clinic was seen in 1898.[14] The operation consisted in partial removal of the sac and secondary closure of a fistula which followed. Since that time 254 patients with pharyngo-esophageal diverticulum have come to the clinic and 161 of them have been operated on. In the remaining ninety-three cases, surgery was deemed inadvisable for one reason or another. For a number of years now the operation has been performed principally in two stages, for it has been found to give the most uniformly good results with the least risk to the patient.

DIAGNOSTIC ASPECTS

The matter of diagnosis has been covered frequently and fully by many writers. The severity of the symptoms depends on the size of the sac; there is greater obstruction in the presence of larger sacs, due to pressure on the esophagus, which causes increasing dysphagia. Regurgitation is common, and there is characteristic gurgling on swallowing liquids. Pain, on the other hand, is rare. The importance of the roentgenologic examination should be stressed and also the confirmatory evidence of the condition. Esophagoscopy is not recommended as a routine measure because of the difficulty, associated danger, and sparsity of information obtained even by experienced observers.

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COARCTATION OF AORTA: TEN YEARS' OBSERVATION OF A PATIENT STILL LIVING

M. J. Shapiro, Minneapolis (*Journal A. M. A.*, March 4, 1933) presents the case of a boy whom he has had under observation for ten years, in whom the first diagnosis made was that of early mitral disease, which was soon changed to juvenile hypertension: the correct diagnosis of coarctation of the aorta was not made until nine years later. Rarely is this diagnosis made until adulthood. Many cases are discovered at the postmortem table after a sudden and unexplainable death in an apparently healthy young person.

Principles Governing the Present Day Treatment of Cancer*

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The purpose of this communication is to discuss some of the fundamental clinical, pathological, and biological aspects of cancer which have an important bearing upon the treatment of this disease. In no other medical condition is an intimate knowledge of the natural history of the disease so indispensable as in the treatment of cancer. This is due largely to the fact that cancer constitutes not a single disease but a group of diseases which differ from one another in their clinical manifestations, gross and microscopic appearance, and prognosis. This consideration imposes extreme difficulties in the early recognition and treatment of this group of diseases. As long as surgery remained the sole treatment of cancer, the therapeutic problem revolved about the development of surgical technic which would permit more thorough and complete removal of the disease. The advent of radiation as another therapeutic agent has complicated the treatment of cancer and raised important problems in therapy. Thus, perhaps the most important, practical problem which confronts the cancer therapist today is the question of the precise position which radiation should occupy and the relative merits of radiation and surgery in the treatment of different benign and malignant tumors.

PATHOLOGICAL CONSIDERATIONS

Extreme variations exist in the gross and microscopic structure of tumors affecting different organs and similar differences are exhibited by tumors affecting the same organ. The site of origin or histogenesis of a tumor plays an important part in its future behavior and much information can be elicited from histogenetic classification. It must be recognized, however, that regardless of their site of origin, tumors may alter their character during any stage of their development and assume clinical and pathological characteristics which are not common to them. Thus, a slowly growing and relatively benign tumor may suddenly become highly anaplastic, and widely disseminated, or more rarely, a malignant tumor, for some inexplicable reason and without treatment, ceases to grow and assumes the clinical features of a benign growth.

An intimate knowledge of the pathways of spread of different types of tumor is indispensable in the treatment of cancer. The decision upon the extent of a surgical operation or radium application cannot be correctly made without this information. For example, the interpretation of the nature of enlarged inguinal glands in a patient suffering from an ulcerated neurogenic sarcoma of the leg is not difficult if one is armed with the knowledge that lymph node metastasis from neurogenic sarcoma is almost unknown. A surgical operation for cancer in any part of the body can be executed correctly only after an intimate knowledge of the pathways of spread and modes of dissemination of the particular tumor in question as it is upon these factors that the operation is modelled.

Recent studies upon the relationship between the microscopical structure of tumors and their degree of malignancy and radiosensitivity have demonstrated that more information than the mere question of the presence or absence of carcinoma can be elicited from the microscopical examination of tumors. It should be emphasized here, that numerous difficulties are encountered in attempting to interpret these relationships. Thus, for example, different portions of the same tumor may show entirely different morphological appearances so that examination of a biopsy taken from one part may be misleading; furthermore, biological changes are sometimes not accompanied by corresponding alterations in morphological appearances. In spite of these difficulties, however, it is conservative to state that

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much useful information upon the degree of malignancy and radiosensitivity may be obtained from the microscopical study of tumors.

BIOPSY

The indications, contraindications, and correct technique of biopsies constitute a problem of great practical importance in the diagnosis and treatment of cancer. This problem has passed through several stages. Indiscriminate incisions into non-ulcerated tumors for purposes of biopsy are to be condemned. Increase in activity of tumors with ulceration and secondary infection is a not infrequent complication of cutting into malignant tumors. Following an era in which this practice was very prevalent, active propaganda against these methods resulted in a highly conservative attitude toward the biopsy question. It is the opinion of the writer that the pendulum now has swung too far in the opposite direction and that the correct position lies between the two extremes.

The discovery and development of the endotherm cutting current has introduced an element of safety in the performing of biopsies. The particular advantage of this method is that the specimen may be removed with a minimum of mechanical trauma and consequently less danger of dissemination. The control of hemorrhage, which is more nearly perfect by the endotherm method, lessens the chances of infection in non-ulcerated tumors. Whether the sealing of lymphatics and destruction of tumor cells are additional factors of safety is not absolutely established, but possible.

It may be stated that as a rule a correctly performed biopsy by means of the endotherm loop does not exert any harmful influence upon the patient, and that ulcerated lesions may be subjected to biopsy with reasonable assurance that no harm will be done. The removal of tissue for biopsy from non-ulcerated tumors should be approached with greater caution and performed only upon strict indications.

Whenever it is possible to excise a tumor widely for the purpose of biopsy, this method is to be preferred over the technic of incising the tumor. This problem often arises in the diagnosis of cancer of the breast. When the tumor is very small, a wide excision is the method of choice, but when the tumor is large, it is impossible to perform a wide local excision without cutting across cancer tissue. Under these circumstances it is distinctly preferable to remove a block of tissue from a selected part of the tumor with the endotherm loop.

When a lesion is very small (less than 10 mm. in diameter) it is often best to remove the entire lesion with the endotherm cutting current for microscopical study rather than to incise it. When performing biopsies upon suspected lymph nodes, it is important to select a node whose size, character, and consistency indicates it to contain and represent the disease. The removal of enlarged, inflammatory nodes contiguous to nodes in the seat of the suspected disease may lead to serious errors in diagnosis and treatment.

Malignant tumors which are under tension, in which an incision leads to the release of tension with rapid ulceration, should be subjected to biopsy only on the strictest indications. In general, however, serious errors in diagnosis and treatment may result from failure to perform biopsy and establish the true nature of a lesion. A recent example illustrates this point: A patient presented himself with an extensive, deep-seated tumor mass in the upper part of the thigh. The tumor was limited to the soft parts and gave the clinical appearance of a neurogenic sarcoma. The writer hesitated to perform a biopsy for fear of releasing the tension and causing rapid ulceration of a tumor which still appeared to be encapsulated. The long duration of the mass and the presence of a small lipoma of the back suggested the possibility of a deep-seated lipoma and an incision confirmed the diagnosis and led to its complete removal.

SURGICAL TREATMENT

The surgical treatment of cancer has developed over a period of many years along the line of more and more extensive block dissections of the primary lesion and its local metastases. This principle is best exemplified in the Halstead operation for can-

cer of the breast. The next important advance in cancer surgery was the introduction of the endotherm cutting current. The ultimate position which this development will occupy in the scheme of cancer therapy cannot yet be stated, but it is already evident that the introduction of electrosurgery is a distinct advance in the treatment of cancer.

It appears strange to state that the surgical technic for cancer of the breast which has been employed for so many years remains not standardized so that now after forty years of experience in the Johns Hopkins Hospital with the Halstead operation, an important communication from this clinic has just appeared containing a comprehensive statistical study which appears to indicate that a wider removal of the skin should be practiced than is now commonly performed in this operative procedure. The evidence seems to indicate that a lower percentage of recurrences and a higher survival rate occurred in those cases in which the removal of skin was so wide as to necessitate skin grafting.

The surgery of cancer presents problems which are not usually confronted in general surgery. An inadequate operative procedure for a non-cancerous condition may lend itself to correction by a subsequent operation. An inadequate operation for cancer usually robs the patient of his only chance of cure. A determination of operability in cancer is sometimes exceedingly difficult and a recognition of certain histological types of cancer which are not amenable to surgical procedures is of great importance.

With the exception of cancer of the skin, mucous membrane of the lip, mouth, tongue, tonsil, pharynx and cervix, surgery remains the method of choice in the treatment of operable cancer.

RADIATION TREATMENT

Sufficient clinical and pathological experience has now been accumulated to indicate clearly those lesions which are amenable to radiation and to separate them sharply from those neoplasms which have failed to respond to this therapeutic method.

The outstanding successes of radiation have been accomplished in the treatment of cancer of the skin and mucous membranes of the mouth and cervix. It has now been definitely established that the carcinomata which arise from the epithelium of the skin and lining mucous membrane are radiosensitive. By a radiosensitive tumor is meant one whose cells are sufficiently more sensitive to radiation than the surrounding normal structures so as to permit complete destruction of all the tumor cells and preservation of the tumor bed. Cancers of the skin, lip, tongue, oral mucosa, tonsil, pharynx, larynx and cervix fulfill this qualification and hence are called radiosensitive. Within this group of tumors, however, there are varying degrees of sensitivity. Thus, the more highly differentiated ones are less sensitive than are the more undifferentiated and anaplastic types as, for example, transitional cell carcinoma and lympho-epithelioma.

In contradistinction to this group of radiosensitive tumors, there exists another and unfortunately larger group of radioresistant tumors. They are carcinomata arising in glands such as adenocarcinomata of the stomach, intestine, rectum, body of the uterus, pancreas, kidney and thyroid. Also sarcomata such as osteogenic sarcoma, fibrosarcoma, neurogenic sarcoma and the melanomata.

The causes underlying radiosensitivity and radioresistance are not entirely understood although recent investigations would make it appear that the function of secretion is accompanied by a state of radioresistance; hence, the radioresistance of adenocarcinomata. It has been known for many years that cells, during the process of reproduction, are radiosensitive; hence, the radiosensitivity of highly anaplastic carcinomata.

The treatment of tumors is particularly complex because of the constantly widening indications for radiation in conjunction with surgery. The tumors whose treatment requires surgical interference alone are now in the minority. The use of preoperative and postoperative radiation as in carcinoma of the breast is an example of combined methods of treatment. Another outstanding exam-

ple in which the combined method is used is in the treatment of certain radiosensitive tumors which are inoperable and rendered operable by preoperative radiation. Embryonal mixed tumors of the kidney (Wilms' tumor) is best treated by preoperative radiation followed by nephrectomy. In a recent case a huge and inoperable tumor of this kind was rendered operable by applications of radium and the remains of the tumor were removed by nephrectomy.

Important advances have been made in recent years in the technique of radiation. It is necessary to emphasize that the results are directly related to the precision and accuracy with which the application is made, the proper selection of cases and the adequacy of the dose administered. It is important to deliver the radiation over an optimum interval of time. Too short an application fails to take advantage of the time factor and results in failure to destroy the more radioresistant forms of cancer. Too prolonged an application or repeated applications over widely separated intervals results in the development of a radioimmunity in which the tumor cells fail to respond to subsequent exposures to radiation. An inadequate or otherwise incorrect initial radium application results in a failure which usually cannot be corrected, and most radiation failures are preferably treated a second or third time by surgical or electrosurgical methods.

Removable, highly filtered, platinum needles containing radium element constitute the most efficient means of interstitial radiation. Their adequate filtration (0.5 mm. platinum), the uniform distribution of the radium, the uniform action of the radium element, the fact that no foreign body remains after treatment, and the fact that the irradiation may be prolonged over any desired interval (7 or 8 days) constitute advantages of this technique over the use of radium "seeds".

One of the outstanding advances in the radiotherapy of cancer has recently come from the Curie Institiute of Paris where Coutard has evolved a special technique of prolonged irradiation with which he has accomplished remarkable results in the treatment of cancer of the tonsil, pharynx and larynx with x-rays. A similar technique in which a large quantity of radium (four grams) at a distance is used in the tumor clinic of the Michael Reese Hospital. This method has important advantages over the x-ray technique, the most important of which is the ability to deliver tremendous doses with little deleterious effect upon the general condition of the patient. The severe general reactions noted during intensive x-ray therapy do not occur under radium "bomb" therapy. In a communication before the International Congress of Radiology (1931) Forssell expressed his belief that the future of the radiotherapy of cancer lies in the use of large quantities of radium at a distance in the form of radium "bombs". The results of this method of treatment in the Radiumhemmet have been most encouraging and a recent report from this centre quotes some remarkable results in the treatment of cancer of the tonsil with the radium "bomb".

Numerous factors determine the result that may be expected in the treatment of any given neoplasm. Of these the stage of the disease is perhaps the most important single factor. Early diagnosis therefore assumes an all important role in the cancer problem. The degree of malignancy of the tumor is a most potent factor but unfortunately is not subject to control. The correct choice of the therapeutic method and the prompt, correct and efficient execution of this method, be it surgery, radiation, or the combination, constitutes a factor in the result over which the cancer therapist has control and the further development of which should have a more telling effect upon the mortality from this disease.

PRIMARY TUBERCULOSIS OF THE PERICARDIUM

William P. Thompson, New York (*Journal A. M. A.*, March 4, 1933), presents a review of the twenty-one reported cases of primary tuberculosis of the pericardium and also analyzes seven cases of the disease that have come to necropsy at his hospital. He concludes that the twenty-eight cases of primary tuberculosis of the pericardium, including his seven, present a uniform and characteristic clinical picture. The following points are of considerable diagnostic importance and should force one to consider this diagnosis: the presence in (1) elderly individuals, of (2) cardiac failure, otherwise unexplained, which progresses relentlessly, without ever receding or responding to treatment, to a fatal termination within a few months, and is associated with (3) a persistent, unexplained fever.

Reducing the Cost of Prescribed Drugs*

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The art of pharmacy is one of the oldest in the world. Just when the division of function between physicians and pharmacists was first recognized is not known, but, in early Egypt, 4000 years ago, the function of prescribing and compounding was entrusted to different classes of practitioners.

In the Book of Exodus (30:22–25) is written "Moreover, the Lord spake unto Moses, saying— Take thou also unto thee principal spices, of Myrrh 500 shekels, of Sweet Cinnamon half so much, even two hundred fifty shekels, and of Sweet Calamus, two hundred fifty shekels, and of Cassia five hundred shekels, after the shekels of the Sanctuary, and of Olive Oil, an Hin: And thou shalt make it in an oil of Holy Ointment, an ointment compounded after the art of the apothecary."

An early prescription indeed, written long before the birth of Christ. George Ebers, a famous German Egyptologist, alleges that this was written 60 years before the Hebrew exodus. This ancient manuscript, then, was written when Moses was overseer of the herds of his father-in-law Jethro, the Midianite, on the plains, at the foot of Mount Horeb.

The close relationship between medicine and pharmacy is, perhaps, nowhere better illustrated than in the title "Doctor of Medicine", because Medicine, after all, is the mainstay in the care of the sick. The pharmacist, because of his training, naturally is interested in the physician, and his use of drugs.

The properly trained pharmacist is a specialist in the compounding of medicine; the physician, a specialist in the treatment of disease. The public is best served when each confines himself to the art in which he is especially trained. Drugs are man's readiest weapon in the battle against disease, and his first aid in the search for health. Physicians and pharmacists, therefore, are not competitors, but co-workers in the healing art and neither can serve efficiently without the aid of the other.

Physicians and pharmacists exist, not for themselves, but, for the public welfare; hence, the necessity of much united and concerted work toward public health. The two professions should cooperate more willingly and effectively for the best results. Wherever consistent and intelligent cooperation exists, results are affirmative for both physician and pharmacist, but most especially for the patient. The patient is entitled to this cooperation, and only through it can the physician and pharmacist discharge their respective duties fully and conscientiously.

Among the earliest arrivals in the new world were those who had been trained in pharmacy in the older countries. These immigrants brought with them the customs and practices of the sections from whence they came, and these differed greatly. Among the group of stalwart pioneers who landed from the Mayflower at Plymouth in 1620, were Giles Firmin, the apothecary, and Sam Fuller, the physician.

Uniformity in pharmaceutical practice gradually developed, as the American colonies became more populous, and as travel increased. Later, pharmacy began to change from the European type, just as did the people, and became more individualistic as indigenous drugs and their uses became better known. It is, however, of special interest to learn that during the Revolutionary period in this country, the pharmaceutical activities were sufficiently well organized to establish a pharmaceutical service in the Army, and in the Hospitals, under a directing officer, known as the Apothecary General. The office was established by the Continental Congress, Feb. 27, 1777, upon recommendation of the Medical Committee of Congress.

The drugs and remedies used by the colonial apothecaries in their efforts to stem the tide of disease and plagues, seems unbeliev-

* Presented before 91st Anniversary Meeting, State Medical Society, Milwaukee, September, 1932.

ably inadequate when viewed in the light of modern science. Consider that smallpox had to be encountered without the virus of Jenner. For smallpox, coughs, colds, and other complaints, a mixture of sod. nitrate, antimony sulphide, and a salt of tin, colored red, was the panacea of the day. Muirison's mercurual inoculation for smallpox was in vogue during this period. Poke-berries were employed in the treatment of cancer, grapevine juice was confidently alleged to cause bald heads to bring forth a profuse growth of hair, dogwood flowers were used in dysentery, boneset, in tuberculosis, and chinese stone was a sure cure for rheumatism and gout.

Public safety demands both experience and training in the handling of drugs. The early guilds of apothecaries realized the needs of organized education, and in 1821, while Napoleon was being treated with lemonade and tartar emetic for cancer of the stomach, the first college of Pharmacy was organized in the city of Philadelphia. The year 1821 was indeed replete with events important to pharmacy. Iodine was found in certain brine springs in Germany; Caventou isolated caffeine; Coindel used iodide of potash in the treatment of goitre, for the first time. Not many years after the establishment of the College of Pharmacy in Philadelphia, similar institutions were established in Boston, 1835, New York, 1829, and Baltimore.

On January 1, 1820, a general convention of medical practitioners was called for the creation of a National Pharmacopoeia, and assembled in the Capitol at Washington. Dr. Lyman Spalding completed the editing of the first U. S. P. The work was published Dec. 15, 1820, in both Latin and English. It was created to standardize remedies, doses, and therapeutic actions. It is safe to predict that the work of some of the ablest physicians and pharmacists in the United States is accepted as worthy of use today, by their professional brethren. More than a century of medical knowledge, of pharmaceutical skill, is embodied in the United States Pharmacopoeia, in successive decennial revisions to which the practicing physicians and pharmacists are heirs. The official drugs and preparations (about 1400) are sufficiently varied in therapeutic activity to offer a remedy, meeting the requirement of almost every case. Many palatable and effective new products can be made by combinations of official preparations.

The National Formulary was added in the year 1888, and later, 1905, the "New and Nonofficial Preparations" by the American Medical Association, after they had passed their Council on Pharmacy and Chemistry.

"PATENT MEDICINES"

In the late eighties, the German chemical exploitation was under way. Antifebrin, patented name of acetanilid, Knorr antipyrine, phenacetin, saccharine, aspirin, and many other patented or trade-marked preparations, heavily advertised to the medical profession, marked the passing of the vegetable drug era. American pharmacy and American sick were expoited by, and paid heavy tribute to the German chemical manufacturers, enriching them at the expense of our unfortunate sick. As the patents ran out, American chemists manufactured these remedies and saved American sick untold thousands. A comparison of prices tells its own tale as follows:

Protected Names		*Non-Protected Names*	
Atophen	$2.75 oz.	Cinchophen	$0.40 oz.
Aspirin	.85 oz.	Acetosalicylic Acis	.15 oz.
Diuretin	1.80 oz.	Theobrom. Sod. Salicyl	.30 oz.
Duotal	1.07 oz.	Guaiacol Carbon.	.28 oz.
Luminal	6.20 oz.	Phenobarbital	3.25 oz.
Phenacetin	.63 oz.	Acetphenetidine	.20 oz.
Pyramidon	.82 oz.	Amidopyrine	.44 oz.
Urotropin	.63 oz.	Hexamethylytetramine	.13 oz.
Veronal	3.00 oz.	Barbital	.60 oz.
Argyrol	1.50 oz.	Argento-protein Mitis	.60 oz.

The total cost of an ounce of each of these Protected-name remedies is $18.95, the Non-protected-Chemical names, $6.35, or one-third!

REDUCE THE COST

At present we are enduring a Swiss invasion, copying the German in its intensely exploiting characteristics. You may recognize the "Ciba" label.

May I present another list of protected and non-protected names? It will show you conclusively that, when druggists cease to pay tribute to the proprietary manufacturer on the prescriptions, the patient gets his pre-

scriptions at half price. There are hundreds of trade-marked articles which have been substituted for and are nothing more than the official preparations with an advertised name, modified for the purpose of cheapening the article, seldom to improve the therapeutic action.

Protected Names			*Non-Protected Names*		
Mistol	2 oz.	$0.45	Aromatic Spray, N. F.	4 oz.	$0.20
Peacock's Bromide	8 oz.	.75	Syr. Bromidorum, N. F.	16 oz.	.86
Gardner's Syr. H. I.	pt.	1.40	Syr. H. I. N. F.	pt.	.50
Tyree's Antisep. Pv.	2 oz.	.30	Pulv. Antisep., N. F.	lb.	.50
Resinol Oint.	3½ oz.	.80	Co. Oint. Resinol, N. F.	lb.	1.75
Iodex.	1 oz.	.38	Stainless Iod. Oint.	lb.	1.35
Ovoferrin	11 oz.	.75	Liq. Ferr. et Mang. Pept.	pt.	.60
Listerine	14 oz.	.61	Liq. Antisep., N. F.	pt.	.25
Glycothymoline	14 oz.	.84	Liq. Antisep. Arom., N. F.	pt.	.40
Tongaline	4 oz.	1.50	Elix. Tonga & Salicyl., N. F.	pt.	1.35

Note the quantity and prices.

At this time, a firm is introducing a 1 gr. digitalis leaf, soft massed pill; 25 cost the druggist 45c. Allen's assayed leaf, (highest priced), costs us $1.75 a lb. (7000 grs.) or 40 grs. for 1 cent. Pharmacists will willingly prepare and dispense 25 of these pills for 50c; they show a good profit, and certainly a very welcome saving to your patient. A striking example of the profits of the proprietaries.

One might well ask, why introduce and sponsor some unknown firm's remedies because of an easily-remembered name, or because it is a new chemical imported from abroad, both trade-marked and protected, when the price is three- or four-fold that of equally effective drugs. The interest of these firms is largely mercenary, and, as I have said, they are seeking to supplant some other tried remedy by advertising for profit. The physician prescribing these proprietaries makes of himself a selling agent without remuneration.

Cut the huge cost of medical bills, by prescribing the non-protected names, chemical nomenclature, U. S. P., or National Formulary preparations. This consideration our American sick certainly are entitled to. Foster American art, science and industry.

We have seen many proprietaries come and go. Any drug store shelf will bear mute testimony to the fads in medicine. Hundreds of preparations have been exploited, but few remain in use today. Many, after years of trial in private and hospital practice, have proved to have certain beneficial effects, but, because of their power for evil, have been discontinued.

Coca and cocaine were used as a stimulant in gastric indigestion, in the cachexia, in combating the effect of morphine and alcohol, in asthma, as an aphrodisiac, and as a local anaesthetic. It was thought to be a panacea for all ills and its virtues were extolled as such. Today, even cocaine is supplanted by procaine or butyn, a non-toxic, and non-habit forming drug, and a federal law was passed against its sale, except on physicians' prescriptions.

This recalls the French invasion with Vin Mariani, Coca Lozenges Pate, Santal Midy, Ricard's cacodylates of iron, etc., etc., which many older practitioners may recall.

HABIT FORMING DRUGS

In 1869, Liebrich introduced chloral for its sleep-producing action. It was superseded by urethane, trional, and sulphonal. In 1904 veronal made its appearance. It is effective in moderate doses, and its use today exceeds that of all other hypnotics. Luminal or phenobarbital was a later arrival. Since 1920, new derivatives have been studied, and introduced as superior to barbital. There are about 200 chemical possibilities.

Several states have passed laws prohibiting the sale of this whole chemical group, except on physicians' prescriptions, because of its toxic and habit-forming action. Today we recognize, in the laboratory, its baneful influence, its action on the cells of the brain, liver and kidney. May I recall the twilight sleep and the injection of amytal for the same purpose, and how both have disappeared?

Must we experiment with every new compound or combination marketed? Do not we inherit any medical knowledge from our forefathers? Why not give preference to dependable drugs and medicines that have stood the test of time and application?

If a thing is old, its continuance is evidence of its quality.

Among the drugs that have survived and proved their efficiency are Opium, 283 B.C.;

Morphine, 1803; Cinchona bark, 1665; Quinine, 1820; Nux Vomica, 1540; Strychnine, 1817; Belladonna, 1542; Atropine, 1833; Aloes, 4th. Century B.C.; Squill 283 B.C.; Digitalis, 1775; Ergot, 1747; Strophanthus, 1889; Ma Huang, 3000 B.C.; Ephedrin, 1924, etc., etc.

The 1592 edition of the Cordica Nuremberg Dispensatory mentions American drugs, Sarsaparilla and Sassafras, 1666; jalap; Peru and Tolu balsams; official drugs, all recognized in our pharmacopoeia and still in use today.

Hipprocrates, 460 B.C., used alum, mercury, niter, lime, sulphur, white precipitate, salt, verdigris, but prejudice against their use for internal medication retarded their adoption. Paracelcus, 1526, gave a new impetus to use inorganic drugs internally. Chemistry, which thus far had been subordinate to alchemy, now entered the service of Medicine.

Glauber salts, $Na_2 SO_4$, has been known since 1660. Epsom salts, $MgSO_4$–1695. Chlorate potash, $KCLO_3$, was especially studied by Berthollet, 1786–88. The bromides of ammonia, calcium, potash and soda have been a blessing to humanity. Phosphorus, 1669, and its many compounds, are used in bone and nerve diseases. In 1811 Courtouis recognized iodine as an element. The famous chalk cliffs of Dover, calcium carbonate, enters into the bones, teeth and other tissue, essential to our lives.

Iron implements were used 5000 years ago in Egypt, steel in China, 2550 B.C. Iron occurs in the human body to the extent of 0.004%, medicinally of great importance and a specific in chlorotic anemia. Of the many compounds and mixtures used, and official today, let me quote: Menecbratus, (1 A.D.), invented diachylon plaster, and used it for the same purposes for which it is employed today. Alexander Trallianus, in the 6th century, used colchicum for gout, iron for anemia, rhubarb in liver weakness and dysentery. He introduced hiera picra into medicine as an anthelmintic. Dr. Steer, inventor of opodeldoc, was an English apothecary of the 18th century. Dr. Dover, inventor of Dover's powder, practiced in London in 1711. The originator of Fowler's solution was born in 1736. Seidlitz powders, the prototype of all effervescent laxatives, was patented in London in 1783. Eff. Magn. citrate is official U. S. P. 1850. Mistura Potassium Citrate, 1850. Mistura Glycyrrhizae Composita, Brown mixture, 1850. Linimentum Saponis Camph., 1850. Infusion Digitalis, 1870, same as used by Withering in 1775. Tr. Benzoin Comp., 1870, Ointment Zinc Oxide, 1870. All official in the U. S. P. or N. F., today.

A remedy, the medicinal value of which has been permanently recognized in the United States Pharmacopoeia and National Formulary, is much to be preferred to a new, unproven fad in medicine. Because there is no waste, extravagance, or undue profit in manufacturing, distributing or selling, every dollar your patient pays for a U. S. P. and N. F. preparation brings him a full dollar in return.

SELF-MEDICATION

Again I emphasize that these new remedies are usually brought out for cash-register value. Self-medication crops up, because of the easily-remembered name of the remedy. The patient remembers a catchy name quite as well as the Doctor, reads the prescription, and calls for 4 ozs. of Cheracol, 1 bot. Oviferrin, original package, 1 oz. Scarlet Salve, and the druggist fills the order if it does not conflict with the narcotic law.

Any proprietary which was introduced as an ethical preparation, may find favor with the medical profession; the druggist is offered free goods in four ounce bottles, to be displayed on his show-case, and soon the patient is sold the preparation directly by the pharmacist.

You may have observed that street-cars carry the advertisement of this proprietary "endorsed and prescribed by your physician", which tells the patient that your service is not needed—to save the physician's fee, when troubled with coughs, colds, corns or flat feet.

Next, the department store bargain-counter or "thrift store" cut the price to attract trade, and your patient's reaction is, that the druggist is a robber and you, too, for prescribing a proprietary and charging

your office fee, when the clerk back of the department drug counter can prescribe the same remedy at a saving of from three to five dollars. If the remedy proves of benefit, the name is passed on to the entire family and neighborhood, and you undoubtedly will blame the poor druggist for counter-prescribing. Let me recall the following names to you: Listerine, Aspirin, Glycothymoline, Gude Ferro-Mangan, Fellows Hypophos., Anusol Suppository, B. K. Sal Hepatica, Phenolax, Hinkels Pills, Nujol, Petrolagar, Biosodol, Pyramidon, Atophan Pills, Veronal, Ungentine, Lilly Insulin, Squibb's Mineral Oil, Mistol, Bellans, Pertussin, Resinol, Agarol, Citrocarbonate, Luminol, Allonal, etc., introduced and sponsored by the medical profession, now to be found on the bargain counter of the cut-rate department or thrift store.

Do you remember a nasal spray window display last winter, where the ailing patient is calling up the doctor, and he replies "I always prescribe MISTOL for colds". It was cut-rate priced, and showed how perfectly superfluous you and the druggist have become after you have introduced the Mistol product.

You may now understand why some of your patients do not repeat. The druggist is discredited first, and on second thought, the physician is superfluous.

It frequently seems to me that the physician's materia medica is largely based upon circular information, or manufacturer's agents discourse, rather than upon the National Formulary or U. S. P. The form in which drugs are prepared has an important bearing on the success of the treatment. Some drugs are best administered as pills, as powders, or in liquid form, infusion, tinctures or solutions.. Why not consult with your pharmacist and have him solve your difficulties. This, to me, is the province of the pharmacist. Physicians can greatly help the professionally-minded pharmacist, and themselves, by careful selection of the pharmacist who dispenses their prescriptions.

The measure in which physicians will increase their knowledge of pharmacology, and especially materia medica and dosage, is the measure in which they will formulate their own prescriptions. The more you formulate your own prescription, prescribing what is indicated, the more helpful can the pharmacist become, and he is eager and willing, more especially the professionally-minded pharmacist.

I believe that every physician in his quiet moments realizes that his patient is not best served by the handing out of such tablets that chance to be in his stock closet or by being given a prescription specialty of unknown composition, the "ethical pharmaceutical" of today which becomes the largely advertised "patent medicine" of tomorrow. The thinking physician realizes that the ideal administration of medicine is by means of the carefully thought out prescription, by the prescribing of the hundreds of elegant and effective preparations in the U. S. P. and N. F. Diagnosis is not the only aim of the physician. The patient has a right to demand of the physician the same skill and thought in providing effective remedial agencies as the modern medical practitioner employs in locating the malady.

There are still pharmacies today in which the physician can have full reliance and confidence. Pick your pharmacist! Pharmacists and phycisians together render a constantly growing health service; the interest of the sick is the paramount concern of both professions.

Physicians and pharmacists do not exist for themselves, but for the public welfare. Both are protected by law to insure the utmost for the sick.

DIABETES MORTALITY IN NEW YORK CITY DURING THE THIRTY-YEAR PERIOD 1901–1931

Godias J. Drolet, New York (*Journal A. M. A.*, March 11, 1933), states that in New York City, from 1901 to 1931, the recorded mortality from diabetes has risen from 503 to 1,921; or, from a crude rate of 14.2 per hundred thousand to 27.1, and from a standardized death rate of 17.3 to 27.9. Among females, diabetes mortality has increased more rapidly; the death rate, standardized, having been 16.3 in 1901 and 35.5 in 1931; whereas among males, adjusted similarly, it has changed only from 18.3 to 19.0. Among men past the age of 55, the diabetes death rate in New York City has, however, measurably increased; among women, the rise begins earlier, namely, at 45 years of age; and their death rate has gone up markedly. The population of New York City is almost 30 per cent Jewish, and in this racial group the proportion of diabetic deaths to all other causes exceeds markedly that of the non-Jewish white population of the city. Among the colored races, the death rate has been lower than in the white race, but the same excess among females has been noted in both groups. While a comparative shortage of food during the World War has here too been followed by some diminution of diabetes mortality, the use of insulin since 1923 has been accompanied by only a slight recession, which has been entirely lost since.

Modern Methods in Diagnosis and Treatment of the Common Fungous Diseases of the Skin*

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The wide prevalence of fungous diseases of the skin, commonly called ringworm, and their increasingly rapid dissemination during the past decade have stimulated great interest in their study. However, the complexity of the subject, due to the highly technical aspects of its laboratory phase, has led to much confusion and probably prevented proper correlation of the clinical and laboratory facts in the minds of many physicians. The object of this presentation is to attempt to review briefly our clinical knowledge of the subject and to add to it practical details of laboratory aid in diagnosis which the average physician can employ, as well as to present some new concepts which have proven of practical value. Of the latter, I wish to stress especially the clinical aspects of allergy in fungous diseases and the increasingly important role played by organisms of the monilial and yeast-like types in skin diseases.

Concerning the frequency of the disease, it has been maintained that recognition of rather than the disease itself has increased, but the majority of investigators believe that there is no doubt about its increase, while the changes in social habits of the past fifteen years contributing toward its spread, and the great interest in it shown by public health and school authorities leave little doubt that its increase is real rather than apparent. Various dermatologists have found that it occupies from first to fifth place in frequency in office and dispensary practice, but if the asymptomatic types are considered it is probably now the most common of skin diseases. There is little variation in frequency in the different social strata and it is by no means a disease of poor hygiene. In fact, the individual taking a daily shower in the average clubhouse is probably a better candidate for the disease than the laborer who bathes once or twice weekly at home. Almost any intermediate object coming into contact with the skin of the hands or feet may transmit the disease, new infections developing from the handling of infected objects or walking with bare feet on infected floors, while probably most cases of recurrence result from reinfection from clothing worn during the active stages of the infection and not properly sterilized. A limited number of cases are contracted from animal sources.

The fact that a recent investigation showed pathogenic fungi in scrapings from the toes in 51% of individuals in a group of over one thousand consecutive dispensary patients, of whom only 4.7% came in primarily for ringworm, indicates the large number of asymptomatic cases and carriers in the average community. These figures should also justify the use of prophylactic measures in public showers, gymnasia, and clubs, as well as the continuance of routine prophylactic applications by the patient who has had one or more acute attacks of the disease.

I do not wish to attempt detailed consideration of the classification of the pathogenic fungi responsible for ringworm as this is a subject of great complexity and some confusion; identification of the causative agent in a given case as a fungus of pathogenic characteristics is usually sufficient for practical purposes. However, it is important to know that fungi, monilia, yeasts, and cryptococci may produce clinically similar lesions and it is necessary to examine scrapings and make cultures to differentiate the genus of the organism, while fermentation and agglutination tests must be resorted to if accurate scientific classification is desired in many cases. These latter procedures are of interest only to the mycologist at this time, but the practical aspects of microscopic examination of scrapings and general classification of cultures will be considered further in this paper.

* Presented before 91st Anniversary Meeting, State Medical Society, Milwaukee, September, 1932.

Ringworm is essentially an intertriginous disease with certain exceptions, attacking by preference the webs of the toes, the groins, folds of the breasts and flanks, the umbilicus, and axillae, but is capable of involving also any other part of the cutaneous covering, including even the nails and hair-shafts. The regional distribution of the eruption is governed to some extent by the selective action of the etiologic organism, but certain species have a wide range. For example, a single species may produce exzematoid ringworm of the toes, marginated, scaling patches of the groins and axillae, and invade the nails of the hands and feet (onychomycosis) in the same individual.

COMMON FORM

Of most practical importance is the common ringworm of the feet and hands. Clinically this usually begins as scaling with tendency to superficial fissuring, involving as a rule the third and fourth webs. Itching may or may not be present. The area may then become slightly inflammatory and the peripheral epidermis appears sodden, often showing frank vesiculation at the advancing border, which may extend along the adjacent medial aspects of the toes or downward onto the sole. If the process is unchecked, single and grouped vesicles may begin to appear on other parts of the feet, especially on the anterior portion of the sole, as well as at the instep and along the lateral margin of the foot. The individual vesicle is usually rather deeply placed and more thick walled than those of dermatitis venenata, which the condition may resemble at this stage, and is also usually accompanied by less inflammatory reaction. The vesicles are usually discrete and may have a bluish tint; when coalescent they often produce a honeycombed, sodden area which may be quite tender.

Vesicles may now begin to appear on the hands in certain cases, also small erythemato-papular and sometimes eczematoid patches on the legs and forearms. To properly understand this phenomenon, it is necessary to interject at this point certain facts concerning the biologic reactions of the host. It has long been known in this type of case that, although the foot lesions may show the fungus in enormous numbers, the lesions of the upper extremities are microscopically and culturally negative. It has been assumed that, due to absorption of toxins generated by the fungus, an allergic state was produced, expressing itself clinically in the production of the secondary lesions mentioned. These lesions are known as dermatophytids. Strong credence has also been given to the theory that the secondary lesions have resulted from the blood-borne dissemination of organisms from the original focus, producing lesions but rapidly becoming attenuated and therefore not found in scrapings or culture. While this is possible, subsequent work has demonstrated by patch-tests and intradermal injection of polyvalent extracts of pathogenic fungi that an allergic state actually is produced. The details of this method will be discussed along with other laboratory aids.

The practical importance of realizing the difference between these two types of lesions rests upon the fact that the treatment is modified accordingly.

ECZEMATOID TYPE

The eczematoid type of ringworm usually begins also in the webs of the feet, but instead of becoming vesicular as does the acute form, the condition extends peripherally as an inflammatory, scaling or crusted and exudative patch, sometimes with minute vesicles and even pustules at the margin, and a center showing an inflamed and sodden or denuded epidermis. One or several such patches may appear, and in more chronic cases the entire sole and margins of the feet may be involved, as well as patches on the hands and fingers, genitocrural lesions, and sometimes scattered smaller and more superficial lesions of the trunk and extremities. These lesions are usually not annular as are those of tinea circinata, and are apt to be confused with eczemas of other causes.

Scattered vesicular lesions of the hands, especially of the palms and lateral aspects of the fingers, or marginated eczematoid patches should always indicate careful examination of the feet. This examination may

be protested by the patient on the grounds that no symptoms nor lesions have been noted on those members but, if omitted, the primary focus may be overlooked. If the hand lesions are of toxic origin or so-called dermatophytids, secondary to a focus on the feet even though asymptomatic, failure to treat the foot lesions will result in failure of therapeutic measures confined to the hands. If the hand lesions are due to actual local growth of pathogenic fungi on the hands, then failure to treat the foot lesions leaves an active focus which may prevent involution of the hand lesions through repeated reinfection from the feet.

It is also advisable to examine the groins in all cases as asymptomatic eruptions of tinea cruris are often completely overlooked by the patient, and the same may apply to axillary lesions.

DIFFERENTIAL DIAGNOSIS

Differential diagnosis usually offers little difficulty in cases involving the feet, as the organisms may be found with ease in most cases with the exception of very chronic eczematoid types which have been subjected to much therapy. Those cases presenting hand lesions with no lesions of the feet or lesions there of such insignificance as to indicate no connection, may be difficult to differentiate. In these cases examination of scrapings under the microscope and cultures should be resorted to. If these are negative, diagnosis must be established upon clinical features alone. The vesicular type may be closely imitated by dermatitis venenata, such as may result from poison ivy or other irritating contacts, but in dermatitis venenata the vesicles are apt to be more closely studded, more superficial, in more irregular and often linear patches and, if extensive, accompanied by more inflammation and edema.

The eczematoid type may closely resemble eczemas of either internal or external causes. In the former case, presence of typical lesions elsewhere and a careful history indicating the true etiology may be of assistance. In the latter, careful consideration of occupational factors may offer a solution. Many chronic eczemas of industrial origin, in the housewife as well as in the laborer or mechanic, may bear more than a superficial resemblance to dermatophytosis. It must also be borne in mind that cases originating as dermatophytosis of the hands undergo metamorphosis through the effects of external irritative factors, usually occupational, finally presenting themselves as cases of eczematoid dermatitis of indeterminate origin. In this type, provided present sources of external irritation are excluded, a therapeutic test cautiously carried out may be of great value.

Rarely, psoriasis of the palms and soles, and lesions of secondary and even tertiary syphilis may resemble closely the more chronic scaling and keratotic forms of palmar and plantar dermatophytosis.

Tinea circinata is far less common than the types of ringworm just described, is usually more acute, and apt to involve several members of a family simultaneously. This type of lesion is likely to be acquired from house pets, especially the cat. In this condition, the annular form of the lesion is apt to suggest the diagnosis, and it is this type of lesion that leads to confusion with impetigo contagiosa. Differential diagnosis can be established by the fact that the impetigo lesion usually has a clear center or a superficial easily separated central crust with a peripheral, annular, very superficial bulla, the roof of which can be easily stripped off, leaving an exudative, smooth, erythematous base, while the annular lesion of tinea circinata shows central inflammation and scaling with peripheral minute, closely studded vesicles, or pustules.

Tinea barbae is usually encountered in those in contact with cattle or in workers with hides and as such sometimes is a compensable disease. It is extremely liable to produce deeply suppurating granulomatous lesions, known as kerion celsi. These may become very extensive with septic absorption, fever, and malaise and the condition may be accompanied by trichophytids, or lesions analogous to dermatophytids, but produced by the trichophyton group of organisms. External applications alone are often unsatisfactory in treating this condition.

Fortunately, tinea capitis is not common in this country except in large city clinics or in institutions, and does not ordinarily

constitute a problem in private practice. The same may be said of favus, which is a great rarity. Tinea versicolor is much more common, and may easily be recognized by its location over the upper trunk, its buff or fawn color, and the almost imperceptible fine branny scaling.

Clinical consideration of the monilia and yeast infections of the skin has been rather meagre until very recent years. It is now becoming very widely appreciated among dermatologists that this group of organisms may produce a wide clinical variety of lesions. These include such diverse pictures as erosive lesions of the webs of the hands and feet, intertriginous eczemas, both dry and moist, of all flexural regions, especially the genitocrural, mammary, and axillary folds, onychomycosis and paronychia of chronic type, pruritus ani and vulvae, lesions of the face, neck, and trunk resembling seborrhoeic dermatitis, perlèche, stomatitis, and glossitis. It has also been conclusively proved that this group of organisms may produce moniliids, or secondary toxic lesions due to the production of an allergic state resulting from absorption of toxins elaborated by the monilial organism. Differential diagnosis, because of the wide diversity of the clinical lesions produced by this group of organisms, must rest upon identification of the organism in scraping or culture. The oidium albicans is by far the most common offender of this group and is quite easily identified by cultures. Any of the above types of lesion which have no other assignable cause and do not respond to simple measures should be investigated for these organisms. Intertrigos and eczemas formerly thought to be due to irritation of perspiration or metabolic disturbances are now often recognized as monilial dermatitis.

LABORATORY AIDS

The most easily applicable laboratory examination for fungi lies in direct microscopic study of the infected skin. This material should be taken from the roofs of fresh vesicles if present, obtained by elevating the roof of the vesicle with a forceps and clipping it off with scissors or knife. If vesicles are absent, scales from the advancing borders of the youngest and most active appearing lesions should be selected. It is advisable to take specimens from lesions in different locations, and to examine specimens from the hands and feet separately. The selected material is then placed upon a slide and a small amount of 20% potassium hydroxide solution is added. A cover-slip is then applied. With the more dilute solution of alkali, especially if the material is thick and dry, it may be necessary to allow several hours to elapse before the specimen can be satisfactorily examined and even with the concentrated solution it may be necessary for it to stand over night before passing final opinion. When the epidermis has been softened sufficiently to press it out flat the fungus, if present, may be identified as a highly refractile, often slightly bluish, branched, threadlike structure, often seen to be passing in and out between the epidermal cells. The thickness, length and degree of branching of the filaments or hyphae vary greatly with different species, and spores may or may not be discernible. In cases of suspected tinea barbae or capitis the hairs themselves should be extracted and subjected to the same type of examination. In these types the shafts may be covered or actually invaded and almost replaced by dense growths of the organisms. In cases due to monilia and yeasts hyphae may be entirely absent and, if present, will probably be of irregular length and shape while the diagnosis must rest upon the actual finding of budding yeast cells.

Use of the cultural method as a practical aid in the diagnosis of ringworm is somewhat more difficult than the direct method, but can be done as an office procedure. Most of the pathogenic fungi do not grow well nor develop characteristic growth on the ordinary media used for bacteria, hence the use of media as originally outlined by Sabouraud and made with crude ingredients is essential to good results. It must be borne in mind that positive cultures may be obtained following negative direct examinations, and vice versa, and there are some clinically typical cases of fungous disease where the organism cannot be detected by either method. The discussion of the various types of patho-

genic fungi has no place in a paper of this length, but a few generalities should be kept in mind. The material for the culture should be selected as for the direct examination. Treatment of the specimen for 30 minutes in 70% alcohol to inhibit the growth of bacteria is advocated by some workers. The material should be planted on the media with the technic used for any ordinary culture. Growth appearing within 72 hours is likely to be due to contaminating saprophytic molds, which are also likely to grow very rapidly with much aerial growth, and to show considerable color of varying shades, usually greens, browns and black. The pathogenic mold usually has a longer incubation period and may appear after even 4–6 weeks; the culture enlarges slowly, and in most forms is snowy white, although colored forms are found occasionally in the common forms of ringworm. The surface of the growth may be fine, downy and smooth or may be thrown into folds depending upon the species, but the growth is usually much slower and with fewer aerial forms than in the saprophytic types. Rapid mutations in growth are also lacking in the pathogenic forms. Culture of the monilial types of eruptions produces growth more quickly than in the case of the hyphomycetes, and is distinguished by the smooth, glistening, moist surface of the growth, of ivory white color in the case of oidium albicans, the commonest offender. On certain special media, these types may also produce hyphae and develop a powdery surface due to aerial growth.

The third type of laboratory aid in the diagnosis of ringworm is of recent origin and is not yet in general use. This method, mentioned above, is similar in its application and rationale to the tuberculin test. A polyvalent extract made from a variety of the pathogenic molds is injected in given dosage into the epidermis. This extract called "trichophytin," in infected individuals produces a wide zone of erythema within 24 hours when injected in dosage of 0.1 cc. of a 1–50 dilution. While experimental work thus far indicates that the method has certain limitations, it is of definite use and is more reliable than a patch test with the same substance. Trichophytin is also used therapeutically, but its use must be cautious as severe reactions may occur. Through the experiments done with this substance it is now obvious that fungous infections of the skin, in addition to producing local inflammatory reactions, may produce a profound state of allergy to the toxins which they elaborate in the skin of the host, and are responsible for the development of dermatophytids, or toxic lesions at a distance from the original active focus of infection produced through dissemination of the elaborated toxin to which the host has become allergic.

THERAPEUTIC CONSIDERATIONS

The therapy of ringworm infections is the center of much popular interest at this time due largely to commercial interest in the matter. As in the case of most widely prevalent diseases which vary greatly in type and severity, the proprietary preparations whose use is urged upon the physician by their vendors are for the most part notoriously unsatisfactory. As a class these fungicidal preparations are often too active chemically, adding a dermatitis venenata to the troubles of the already harassed patient, and in some instances probably further lower the local resistance of the skin of the host to the invading organism. It must be borne in mind at the start that, as is obvious from the wide variance in clinical type, location, and degree of inflammation met with in different cases of the disease, no panaceas can exist which are applicable to all cases. With this in mind, therapeutic measures should be selected which, while as active as possible in inhibiting growth of the organism and destroying it if possible, will also not irritate the skin of the host and thereby lower its vitality. It is a useful maxim that in the vesicular forms it is usually unsatisfactory to use ointments; the potassium permanganate soak is very useful at this stage and, combined with local applications of an evaporating and astringent lotion such as a weak aluminum acetate solution or one of dilute lead subacetate, will result in disappearance of the vesicular lesions in a short time. The larger vesicles of the feet may

be incised and a weak silver nitrate solution or tincture of iodine applied to their bases.

When the vesicles have dried, lotions may be discontinued but through its anhydrotic effect the continued use of the potassium permanganate soak undoubtedly changes the soil in a manner unfavorable to the growth of the organism in most cases. Ointments may now be used, but the formula should be varied with the needs of the individual case. To begin with, a weak ointment of the Whitfield type is usually satisfactory, increasing the strength of the active ingredients as it becomes apparent that the patient's skin is tolerant of the mixture. To save the patient expense, it is practical to prescribe a preparation of maximum concentration at the start with instructions to the patient to dilute the mixture with vaseline at first, gradually diluting less and less as the lesions involute and the skin shows no evidence of irritation. Variations in the Whitfield type of ointment of 2–6% of salicylic acid and 4–12% of benzoic acid may be used at different stages and in different cases, while the addition of precipitated sulphur to the ointment is often useful as well. Experimental chemotherapeutic studies have demonstrated the value of the essential oils as fungicides but they are often found to be irritating and must be used with caution. Iodine likewise is beneficial, but only in the metallic form and if used repeatedly the skin must be carefully observed for evidence of irritation. In the test-tube boric acid and salicylic acid show surprising fungistatic properties and, while usually incorporated for its keratolytic effect, it is probable that salicylic acid acts in the skin as a fungicide to some extent. In the same way, boric acid soaks are often substituted for potassium permanganate with good results.

Of the physical therapeutic measures, ultra-violet light exposures properly administered are of value in selected cases, especially in the more superficial forms of tinea circinata and tinea versicolor The x-ray is likewise helpful in certain chronic infiltrated and dully inflammatory cases but it must be borne in mind that the x-ray has no fungicidal effect whatever, and is probably useful mainly in promoting the absorption of infiltrate and inhibiting hyperidrosis. It must also be even more strongly borne in mind that ringworm is a chronic and recurrent disease and that prolonged and injudicious use of the x-ray, especially if the dosage is not exact, is apt to lead ultimately to damage, such as atrophy, telangiectasia and even ulceration. It is not uncommon to see cases of x-ray atrophy resulting from the improper use of x-rays with the ringworm infection for which the treatment was given still active in the atrophic areas. X-rays are especially useful in the deeply indurated forms of tinea barbae and in kerion celsi, and are sometimes utilized for the purpose of epilation in tinea capitis. This procedure should never be attempted except by an expert roentgenologist or dermatologist with special training in roentgentherapy and with a carefully calibrated apparatus.

Consideration must also be given to the geography of the condition in the selection of topical applications. For example, an ointment of the Whitfield type suitable to an eczematoid ringworm of the feet may produce a violent dermatitis in the groin or axilla. In these areas mild mixtures of salicylic acid, sulphur, and tar may be extremely effective.

Even after the active condition has been entirely cleared so far as visible pathology is concerned, thought must be given to the prevention of reactivation or reinfection. Infected material such as the shoes and stockings may be sterilized with a formaldehyde candle, which may also be used for bedroom or bathroom rugs. The frequent use of a 5–10% sodium thiosulphate or a 0.1–0.5% sodium hypochlorite solution foot-bath may also be used as a prophylactic measure in the home, school, or club alike. Often a weekly or bi-weekly application of a mild Whitfield type of ointment will effectively control a latent infection or prevent reinfection in a cured case.

The seasonal variation in ringworm activity warrants the use of routine prophylactic measures in any individual who has once had the disease in an active form at least during the spring and summer months.

From our present knowledge of the disease, it is obvious that the more widespread use of prophylactic measures and careful consideration of the individual case by the physician are needed if this troublesome disease is to be satisfactorily controlled.

The Significance of Renal and Ureteral Pain*

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Pain, of some type, is probably the most common symptom of surgical renal or ureteral disease. It may be the only symptom, or occur in conjunction with other symptoms. The character of the pain varies greatly in intensity and type, both of which factors unfortunately are not prone to divulge exact information concerning the nature of the degree of the disease present, but too frequently directs attention to some adjacent or even distant healthy structure.

For practical purposes, upper urinary tract pain may be considered of four distinct types: (1) the acute colicky type with a tendency toward radiation downward along the course of the ureter, (2) the deep boring type confined to the renal region, (3) the obscure, indefinite type of upper quadrant distress and, (4) the type definitely referred to other structures. The first two types are at once usually presumed to be caused by renal or ureteral disease, while the last two types too frequently lead to the diagnosis of some extra renal or ureteral disease. A single outstanding characteristic of all types of upper uninary tract pain is the marked tendency to be intermittent. To be sure, this feature is not always present in every patient, or even in every disease, but taking all upper urinary tract diseases as a group, where pain is a prominent symptom, this tendency is a prominent feature.

At this point, it would seem practical to recall that the kidney and ureter receive their efferent innervation entirely from the autonomic nervous system (sympathetic nervous system) : that functional division of the nervous system which supplies viscera and smooth musculature with efferent innervation. It consists of an aggregation of ganglia, nerves and plexuses and must not be too sharply separated from the cerebrospinal nervous system, since it contains great numbers of fibers which run to and from the brain and the spinal cord.

The nerve supply of the kidney is derived directly from the renal plexus which extends from the aortic plexus along the renal artery to the hilum of the kidney. It is made up mainly of branches from the coeliac ganglion and fibers from the aortic plexus. It is also joined by the lowest splanchnic nerve and communicating branches from the adrenal plexus. Vagus branches are known to be present in some but not in all cases. Clinical evidence seems to indicate that the efferent fibres supplying the kidney are derived mainly from the tenth, eleventh and twelfth thoracic nerves (Kuntz).

The nerves which enter the kidney from the renal plexus accompany the renal artery and its branches. Even after the arteries enter the parenchyma, nerve fibers may still be observed along their walls even to the smallest arterioles. Afferent nerve fibre terminations have also been described in the kidney especially in the musculature of the kidney pelvis, renal vessels and the renal capsule (Renner).

In a similar way the ureter is supplied by nerves from the renal, spermatic (ovarian) and hypogastric plexuses. The lower third also receives branches from the vesical plexus. The afferent fibers supplying the ureter are components of the eleventh and twelfth thoracic and the first lumbar nerves.

The kidney and ureter, like other visceral organs, may be cut, torn or otherwise injured without causing any sensation. The renal pelvis, however, seems to be sensitive under certain conditions. Although mere contact results in no sensations, contact of this structure with heat or cold gives rise to pain. According to Mueller, pain sensibility seems to be a peculiar property of the renal pelvis. Renal pain probably arises in

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this part of the organ in the majority of cases. Traction on the kidney also gives rise to pain, due in large measure to the pull on the renal vessels and the parietal peritoneum; this latter structure being profusely supplied with afferent spinal nerve fibers on its external surface.

Recent experimental and clinical observations have demonstrated that disturbances in the kidney, ureter and other internal organs may give rise to afferent impulses which are conveyed to the central nervous system through the visceral afferent components of the spinal nerves and give rise to painful sensations which are referable to the organ in which the stimulus arises.

According to Mackenzie, pain may be elicited in the kidney or ureter and other viscera chiefly in the response to vital processes, such as the contraction of smooth muscle. Mechanical stimulation of smooth muscle causes no pain, nor does the physiological contraction of this muscle, but when stimulated to violent or spastic contraction, or under circumstances when the blood supply of the muscle is greatly diminished, the contraction of the smooth muscle gives rise to pain. Analysis of the data bearing on visceral sensations clearly shows that the stimulus always involves contraction or hypertension of the smooth musculature of the viscus itself or the blood vessels through which it is supplied. Just as hypertension or spastic contraction of the skeletal muscles produces somatic pain, hypertension or spastic contraction of smooth muscle gives rise to visceral pain (Kuntz).

Pathologic conditions of the kidney and ureter commonly cause pain. In some conditions the pain is due, at least in part, to traction caused by shifting of the position of the organ. In cases of renal enlargement, the sensory nerves in the adjacent parietal peritoneum may be stimulated by pressure, a condition considered by some authors as one of the major causes of renal pain. Rapid distention of the renal capsule is also regarded as a factor in producing painful sensations. All are familiar with the common occurrence of pain in the remaining kidney, for a considerable time, following removal of its mate, probably caused by capsule distention incidental to compensatory enlargement; similarly pain may be localized to the normal kidney while its symptomless mate is rapidly undergoing destruction of function by disease.

Gubergritz and Itschenko have demonstrated the production of painful sensations by distention of the renal pelvis with water, but, after section of the nerves along the renal vessels had been made, no such painful sensations could be elicited. They concluded that the afferent impulses involved are conducted through the renal plexus and reach the spinal cord through the splanchnic nerves. They agree that under certain local conditions, pain of renal origin may be produced by stimulation of the sensory nerves of the adjacent parietal peritoneum, but in general it may be assumed that impulses concerned in the production of renal pain are mediated through the visceral afferent fibers which traverse the renal plexus.

It is a common observation to note pain in an area other than that which is the site of its origin. Head has shown that these so-called referred pains are always localized in the same cord segments, through which the viscus in question is also supplied. These referred sensations are not always distinctly painful but may produce an area of tenderness or hyperalgesia in the corresponding muscular and skin area. It is important to constantly be aware of the fact that these surface sensations may exist in the absence of deep visceral pain. The common occurrence of epigastric pain caused by renal lesions, especially stone in the pelvis, is a good example of this phenomenon, since the referred sensation may be the only symptom or it may be associated with pain definitely localized to the offending structure. This particular painful sensation in the epigastrium, while definitely localized as to surface area by the patient, cannot be localized as to depth either clinically or by the patient with any degree of accuracy although the sensation arises in the skin and muscle of the corresponding renal segment. Testicular pain associated with stone in the lower ureter might well be mentioned here and the point emphasized that ureteral colic need not necessarily be a part of the clinical pic-

ture. Impacted low ureteral stone may cause corresponding unilateral testicular pain as its only manifestation. Ryle has concluded that any ureteral lesion which produces inflammation or ulceration of the ureteral mucosa may produce testicular pain.

While protection muscular rigidity associated with acute inflammatory renal lesions may in part be voluntary, it may be readily produced by referred impulses to the overlying muscles. No doubt both factors are jointly responsible in most instances. In a similar way, an explanation is apparent of the common observation of quite accurate localization of a calculus in the ureter, when not associated with back pressure renal pain. Here again the actual seat of the pain is superficial, but too frequently diagnosed as intra-abdominal as evidenced by the number of unnecessary intra-abdominal operations in this and other ureteral diseases.

Time does not permit discussion of renal pain of vascular origin, other than to state that degenerative lesions of arteries produces local pain, mainly caused by spastic contraction of the musculature of the vessels, although marked vascular distention causes pain due to pressure on the periarterial nerve plexuses and also to renal capsule distention.

SUMMARY

From this discussion it should be emphasized that the kidney and ureter are innervated efferently by the autonomic nervous system but is generally conceded that afferent fibres are present in the renal pelvis, renal capsule and the blood vessels. Therefore any pain of renal origin originates from these parts, keeping in mind the possibility of painful sensations due to renal torsion, traction of the main vessels and pressure on the external surface of the adjacent parietal peritoneum. Abnormal impulses from the renal pelvis, ureter, renal capsule or blood vessels under certain unknown and little understood conditions may eventually be referred to some superficial area supplied by spinal nerves from the corresponding cord segment. Any condition which causes renal enlargement with rapid distention of the capsule may cause pain, likewise pelvic distention, or any intra-pelvic condition which causes irritation and subsequent spastic contractions of the pelvic musculature may result in painful sensations. Physiologic ureteral peristalsis produces no sensation but any condition producing abnormal contractions results in pain of a radiating type along the course of the ureter. It is quite generally understood that this type of radiating pain is only the result of the downward passage of some foreign substance such as stone, clots or inflammatory or neoplastic debris, but other local pathologic processes may start these spasmodic ureteral contractions with similar clinical manifestations. Such symptoms, while not common, may result from ureteritis, ureteral kinks, strictures, or extra ureteral pressure sufficient to produce partial obstruction.

It is apparent, therefore, that our search for the cause of ureteral colic should not cease, in all instances, with negative roentgen ray and urine studies.

Some of these points of clinical interest may be brought out more clearly by citation of representative clinical cases.

Developments in Plastic Surgery of the Face and Neck*

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For many years certain principles have been applied in reconstructive surgery of the face and neck, but within the last thirty years definite advances have been made. It is now generally conceded that in this type of surgery a great deal of patience is required, both by the surgeon and the patient. Careful preoperative study of each case is essential, so that a definite plan may be formulated for the various stages of treatment. Results in cases with marked deformity appear quite dramatic; they are accomplished only by the greatest care in the

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handling of tissues, and by repeated and exacting operations carried out over a considerable period, with the most painstaking postoperative care. Perfecting of methods for the transplantation of thin and thick free skin grafts, the use of pedicled flaps, fat, fascia, cartilage, and bone, has aided greatly in the results.

SKIN GRAFTING

Thiersch grafts are used about the face and mouth in correcting ectropion of the eyelids, and relining the sulcus between the cheek and the jaws. Esser introduced the use of Thiersch grafts with dental compound in replacing scarred tissue about the face, such as the lower eyelid, and in forming the sulcus between the lips, cheeks and jaws. This was a distinct advance, as by means of a dental compound, even pressure is applied to the Thiersch graft and the number of takes were high. The skin grafts are usually taken from inside the upper part of the arm or the leg. The area must be held flat in order to get a smooth surface. This is usually done by the pressure of a flat piece of wood at each end of the area, thus holding the skin under tension. A heavy, sharp razor covered with vaseline is used to cut the graft and in this way large even grafts may be obtained. The Thiersch grafts surround the dental compound with raw surface out. I have applied the same method, using full-thickness skin grafts instead of Thiersch grafts, and found it very satisfactory. The dental compound is removed in about ten days and replaced with a piece of vulcanite attached to the teeth to fill in the sulcus.

The use of full-thickness skin grafts requires very careful technic, and on this the result is directly dependent. Usually a general anesthetic is preferable to a local anesthetic, on account of the hemostasis associated with the latter. The full-thickness grafts are used preferably in clean wounds. The area to be grafted must be freed from fat as much as possible, and must be dry. To insure a dry bed, a barber's warm air blower or stryphnin gauze are valuable aids. The vessels may be pinched off with forceps and hot sponges may be used. If split silk rather than catgut is used for tying off vessels there will be less foreign material in the wound.

The graft may be taken from inside the upper part of the arm, the leg, or the abdomen, depending on the size required. The skin inside the upper part of the arm is thinner and affords an excellent graft. A pattern is cut, using thin lead foil or rubber tissue. The graft is outlined about the size of the area to be grafted, so that the skin will be on even tension. An assistant takes the graft while the area to be grafted is being made as dry as possible. The graft is best excised by a sharp scalpel, as brought out by Davis [5] who has proved experimentally that if the fat is removed with the skin and then removed with scissors, the result is not as good as if a clean excision is made. The grafts should be accurately sutured in place by interrupted sutures, usually dermal. Mattress sutures are first placed, in order to make a wide approximation of the margins.

Various methods of dressing have been advocated. Davis [4] recommends silver foil and dry gauze. Blair [1] uses a sea sponge for pressure, on top of zeroform ointment and gauze. I have used gauze pressure applied with a thin vaseline dressing to keep the gauze from sticking when it is removed from the grafts. The amount of pressure to exert is decided by experience.

In The Mayo Clinic the full-thickness skin grafts have been used about the face in areas in which it is possible to secure firm pressure after operation; such as filling the defect that occurs following excision of scarred tissue after removal of a low-grade epithelioma in cases in which plastic closure was not possible. It may also be used in correcting ectropion of the eyelids, and in lining the distal end of a pedicled flap to obtain a double epithelialized flap. It should be used in lining a pedicled flap in total rhinoplasty, or in lining a flap to reconstruct the full thickness of the cheek or lower lip. It may be used in replacing large, pigmented hairy moles on the face, in lining the cheeks following scarring which has obliterated the sulcus between the jaw and the cheek, in supplying the lost mucous membrane in atresia of the nostrils, in atresia of the ex-

ternal auditory canal, and in replacing areas on the forehead from which a pedicled flap has been removed.

PEDICLED FLAPS

The progress in the use of pedicled flaps in the latter part of the eighteenth century and the early part of the nineteenth century has been in using larger flaps, and in the application of the lining of the flap in the reconstruction of the nose and cheeks. Usually the transfer of a flap was made in one stage, but with the experience obtained during the World War the delay of flaps and the use of the tubed flaps was perfected. The tubed pedicled flap makes it possible to bring tissue from distant points, such as the thorax, abdomen, back or arm up to the face and neck more satisfactorily than with any previous method.

If it is impossible to obtain sufficient tissue about the face or neck to reconstruct lost tissue, the ideal method is to elevate the tubed flap and then delay it three months before transferring. In using this it is best to mark out the flap so that it is not more than three times as long as it is wide. Adding about a third to its width usually is an advantage, as the skin tends to shrink. The tube is closed with dermal sutures and the skin is brought together underneath the tube with silkworm and dermal sutures. After three months an additional area of skin may be elevated at the lower end of the flap, and sutured back in place before the flap is finally brought to the new position on the face or neck. The thorax or back may be used for the larger tubes. The thorax of women is not used on account of the subsequent scarring about the breasts. The skin of the thorax, however, is usually thinner and of better texture than that of the back.

The most striking advance in total rhinoplasty has been in the use of a forehead flap, following the method of Nélaton and modified by Blair, thus building a complete nose from the forehead. I have used a full-thickness graft to line the upper portion of the nose to prevent a tendency to shrink, as usually occurred when a lining was not used. If necessary, a piece of cartilage may be used to make a bridge to the nose following total rhinoplasty.

The Z incision, advocated by McCurdy in long band scars of the neck, is a distinct advantage and frequently replaces the pedicled flaps in such conditions.

TRANSPLANTATION OF OTHER TISSUES

Marked progress has been made in the transplantation of tissues, such as fascia, fat, cartilage and bone, and in the use of fascia lata in the correction of ptosis of the upper eyelid and facial palsy. By means of a specially made trocar to carry the fascia, loops are inserted in cases of facial palsy to elevate the cheeks and angle of the mouth. Recently, Stone reported on the use of preserved fascia lata which he feels gives satisfactory results. The transplantation of fat for the correction of deformities is best done with a pedicled flap if possible; the results with free fat transplantation are sometimes questionable, as the graft may undergo partial absorption.

Cartilage is used when the skeleton tissue is to be replaced in a fixed portion of the face, such as saddleback nasal deformities or absence of part of the malar bone. Cartilage from a rib is used.

I do not believe that the use of foreign substances is advisable, since most of these will ultimately come out. Reconstruction of the lower jaw with bone from the crest of the ilium is usually most satisfactory, although grafts from the osteoperiosteum give good results in many cases. Fixation of the fragments of the jaw is essential, and in some cases in which the amount of bone lost is small, the method of Cole of sliding a piece of bone from the lower margin of one of the fragments to fill in the gap gives good results.

HARELIP AND CLEFT PALATE

In the treatment of harelip and cleft palate, closing the lip first when the child is a few weeks old and then closing the palate when the child is about fourteen or sixteen months old, seems to give the best end results. Although some excellent results have been obtained by forcibly wiring the jaws, the marked irreparable destruction and loss

of teeth which has occurred in many such cases, even if surgical procedures have been skillfully performed, makes such operation an unnecessary risk. Then, too, when the jaws are forced together or the premaxilla is forced back in position, usually there is a flattening of the upper lip which can only be corrected by means of a plate when the child is older. In cases of single herelip the method of Mirault, as perfected by Blair,[2] seems to give the best results.

The palate is closed by the modified Langenbeck operation. If the palate is widely separated sometimes the closure is done in stages, just as one would do any other type of plastic operation in stages if there is tension on tissues.

PROSTHETIC APPLIANCES IN RELATION TO PLASTIC OPERATIONS

The use of prosthetic appliances as an aid to plastic operation about the face has been of distinct advantage. Dental splints in skin grafts, and the temporary replacement of large deformities about the nose or face with artificial appliances until such a time as reconstructive surgery may be attempted, are of value. The work of the dentist has been a great aid in this type of operation.

SUMMARY

Patients of the present day with deformities of the face and neck rightly demand much more than could have been accomplished years ago with the methods then available. It is only by good surgery and careful preoperative study and postoperative treatment that such results can be accomplished.

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Principles to be Observed in the Treatment of Congenital Harelip and Cleft Palate*

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It is not my intention to advocate any new method or technique for the treatment of congenital harelip and cleft palate, but merely to emphasize certain fundamental principles relative to their treatment. My observation of these cases admitted to the Wisconsin General Hospital during the past seven years, of which 50% have had previously attempted correction, leads me to believe that the fundamentals are frequently not followed.

There is a great diversity of opinion as to the treatment of congenital harelip and cleft palate, both preoperatively and surgically. These differences of opinion undoubtedly arise because of the fact that one finds that this type of surgery is being done by general surgeons, osteopathic surgeons and dentists who devote part of their time to the correction of these deformities. Perhaps, the reason why a number of general surgeons, osteopathic surgeons and dentists are doing this type of surgery is because the lip and palate defects are apparently simple clefts and the repair, therefore, easy and not worthy of any special consideration. Operative failures of from 70–80%, however, show that the surgical correction of these deformities is not as easy as one's first impression leads him to believe.

Of first consideration in the treatment of these patients is that of feeding. With a cleft existing in the palate or palate and lip, it is impossible for the child to nurse the breast, with the result that almost immediately after the mother is delivered, therapeutic measures are taken to prevent the onset of lactation or to stop lactation and the in-

fant placed on artificial feedings. We feel that this is an error in judgment because mother's milk is still considered the best possible infant food and every effort should be made to give it to the patient, which already has a defect that will interfere with proper nutrition. It is our policy to make every effort to increase lactation and feed the baby mother's milk as long as possible. The mother's breasts are pumped at regular intervals and the baby given the milk by means of a dropper or a Breck feeder. Various nipples have been devised to block off the palatal fissure, but these have the disadvantage of preventing the palate processes coming closer together as nature attempts to do. If for some reason the harelip cannot be corrected at the desired time (which will be discussed later) the closure of the lip fissure by strapping with adhesive plaster aids deglutition and also tends to narrow the fissure of the lip and palate.

WHEN TO OPERATE

It is a fairly safe rule to follow, to operate an infant only when its weight curve is going up, when its coagulation time is three minutes or less, Hgb of 65–70%, with no evidence of an acute infection, physically or clinically, and whose thymus, if persistent, as determined by roentgenograms, has been treated with deep x-ray therapy.

Persistent thymus, in infants having congenital harelip and cleft palate, is not uncommon, as we have discovered in our series of cases operated at the Wisconsin General Hospital. Routinely, an x-ray is taken of all our infant patients to determine whether or not there is any evidence of persistent thymus. Very frequently, however, one does not need the aid of the x-ray to make a diagnosis of a persistent thymus. These large, fat, flabby and artificially fed babies, which are frequently seen, invariably have a persistent thymus.

The treatment for persistent thymus consists of deep x-ray therapy. Just what physiological change takes place in the thymus following x-ray has not been definitely determined. Immediately after the treatment with x-ray, no noticeable change is apparent—and yet there is a disappearance of the respiratory embarrassment under anaesthesia which is characteristic in these infants with persistent thymus, when untreated. Similar respiratory disturbances have been noted in some of our patients, showing no thymus enlargements on the roentgenograms, which raises the question whether the size of the thymus determines the degree of symptoms one can expect. Does the disturbance of the metabolic rate and respiratory embarrassment vary directly with the size of the thymus? Are we dealing with a mechanical respiratory obstruction or a toxicity produced by the thymus? This is a problem which some day we hope can be solved by basal metabolic studies on infants.

Regarding the age for operation, it is our opinion that the earlier after birth that the harelip deformity is corrected the better the result obtained. We feel that the ideal age for correction of the harelip deformity is the first two or three days after birth because:

(1) There is need for a very small amount of anaesthesia. (2) There is less surgical shock. (3) The tissues are more easily moved to the desired positions, and this is particularly true in cases of double harelip where the alveolar process is protruding markedly. (4) The earlier the lip is repaired, the earlier will the pull of the lip muscles bring the palatal processes toward the mid-line, thus making the closure of the palatal fissure easier.

In closing the palate, it is our policy to perform the first operation upon the palate from nine months to one year after the correction of the harelip, regardless of the age at which the lip was corrected. In those patients that were operated upon soon after birth, who return after nine months to one year for correction of the palate deformity we have observed that the fissure in the palate has become considerably narrower, thus making closure of the fissure less difficult.

Relative to the operative treatment of congenital harelip and cleft palate—time will not permit me to enter into a detailed description of the operative methods used. Various operative methods, such as the Rose, Owen[1] and the Mirault,[2] are being used by men specializing in this particular field of

surgery, which in their hands yield good results. We use a combination of parts of the Mirault and Malgraine methods, in which we had introduced the use of double button silkworm nasal splint sutures.

FUNDAMENTAL FACT

Regardless of what method is used, there is this fundamental fact to remember i. e., all the normal tissues are present and need only to be placed in their proper position and none sacrificed. Too frequently have cases come to us that have had lip repairs in which the alveolar process has been cut away in order that the lip pedicles may be drawn together, with the result that these patients have a permanently deformed mouth and lip. Also in order to get the tissues to heal in the positions desired, they must be brought into position without tension. Furthermore in repair of harelips it is necessary to reconstruct the deformity of the nose to assure nasal breathing, improve the appearance of the ala outline, straighten the septum and give correct alignment to the lip muscles.

Relative to the method of closing the fissure in the palate, a first consideration is the use of a method that will not produce a permanent deformity of the mouth, one that will cause a minimum amount of scar tissue in the velum, thus enhancing flexibility of the soft palate, and a maximum rigidity at the posterior border of the hard palate to permit better function of its attached muscles.

As previously stated, a method should be used which will not produce any permanent deformity. Such method would, therefore, eliminate any forcible replacement of the pre-maxilla and wiring, or compression of the sides of the palate to force the fissure borders in contact.

It is not my intention to critically discuss the various operative methods being used at present, but I do want to commend the method that Doctor G. V. I. Brown[3] brought forth, which he describes as the bone flap operation. In this method,

1. The palatal bone segments are separated and moved to the mid-line without narrowing or contracting the nares or dental arches or interference with the nasal blood supply. 2. No severing of the muscles attached to the hard palate border is required. 3. There is no appreciable shortening of the velum or loss of flexibility because no muscles are cut across and union is usually primary since there is no interference with the blood supply of the flaps, and, therefore, better speech results. 4. The operative procedure requires less time and usually defects which require several operations, by other methods, can be corrected in two steps.

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Acute Gonorrhoea in the Female

By J. R. DUNDON, M.D.
Milwaukee

This paper advocates the use of heat in the abortive treatment of acute gonorrheal cervicitis and endocervicitis. One is familiar with the use of cautery (after dilatation) of the chronically inflamed cervix, but there is much timidity about its feasibility in acute cases.

Having seen the futility of other remedies to retard the slow but sure advance of the gonococcus from its cervical locus to the limits of the female adnexa, it was with considerable joy that we learned of this simple measure from Dr. Henry Barner of Bremerton, Wash. He applies heat with an ordinary dressing forceps whose vaginal curve corresponds with that of the cervical canal, being introduced normally or inverted, depending on whether the uterus is, respectively, anteverted or retroverted. The instrument is held in the flame until it will cause a brief sizzle when it touches the mucosa. A red heat was not needed to cure the cases herewith reported. A red heat applied with so large an instrument would very probably produce stricturing burns. Ulcers on the vaginal surface of the cervix can be more

efficiently treated by a broader and flat surfaced instrument and as such we recommend the head of a wire nail whose stem is grasped by a forceps. No other instruments are needed than a bivalve vaginal speculum. As there is no thermal sensation in the cervix no anaesthesia is required. When the forceps is inserted through the internal os uterine cramps occur but the patient does not start as when the vagina is accidentally touched. Because of the sensitivity of the vagina, caution must be used to avoid touching the speculum which quickly conducts the heat to that organ. The forceps is introduced gently, being held like a gaming card. As it chills, resistance to its progress may be felt, whereupon it is withdrawn and after reheating apparently melts its way. While the cervix is about an inch long, we have penetrated a half inch further with no damage reported. One patient so treated has for five months been free from a long standing dysmenorrhoea. Two seconds have proved sufficient to sterilize ulcers at the temperature indicated.

While medicinal douches were used in conjunction with cautery in the two following cases, we feel that we can truthfully ignore their effect in view of past inefficiency and because of the prompt retrogression of the ulcers after heat.

CASE NO. 1

Mrs. F. was brought in by her husband, at our request, because he had exposed her to his acute anterior urethritis during its stage of incubation. She was a young nullipara who had never had leukorrhoea.

On Jan. 11, 1931, when first examined, there were three shallow ulcers of irregular outline about the external os. Gonococci were recovered from their purulent bases unmixed with other bacteria. The heated forceps point was applied to them as thoroughly as the eye could guide.

On Jan. 12, 1931, the normal mucosa could be seen to have projected its dentate margin out on the ulcers. The points apparently missed were recauterized on two successive days.

On Jan. 14 the heated forceps was inserted about an inch and a half into the cervical canal because the discharge from that locality had increased.

On Jan. 15 the patient complained of "cramps" in the lower abdomen similar to menstrual pains. The vagina was irrigated with potassium permanganate solution (1–6000) and the eschar in the cervix wiped with hexylresorcinol solution for two days.

On Jan. 17 it was evident that no further cauterization was needed. Her discomfort was slight, and subsequent treatment on Jan. 19, 22, 24 and 27 consisted of vaginal irrigations with picric acid solution (6–1000). The cervix was normal in every respect. When seen again on Feb. 19, 1931, she was still well.

CASE NO. 2

Mrs. I. was called in because she had had coitus with her husband five days previous to the onset of his acute urethritis. She had already noticed a vaginal discharge. Cervical ulceration was deep. Unmixed gonococci were demonstrated in the cervical pus. In our inexperience we gave a dubious prognosis as to our ability to prevent the spread of the infection to the tubes in so advanced a case. However, on April 12, 1932, the entire cervical canal was cauterized together with the ulceration on the vaginal surface.

On the following day there was definite improvement. The vagina was irrigated with protargol solution (½%).

On April 14 the cervix was again cauterized as formerly, followed by irrigations on April 15.

On April 16, 1932, there was still some purulent discharge, so a third and last cautery was done. Daily irrigations were continued and the cervical canal swabbed with the same protargol solution. The patient complained of pain in the lower right quadrant which we attributed to toxins absorbed from the burnt tissue. Her temperature was 100 F., so she refrained from her clerical work for a day. She made rapid progress thereafter. Several weeks were required for the separation of the eschar from the cervical canal. On April 28 the husband was released from treatment. The patients were seen at weekly intervals. Neither has become reinfected, although since May 7th spermatozoa were found in the vaginal smears. By July 6th the cervical mucosa had completely regenerated. On August 4, 1932, only a few pus cells could be found microscopically.

In conclusion it appears that early cervicitis may be rapidly aborted by a degree of heat not dangerously destructive to tissue and that such treatment may be ambulatory.

METABOLISM OF ALCOHOL

H. E. Himwich, L. H. Nahum, Nathan Rakieten, J. F. Fazikas, Delafield Du Bois and E. F. Gildea, New Haven, Conn. *(Journal A. M. A.,* March 4, 1933), point out that the ingestion of 10 cc. of 19 per cent alcohol per kilogram of body weight by human subjects and of 50 cc. per kilogram of body weight by dogs is followed by an acidosis. This acidosis is probably the result of two factors: a relative retention of carbon dioxide and the accumulation of lactic acid. The alkali reserve of the body is diminished because of this accumulation of lactic acid. In patients suffering from the after-effects of overindulgence in alcohol—the so-called hangover—there was an increased content of lactic acid in the arterial blood. The brain, which usually derives its energy from the oxidation of carbohydrate, may nevertheless also oxidize alcohol.

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EDITORIALS

HYPOPHYSEAL CACHEXIA
(Simmonds' Disease)

LEST some casual reader may be frightened at the caption of this editorial the writer hastens to say that this disease is the result of lesions destroying the anterior lobe of the pituitary gland.

For years doctors were seeing people, women especially, who for no assignable reason began to lose weight, lose stature, lose hair all over the body, lose libido, show atrophy of skin, of genital organs and gradually die of inanition apparently. At the autopsy table nothing was found to account for death. The most striking change was the evident atrophy of all the organs.

Since 1914, when Simmonds of Hamburg first called attention to the causal relationship between destruction of the anterior pituitary lobe and the curious symptoms and signs, many cases have been reported mainly in the German Literature.

In 1931 R. F. Farquharson and Duncan Graham of Toronto[1] reported three cases before the Association of American Physicians. Only one of those was confirmed at autopsy. The symptoms and signs of the other two cases however seem to put them in the class of hypophyseal cachexia. Recently Solomon Silver[2] has reported a typical case confirmed at autopsy and has reviewed all the previous cases up to date. He has been able to collect 41 cases which satisfied all the criteria both clinical and pathological.

The disease occurs predominantly in women in the fourth, fifth and sixth decades "although cases have been reported as early as the ninth and as late as the sixty-ninth year."

The commonest etiological factor is childbirth, followed by puerperal sepsis. Other causes are tumors, syphilis, and, in men, arteriosclerosis. More than half of the reported cases were found to have atrophy of the anterior lobe, either replacement by fibrous tissue or simple atrophy of the gland. In several cases the anterior lobe was the seat of a cyst, and in other cases tumors (basophilic adenomata, malignant disease of the gland), tuberculosis and syphilis were the causes of destruction of the anterior lobe.

The atrophy of the gland or the cyst formation following puerperal fever has been shown to be due to thrombosis of the arteries which supply the anterior lobe.

The onset is insidious and the disease is progressive, the patients usually dying as a result of intercurrent infection or in a short period of coma. The symptoms have been briefly listed above. The extreme cachexia

[1] Tr. Assoc. Amer. Phys. 46: 150, 1931.
[2] Arch. Int. Med., 51: 175, 1933.

is most striking together with the actual diminution in size of the patients. The teeth fall out and there is extreme weakness. Mental disturbances are not uncommon. The patients are often disoriented and require restraint. There may be convulsions.

As objective laboratory findings, the most striking is the unusually low basal metabolic rate. There are low blood pressure, anemia, leucopenia and hypoglycemia.

To make the diagnosis from other causes of cachexia, e.g., carcinoma or tuberculosis may be difficult. However, certain important symptoms and signs should be carefully noted. The onset in a woman after childbirth, the amenorrhea, the loss of libido, the loss of secondary sex characteristics, the marked atrophy of the external and internal genitalia, the senile appearance of the face and skin speak for Simmonds' disease.

In men atrophy of the testicles, loss of libido, and the other signs should make one suspect the diagnosis. Naturally careful x-ray studies of the sella turcica should be made. If there is evidence of tumor there will be the usual signs. If the lobe is atrophic the sella may be small.

Treatment depends upon the cause of the destruction of the gland. If no tumor or other specific causative factors can be found, substitution therapy with anterior lobe extract should be tried. Some authors have reported favorable results but it cannot be considered specific in the sense that thyroid extract is for myxedema.

Finally, while but relatively few cases are reported, Silver is sure that the disease is not so uncommon. It awaits recognition. He also believes that mild states of the disease occur. This may very well be true as it would be quite analogous to the hypofunctional states of other endocrine glands.

That the disease is already in our midst can not be doubted. The writer presented one undoubted case before the Milwaukee Academy of Medicine last year and has seen several other cases in which there was a strong suspicion of pituitary hypofunction. Possibly now that our attention has been called to the disease we shall be on the lookout for it and recognize it when it presents itself in a specific case. L. M. W.

HAZARDS INVOLVED

MANY drugs introduced after careful experimental and clinical trial with the backing of scientists and pharmacologists have to be abandoned as remedial agents after months or years of use because of the gradual accumulation of cases exhibiting untoward results. Such a drug is cinchophen (phenyl-cinchoninic acid, atophan) and its compounds and salts, neocinchophen, oxyliodide, and chloroxyl — the compounds and salts possessing the hazards of cinchophen in varying degrees. There are many other analgesics which have varying degrees of toxicity.[1]

There are several types of toxic reactions among those reported:—cutaneous, anaphylactic, gastrointestinal irritation and ulceration, hepatitis and acute yellow atrophy of the liver.[2] The last is the most serious result and there have been reported twenty-five deaths with twenty autopsies confirming the diagnosis of toxic hepatitis.[1] Since then thirty more cases of poisoning have been reported.

The toxic manifestations of the drug are not dependent upon the amount of drug administered, nor can they be prevented by simultaneous administration of soda bicarbonate or by any other means.[3] Toxic manifestations do not always follow immediately upon giving the drug,—sometimes being delayed two weeks or more after the drug has been stopped. Cabot was the first to report a death from its use.[4]

In some instances sensitization of the liver seems to take place. in others, predisposing causes like cirrhosis, chronic cholecystitis, chronic nephritis, alcoholism and pregnancy precede the poisoning caused by the use of these drugs.

In view of the fact that arthritis, myositis, sciatica and other forms of neuritis and the whole group of infirmities loosely spoken of as "rheumatism," are so common and so frequently treated with these drugs or their compounds, it seems worth while once more to warn the profession against their hazards. As pain killers they rank with the salicylates and achieved considerable popularity in the treatment of gout. The dangers of their use are so unforseeable and insidious and the drugs in many instances are so lethal that there seems no justification for their inclusion in the pharmacopeia or their further use by the profession. And moreover steps should be taken to prevent the sale of "rheumatism remedies" containing cinchophen or its derivatives over the counter. H. P. G.

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[1] Rabinowitz, M. A., Journal American Medical Association, 95 (1228) October 25, 1930.

[2] Gargill, S. L., New England Medical Journal, Vol. 206, No. 4. January 28, 1932.

[3] Willcos, W. H., British Medical Journal 2:273 1926.

[4] Cabot, R. C., Boston Medical & Surgical Journal 192 (1132) June 4, 1925.

THE PRESIDENT'S PAGE

Reginald H. Jackson

TIME CONTROL AS A VITAL FACTOR IN CERTAIN SURGICAL LESIONS

"Time is itself an element."—GOETHE.

TIME, in the philosophy of Bergson, is just as important and essential in a chemical reaction as is the presence of any specific material ingredient. An appreciable, however infinitesimal, space of time must elapse to complete a given reaction.

Every general surgeon with many years of active experience has stored away in the vaults of his memory too many instances of valuable and promising lives sacrificed on the altar of fatal DELAY. There is indelibly imprinted upon his mind through bitter experience the lesson that "Beyond a given point an increase in the time element added to the other factors in certain surgical lesions means an ever higher mortality rate."

The art and science of surgery today is far in advance of its practice. We know, for instance, that in acute appendicitis removal of this organ before the infection has passed from it to the adjacent tissues practically insures a 99% plus chance of recovery, whereas once the infection has spread beyond the confines of the appendix a resulting mortality rate of from 10% to 20% is assured.

In acute perforations of the hollow viscera or acute intestinal obstruction, and in certain other conditions, twenty-four, twelve, eight, or even fewer hours delay in surgical attention may in a given case prove disastrous. Practically the same operative measure but with entirely different results, due the addition of a few hours of TIME. Unquestionably it lies within the present power of surgery to materially lower the existing high mortality rate of acute appendicitis, but through the stupidity of the laity and the carelessness or ignorance of some physicians, the golden hours of opportunity for surgical aid are too often neglected.

In the past, generous allowance has been made for an apparently unavoidably high percentage of diagnostic error on the part of the rank and file of our profession, based on the assumption that many of them had received only a mediocre medical education. Today, with the ever higher requirements for matriculation and graduation in medicine one would expect a steady decline in the mortality rate of acute appendicitis but statistics indicate an ever increasing one. Possibly part of the trouble lies in our failure to educate the laity as to the importance of TIMELY surgical interference. What should the laity know about appendicitis? Who should tell them? At the coming meeting of the New York State Medical Society, Dr. Dean Lewis is to deliver an address at a public meeting on "What the Community Should Know About Appendicitis." This is encouraging and should set an example for other State Societies to follow.

Conceivably also a readjustment of the medical curriculum may be indicated. If one-third of the hours devoted by the medical student in his first and second years to memorizing and passing voluminous tests and examinations in organic chemistry and kindred and sundry laboratory courses could be utilized by him in observing at first hand the actualities of disease with simple lucid explanations of the need for action, the early basal experience thus acquired would go far toward insuring his becoming a more efficient doctor. At present, even at the end of his senior year his mind is still more or less addled by the cramming it has been subjected to in attempting to absorb all the scientific pabulum of the many courses which, while ancillary to medicine, are, so far as the making of a practical doctor is concerned, neither vitally necessary—in their present exacting requirements—nor essential to the welfare of his future patients.

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SOCIETY PROCEEDINGS

BROWN–KEWAUNEE

The meeting of the Brown–Kewaunee County Medical Society was held at the Beaumont Hotel on February 21st. Thirty-three physicians were present including the following guests from Fond du Lac: Drs. S. E. Gavin, D. J. and J. E. Twohig, H. A. and J. C. Devine, and Johnson.

The program began with a paper by Dr. P. R. Minahan, Green Bay, on the subject of "Medical Economics." Dr. Minahan's paper described the practice of medicine as it would obtain under the system of state medicine, contrasting it with the present system of private initiative. His paper was a powerful argument against state medicine.

The guest speaker of the evening was Dr. Stanley J. Seeger, Milwaukee, president-elect of the State Society. Dr. Seeger's address on the subject of "Carcinoma of the Rectum" was very interesting and instructive and constituted a splendid resume of that condition from its various angles. Discussions were had by Drs. Twohig, Gosin and Williamson. O.A.S.

DANE

A contract providing for a medical relief system has been signed by the Dane County Department of Welfare and Outdoor Relief. The new plan provides for the care of indigent sick on a different basis from that previously used and culminates a two-year study by the Dane County Medical Society.

This system places at the service of the needy, without cost, 118 members of the Society including specialists. The county pays only the cost of supplies, hospitalization, drugs and medicines. The only remuneration physicians receive is for house calls, an amount which is fifty per cent less than the customary fee.

The medical relief service is operated by a board of control elected by the trustees of the Dane County Medical Society. The board is composed of Drs. Thomas Tormey, Joseph Dean, F. F. Bowman, H. A. Keenan, J. N. Sisk and Mr. E. C. Hein of the County Welfare Department.

EAU CLAIRE

A meeting of the Eau Claire and Associated Counties Medical Society was held on Monday evening, February 27th, at the Hotel Eau Claire. Dinner was served at six-thirty o'clock following which Dr. Samuel B. Solhaug of Minneapolis gave an address on "Ovarian Cysts."

FOND DU LAC

The regular meeting of the Fond du Lac County Medical Society was held on March 8th at which time a clinic and talk was given by Dr. Frank Smithies, Chicago.

A large group of out of town guests were present. Dr. Smithies conducted a clinic at St. Agnes' Hospital in the afternoon on "Diseases of the Stomach and Gall Bladder." A supper and talk at the Hotel Retlaw that evening by Dr. Smithies on "Gastric Ulcers" concluded the meeting.

GREEN LAKE–WAUSHARA–ADAMS

Members of the Green Lake–Waushara–Adams County Medical Society and their wives met on February 24th at the American House at Princeton.

A pike dinner was served after which the physicians held a business meeting while the members of the Auxiliary adjourned to the home of Dr. G. G. Mueller for an evening of cards.

MANITOWOC

A meeting of the Manitowoc County Medical Society and the Woman's Auxiliary was held on March 9th at the K. C. Community Center at Manitowoc at eight o'clock.

Dr. F. A. Nause, Sheboygan, president of the Fifth Councilor District Medical Society, addressed the meeting. An invitation was extended through Dr. Nause to hold the next district meeting at Two Rivers.

The subject of radio broadcasting by the Society was referred to the Public Relations Committee which will make final arrangements for weekly broadcasts over WOMT.

The jigsaw puzzle contest was won by Dr. T. H. Rees of Manitowoc. The puzzles were made and furnished by Dr. Charles Barnstein of Manitowoc.

Following the meeting a luncheon was served to the physicians and their wives. E.C.C.

PORTAGE

On January 25th the members of the Portage County Medical Society had a dinner meeting with their wives at the Hotel Whiting, Stevens Point. Forty attended the dinner which was followed by two programs, one for the ladies and one for the physicians. Miss Ruth Buellesbach, executive secretary of the Woman's Auxiliary, State Medical Society, gave a talk to the ladies on the Auxiliary, following which they organized the Portage County branch of the Auxiliary.

Two very interesting talks, illustrated by lantern slides, were given by Dr. George H. Ewell and Dr. Arnold S. Jackson, both of Madison. Dr. Ewell talked on "Prostatic Disease with Special Reference to Transurethral Resection" while Dr. Jackson talked on "Diseases of the Thyroid Gland." E.E.K.

RACINE

The regular March meeting of the Racine County Medical Society was held on the 16th in the evening at the Racine Elks Club.

"Dermatitis Due to Allergic Conditions" was discussed by Dr. Harry Foerster of Milwaukee.

The address was illustrated with lantern slides.

An address on "Prostatectomy—Preoperative—Operative and Postoperative" was given by Dr. W. J. Carson of Milwaukee. The address was illustrated with lantern slides.

Dr. R. W. Kreul, Racine, was duly elected a member of the Society.

Luncheon was served following the meeting. S. J.

RICHLAND

A meeting of the Richland County Medical Society was held on January 19th at which time the following officers were elected for the coming year:

President, Dr. B. I. Pippin, Richland Center; Vice-president, Dr. George Parke, Viola; Secretary-treasurer, Dr. Gideon Benson, Richland Center; Delegate, Dr. H. C. McCarthy, Richland Center; Alternate, Dr. A. D. Campbell, Richland Center, and Censor, Dr. L. L. Hines, Rockbridge.

A by-law which prevented a qualified physician from becoming a member until he had practiced in the county for one year was rescinded and the Society in the future will be conducted strictly by the rules suggested by the State Medical Society.

ROCK

A meeting of the Rock County Medical Society was held on February 28th at the Monterey Hotel, Janesville. Following the dinner, Dr. Erwin Geisler of Northwestern University Medical School gave a lecture on "Cancers of the Skin."

SHAWANO

The Shawano County Medical Society met on March 1st and elected the following officers:

President, Dr. O. F. Partridge, Mattoon; Vice-president, Dr. L. W. Peterson, Shawano; Secretary-treasurer, Dr. A. A. Cantwell, Shawano; Delegate, Dr. G. R. Stauff, Birnamwood; Alternate, Dr. A. J. Gates, Tigerton. A.A.C.

VERNON

At a meeting of the Vernon County Medical Society held at Viroqua on February 16th, it was unanimously voted to form a Tri-County Medical Society consisting of Monroe, Juneau, and Vernon Counties. A large representative body from each of these counties was present at the Viroqua meeting and were all enthusiastic concerning a new society.

Dr. P. H. Hansberry of Hillsboro, secretary of the Vernon County Medical Society, has sponsored the move.

There is no doubt but a very strong medical organization will develop from this change. Dr. Hansberry believes there is not sufficient force behind a County Society where there is no large city to support the meetings to make progress which might be of benefit to the medical profession.

Drs. Arnold Jackson and George H. Ewell of Madison gave very interesting talks. Dr. Jackson spoke on "Diseases of the Thyroid" and Dr. Ewell discussed "Transurethral Resection of the Prostate Gland."

There were over fifty members present and all were highly pleased with the possibilities of a Tri-County Society. P.H.H.

MILWAUKEE ACADEMY OF MEDICINE

The following program was presented by the Milwaukee Academy of Medicine at their meeting held in the Medical Arts Building on March 21st:

Case Report: "Brain Tumor (Specimen)," Frederick A. Stratton, M. D.

"Ocular Findings in General Diseases," Sanford R. Gifford, M. D., professor of ophthalmology, Northwestern University Medical School.

MILWAUKEE HOSPITAL INTERNS

The March meeting of the Milwaukee Hospital Interns Association was held at the home of Dr. T. S. O'Malley, 1926 N. 53rd Street, on March 15th.

Dr. O'Malley addressed the group on "Infections of the Hand," and Dr. Arthur C. Hansen spoke on "Agranulocytosis."

MILWAUKEE OTO-OPHTHALMIC

The March meeting of the Milwaukee Oto-Ophthalmic Society was held at the Wisconsin Club on the 28th, immediately following a dinner at six-thirty o'clock. The scientific program consisted of the following addresses:

"Orbital Abscess" by Dr. L. H. Guerin.

"Malignancy of the Tonsil." A case report by Dr. E. Edelman.

MILWAUKEE PATHOLOGISTS

Announcement of the organization of the Milwaukee Pathologists Society was made in March. Members of the organization are Drs. E. F. Barta, J. J. Seelman, Norbert Enzer, M. Fernan-Nunez, John Grill, E. J. Oesterlin, and E. L. Tharinger. Preliminary meetings, leading up to the organization of the Society, have been held since last June.

On February 25th this group was formally organized when they adopted their constitution and by-laws and became a component part of the American Society of Clinical Pathologists. Plans were immediately laid for the meeting of the American Society of Clinical Pathologists to be held just preceding the meetings of the American Medical Association in Milwaukee in June.

At the meeting held on February 25th, Dr. E. L. Tharinger was elected President; Dr. John Grill, Vice-president; Dr. M. Fernan-Nunez, Secretary-Treasurer. The Board of Censors is made up of Drs. J. J. Seelman, Norbert Enzer, and E. F. Barta.

All committees, headed by Dr. Norbert Enzer, general chairman, have become active in planning for the forthcoming meeting. Dr. Enzer was appointed chairman of the hotel committee; Dr. Fernan-Nunez, chairman of the scientific exhibits; Dr. Barta, chairman of commercial exhibits, and Dr. Tharinger, chairman of the publicity committee. Prior to the formal organization Dr. Seelman acted as chairman and Dr. Tharinger as secretary.

The purpose of this group is to promote higher standards of laboratory and clinical methods and re-

search; to establish standards for laboratory examinations; to elevate the scientific and professional standards of clinical pathologists, and encourage a closer relationship between practicing physicians and pathologists.

It is also the aim of this Society to organize the pathologists throughout the State.

Among the plans which they have in mind is the appointment of a committee on hospitals to survey, from an economic standpoint, the work now being done by pathologists in the various hospitals.

Meetings will be held during the months of October, November, December, February, and April.

The annual meeting of the American Society of Clinical Pathologists will be held on Friday and Saturday preceding the opening of the meetings of the American Medical Association.

Headquarters will be established in the Hotel Pfister.

A boat trip on Lake Michigan has been planned for Sunday, June the 11th.

THE WOMAN'S AUXILIARY

MRS. FRED A. NAUSE, JR., Sheboygan, *President*
MRS. EBEN J. CAREY, Milwaukee, *President-elect*
MRS. WALTER FORD, Sheboygan, *Secretary*
MISS RUTH BUELLESBACH, Madison, *Executive Secretary*
MRS. R. G. ARVESON, Frederic, *Treasurer*
MRS. JAMES C. SARGENT, Milwaukee, *Press and Publicity Chairman*
MRS. JAMES F. PERCY, Los Angeles, Calif., *National President*
MRS. ROCK SLEYSTER, Wauwatosa, *National Convention Chairman*

National Convention, Milwaukee, June 1933

WOMAN'S AUXILIARY
to the
AMERICAN MEDICAL ASSOCIATION*
Eleventh Annual Meeting
Milwaukee
June 12–16, 1933
Headquarters: Hotel Pfister, Milwaukee

PRELIMINARY PROGRAM

Monday, June 12, 1933

12:30 P. M. Luncheon at College Women's Club in Honor of Past Presidents, followed by National Board meeting and visit to American Medical Association Exhibits at Auditorium. Tickets $1.00.

7:00 P. M. Dinner for National Board, Delegates, and wives of Officers and Delegates of the American Medical Association at Woman's Club of Wisconsin. Musical Program furnished by Artist Members of Auxiliary to Medical Society of Milwaukee County. Tickets $1.25.

Tuesday, June 13, 1933

9:00 A. M. General Meeting—Roof Room, Hotel Pfister. Mrs. James F. Percy, Presiding.

12:30 P. M. Luncheon and Bridge at the Wisconsin Club. Tickets $1.25.

2:00 P. M. **Attractions available for those not wishing to play Bridge are Layton Art Gallery, Milwaukee Art Institute, Milwaukee Museum, Curative Work Shop and Vocational School.

or

**Bus Trip to County Institutions, Milwaukee Children's Hospital Convalescent Home, and Washington Park Zoo.

8:00 P. M. General Meeting of American Medical Association.

10:00 P. M. Informal Dance at Wisconsin Club. Courtesy of State Medical Society of Wisconsin. Hostesses: Woman's Auxiliary to the State Medical Society of Wisconsin.

Wednesday, June 14, 1933

9:00 A. M. General Meeting—Roof Room, Hotel Pfister. Mrs. James F. Percy, Presiding.

12:30 P. M. Auxiliary Luncheon. Fern Room, Hotel Pfister. Toastmistress: ------ Guests and Speakers from the American Medical Association. Musical Program. Tickets $1.00.

4:00 P. M. **Teas in Private Residences.

8:30 P. M. Light Opera. Tickets $1.00.

Thursday, June 15, 1933

9:00 A. M. General Meeting. Roof Room, Hotel Pfister. Mrs. James Blake, Presiding.

12:00 Noon Trip to Oconomowoc Lake District. Luncheon 12:30 P. M., Carnation Milk Plant, Oconomowoc, Wisconsin, Transportation and Luncheon Courtesy of Carnation Milk Company.

or

12:30 P. M. Buffet Luncheon, Crystal Room, Hotel Pfister. Tickets 75c.

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* All women attending this Convention whether Auxiliary members or not are invited to participate in this entire program.

** Bus transportation to be paid by individuals.

2:00 P. M. **Sight Seeing Tour of Milwaukee.
6:30 P. M. "Bring Your Husband" Dinner. Fern Room, Hotel Pfister. International-House-Cabaret. Tickets $1.50.
9:00 P. M. President's Reception and Ball, Schroeder Hotel. Hosts: The American Medical Association.

Friday, June 16, 1933

10:00 A. M. Golf Tournament.
All Trips Start from Hotel Pfister.

MRS. ROCK SLEYSTER,
General Chairman,
Wauwatosa, Wisconsin.

HOSPITALITY HOTEL CHAIRMEN

ABBOT CREST HOTEL
Chairman: Mrs. M. Q. Howard------Bl. 2600
Vice Chm: Mrs. J. J. Pink---------Ed. 1620

AMBASSADOR HOTEL
Chairman: Mrs. J. J. Lettenberger---Or. 0999
Vice Chm: Mrs. A. J. Caffrey------Ma. 0649
Mrs. P. Gaunt----------We. 0166
Mrs. C. J. Becker--------Hi. 3089

ASTOR HOTEL
Chairman: Mrs. G. Friedman-------Br. 8420
Vice Chm: Mrs. H. G. Schmidt-----La. 5441

AUDITORIUM
Chairman: Mrs. E. F. Peterson------Bl. 0082
Vice Chm: Mrs. Browning ----------
Guest Book: Mrs. James H. Hackett---La. 0548
2nd Vice Chm: Mrs. S. Cahana------Ed. 5904
Mrs. H. J. Farrell------Bl. 8026

BELMONT HOTEL
Chairman:
Vice Chm:

BLATZ HOTEL
Chairman: Mrs. U. A. Schlueter----Or. 0955
Vice Chm: Mrs. R. C. Pfeil------Or. 4120-R

CARLETON HOTEL
Chairman: Mrs. M. Fox----------La. 3042

COLLEGE WOMEN'S CLUB
Chairman: Mrs. Bearman ----------

COLONIAL HOTEL
Chairman: Mrs. W. T. Nichols------La. 0176
Vice Chm: Mrs. Clarence Hardy----La. 2018

GLOBE HOTEL
Chairman: Mrs. Henry Ulvin-------Bl. 3610

JUNEAU HOTEL
Chairman: Mrs. T. H. Rolfe--------La. 0855
Vice Chm: Mrs. Howard Halsey----La. 5684

KNICKERBACKER HOTEL
Chairman: Mrs. Oscar Lotz--------Ed. 3234
Vice Chm: Mrs. A. Rosenberger----Ed. 0154

LA SALLE HOTEL
Chairman: Mrs. D. P. Thill--------Ho. 0246
Vice Chm: Mrs. H. Jermain--------Lo. 6398

MARTIN HOTEL
Chairman: Mrs. Chas. Fidler-------Br. 8800
Vice Chm: Mrs. Chas. M. Schoen----Bl. 6293

MEDFORD HOTEL
Chairman: Mrs. H. B. Podlasky-----Ho. 6866
Vice Chm: Mrs. Norbert Enzer-----La. 0123

MARYLAND HOTEL
Chairman: Mrs. Harlow S. Roby----Ed. 0297
Vice Chm: Mrs. Norman McBeath--Ed. 5462

MILLER HOTEL
Chairman: Mrs. F. C. Mock--------Ed. 0392
Vice Chm: Mrs. L. M. Wegner------Hi. 6746

PFISTER HOTEL
Chairman: Mrs. Millard Tufts------Ed. 7307
Vice Chm: Mrs. H. C. Dallwig------Ed. 4713
Headquarters: Mrs. Karl Schlaepfer-Ed. 6328
Mrs. Edwin Bickler---Lo. 1754

PLANKINTON HOTEL
Chairman: Mrs. C. H. Baumgart----Hi. 3846
Vice Chm: Mrs. G. H. Hoffman-----Gr. 3504

PLAZA HOTEL
Chairman: Mrs. A. deNeveu --------Sh. 4634
Vice Chm: Mrs. W. A. Joseph------Sh. 0806

REPUBLICAN HOTEL
Chairman: Mrs. E. Belknap---------Bl. 7681
Vice Chm: Mrs. Ray Benton--------Ed. 7788

ROYAL HOTEL
Chairman: Mrs. C. F. McDonald----Sh. 4739
Vice Chm: Mrs. J. T. Klein--------Ed. 2419

SCHROEDER HOTEL
Chairman: Mrs. Harry Heeb-------Ed. 0040
Vice Chm: Mrs. R. J. Muenzner----We. 3473

SHORECREST HOTEL
Chairman: Mrs. A. H. Knudson-----La. 5669
Vice Chm: Mrs. R. I. Hiller--------La. 4980

SEVEN-SEVENTY MARSHALL HOTEL
Chairman: Mrs. P. E. Oberbreckling--
----------Hi. 3004
Vice Chm: Mrs. E. J. Schelble------Co. 0570

TOWER HOTEL
Chairman: Mrs. L. D. Smith--------We. 6082
Vice Chm: Mrs. H. G. Walters--Racine, Wis.

WISCONSIN HOTEL
Chairman: Mrs. T. S. O'Malley------Ki. 0234
Vice Chm: Mrs. C. W. Long--------Ed. 0047

Y. W. C. A.
Chairman: Mrs. Grace Willson------

HEALTH ESSAY CONTEST

Sophomores in high schools where county auxiliaries are organized still have the opportunity of entering the Health Essay Contest. The essays are to be based upon any articles or article appearing in the February and March issues of Hygeia, which pertain to health, and the relationship of the medical profession to the individual, the family, and the community. The final rules of the contest are given in the March issue of the Wisconsin Medical Journal, page 188. The contest closes April 15th.

With the many splendid articles appearing in the February and March issues of Hygeia, we hope the contest will accomplish its object as a health educational feature.

NEW AUXILIARIES

The Wisconsin Auxiliary is very proud to report four new county auxiliaries so far this year, with the date set early in April for the organization of the fifth.

County	Date of organization	Approximate membership
Kenosha	November	30
Racine	December	40
Portage	February	15
Manitowoc	March	30
Waukesha	April	40

An Auxiliary to the Waukesha County Medical Society will be organized on April fifth at a meeting to be held at the Avalon Hotel, Waukesha, at 3:30 P. M.

MANITOWOC COUNTY AUXILIARY ORGANIZED

The doctors' wives joined their husbands at a dinner meeting at the K. C. Community Center on March 9th. The Secretary of the County Medical Society, Dr. Erwin C. Cary, arranged a social hour for the ladies,—"a chance for all the wives to get together and tell how they are fighting the depression, talk over politics or anything else you may care to do." Some ladies planned to play cards and others brought jig-saw puzzles. The state president, Mrs. Fred A. Nause, Jr., Sheboygan, joined the ladies. Mrs. Nause came—saw and conquered, and when she left Manitowoc county had organized an auxiliary with the following officers: President, Mrs. Malcom P. Andrews, 835 N. 15th Street, Manitowoc; president-elect, Mrs. Alfred P. Zlatnik, Two Rivers; secretary and treasurer, Mrs. Joseph W. Steckbauer, 1217 Manilla Street, Manitowoc.

MILWAUKEE COUNTY

The Auxiliary to the Medical Society of Milwaukee County held its March luncheon meeting at the Y. W. C. A. About 140 people were present. In the absence of the president, Mrs. Rock Sleyster, who is in California having the privilege of meeting and conferring with the national president, Mrs. James F. Percy, the vice-president, Mrs. Dirk Bruins, presided.

Dr. Ralph Hamill, professor of Psychiatry at Northwestern University, addressed the group on "Traits in Children that may cause trouble in Later Life." In order that others might have the privilege of hearing Dr. Hamill's talk the Auxiliary was very happy to extend an invitation to the presidents of all of the Parent-Teacher organizations in the city. Dr. Morris Fishbein, editor of the Journal of the A.M.A., will address the April meeting.

The membership committee reports 53 new members listed since the first of January. The public relations committee has placed four speakers from the Medical Society's speakers bureau to talk before lay organizations in February, three in March, three in April and one in May.

PORTAGE COUNTY

The Portage County auxiliary was entertained on March 13 at the home of Mrs. Wayne F. Cowan with Mrs. Herbert P. Benn as assisting hostess. Fourteen members attended. Miss May Roach, the guest speaker of the afternoon, gave an informal talk on health conditions throughout Portage county as viewed from a teacher's standpoint. The rest of the afternoon was spent in sewing for the Red Cross, and lunch was served.

ROCK COUNTY

Thirty-three members of the Rock County auxiliary held a meeting on February 28th at Pinehurst sanatorium where they made plans for a membership campaign and the sponsoring of the Health Essay Contest. Cards were enjoyed, first prize in contract going to Mrs. Richard Farnsworth of Janesville and first in auction to Mrs. R. S. Vivian, Beloit. The next meeting will be a dinner at the Spanish Tavern in Beloit at which time Dr. Jessie Allen will be the speaker.

SHEBOYGAN COUNTY

The Auxiliary to the Sheboygan County Medical Society enjoyed a luncheon at the Elsie Timm Tea room in Sheboygan on March first. After a short business meeting the remainder of the afternoon was pleasantly spent playing bridge at the home of Mrs. Theodore Gunther.

WINNEBAGO COUNTY

The Winnebago County auxiliary met at the Menasha hotel at 1:30 Monday afternoon, February 27th. An account of the majority and minority reports of the National committee on Costs of Medical Care was given and a very interesting discussion regarding the socialization of medicine followed.

The Winnebago County auxiliary has been organized for more than a year and holds meetings the fourth Monday of every month.

NEWS ITEMS AND PERSONALS

Physicians in Wisconsin are cordially invited to attend the annual meeting of the American Association for the Study of Goiter to be held in Memphis, Tenn., May 15, 16, and 17. The headquarters will be at Peabody Hotel. Those who desire further information should communicate with J. R. Yung, M. D., corresponding secretary, Terre Haute, Indiana.

Dr. James W. McGill, Superior, returned in February from New York City where he spent a month in postgraduate study in operative gynecology and obstetrics.

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Dr. Harold Swanberg of Quincy, Illinois, editor of The Radiological Review, addressed the staff of the Evangelical Deaconness Hospital, 1821 Wisconsin

Ave., Milwaukee, on "Radium Therapy" on April 4th.

—△—

Dr. George B. Benson, son of Dr. Gideon H. Benson of Richland Center has announced his association with his father for the practice of medicine and surgery. He was recently licensed to practice and is a graduate of Rush Medical College, 1931.

—△—

A total of 10,376 cases of influenza were reported to the State Board of Health for January as compared with but 119 cases a year ago.

—△—

Members of the staff of Holy Family hospital of Manitowoc met on March 3rd to hear Dr. Harry Foerster of Milwaukee speak on "Infectious Skin Diseases," illustrated with lantern slides.

—△—

Dr. Frank S. Wiley, chief-of-staff, St. Agnes hospital, Fond du Lac, on February 20th was tendered a testimonial banquet by the Sisters of St. Agnes, sponsored by the Fond du Lac County Medical society in observance of the fiftieth anniversary of his graduation in medicine. The banquet was attended by a large number of medical men from all parts of the state, as well as many members of the laity.

Splendid tributes to Dr. Wiley were extended during the course of the evening, among which was an original poem by Sister M. Julia Dullea expressing in glowing terms the appreciation of the Sisters of St. Agnes of the jubilarian's service to the hospital, which has been Dr. Wiley's dream, and the center of his professional activities for many years and in the development of which he has devoted much time and energy.

Congratulatory telegrams and letters were received from prominent persons throughout the country, including Archbishop S. A. Stritch of Milwaukee, Gov. Albert G. Schmedeman and Drs. Reginald H. Jackson and C. A. Harper of Madison, Drs. William and Charles Mayo of Rochester, Drs. Archibald Church, M. L. Harris and John M. Dodson of Chicago, Dr. Louis F. Jermain of Milwaukee, Justice C. A. Fowler of the Wisconsin Supreme court, Madison, and many others.

As a token of recognition of his fifty years of practice, Dr. Wiley was presented with a testimonial book which contained his biography, a record of the progress of the hospital under his direction, tributes paid to him at the banquet and telegrams and letters received by him on the occasion. The book, which was presented by Dr. T. A. Hardgrove of Fond du Lac, was signed by all present at the banquet.

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Dr. E. C. Hartman of Janesville addressed the St. Mary's P. T. A. on the subject of "The Home Medicine Chest and Contagious Diseases" at its March meeting.

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The following health talks, sponsored by the State Medical Society were delivered by Miss Ruth Buellesbach, R. N., executive secretary of the Woman's Auxiliary, over Station WHA, University of Wisconsin, during the month of March:

March 1—Bronchitis.
March 2—Learning to Live.
March 7—Lockjaw.
March 8—Pity the Poor Ostrich!
March 9—What We Eat.
March 14—The Roentgen Ray in Preventive Medicine.
March 15—Smallpox is Here Again.
March 16—Smith, In Search of Health.
March 21—The Eyes After Fifty.
March 22—Your Children and Measles.
March 23—Being in Business for Your Health.
March 28—High Blood Pressure.
March 29—Baby Learns to Walk.
March 30—Growing Old Sensibly.

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Drs. R. A. and Gunnar D. Quisling of Madison returned from Europe in March where they spent a year in postgraduate study. Both are graduates of the University of Illinois School of Medicine and are associated with their brothers, Drs. S. and A. A. Quisling, 123 King Street, Madison.

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Dr. C. H. Boren of Marinette discussed health problems before a meeting of the members of the American Legion Auxiliary of Marinette.

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There were 42 cases of tularemia reported in Wisconsin in 1932 as compared with 27 cases in 1931, according to the State Board of Health. Last year there were four deaths from this disease with only one reported in 1931. Ashland County reported the largest number of cases with four.

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Dr. H. E. Kasten of Beloit was the principal speaker before the fifth meeting of the annual Fond du Lac Safety school held in the Roosevelt Junior High School on February 27th. His subject was "Safety Factors in the World's Greatest Industry—Living."

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Dr. William H. Gunther of Sheboygan was the guest of honor at a noonday dinner at the Foeste Hotel on February 20th, the occasion being the fiftieth anniversary of his graduation from Rush Medical College.

In age and in number of years of professional practice, Dr. Gunther is the oldest physician in Sheboygan. At the banquet given in his honor, Dr. Gunther received felicitations from his associates at the Sheboygan Clinic and a number of short talks were given by those present.

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Dr. P. J. Dailey, formerly of Elcho, is now associated with Dr. M. J. Donohue of Antigo with offices in the First National Bank building.

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"Essentials of Nutrition" was the subject of an address by Dr. Elmer L. Sevringhaus, Madison, be-

fore a meeting of the Beaver Dam Women's Club on February 27th.

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A radio program on "Your Health" is sponsored jointly by the La Crosse County Medical Society and the La Crosse County Dental Society. The health talks are given each Tuesday over WKBH,—a physician and dentist alternating each week.

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Dr. R. F. Wilson, Beloit, was the speaker at the March meeting of the Graduate Nurses' Club, having as his topic "Etiology and Prevention of Cancer."

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Dr. Wilson Cunningham of Platteville visited the offices of the State Medical Society on March 2nd.

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Dr. T. O. Nuzum of Janesville spoke on "Surgery in Tuberculosis" before a meeting of the Second District Nurses Association held in Beloit on March 9th.

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Dr. E. R. Hering, Jr., son of Dr. and Mrs. E. R. Hering of Shell Lake, Wisconsin, who has been stationed at Great Lakes Naval hospital, has been transferred to U. S. Naval hospital at San Diego, California. Dr. Hering who is twenty-four years old, is the youngest physician in the service.

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Dr. Allen L. Millard, formerly of Appleton, has moved to Marshfield.

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Dr. Robert C. Thackeray of Racine has been selected as one of fifteen candidates to be voted upon for the Repeal Convention to be held in Milwaukee. This list of fifteen names was selected by the Wisconsin Division of the Association Against the Prohibition Amendment.

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Dr. John R. Minahan of Green Bay was elected president of the Irish Fellowship Club of Green Bay at a celebration of the club on March 17th at the Beaumont Hotel.

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Drs. J. R. Harvey, Footville, and F. B. Welch of Janesville were renamed president and vice-president, respectively, of the Rock County Medical Milk Association. The association offers a milk inspection for dairy farmers of Rock County.

—△—

Mrs. Charles S. Sheldon, 84, widow of the late Dr. C. S. Sheldon and mother of Dr. W. H. Sheldon of Madison, died at her home on March 15th. Mrs. Sheldon had lived in Madison since 1885. Surviving are three sons and one daughter.

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Dr. F. F. Bowman, Madison, spoke on "Tuberculosis" before a meeting of the P. T. A. of Central High School.

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The Mid-Western Section of the American Congress of Physical Therapy will conduct a one-day scientific program on Monday, May 15th, at the Hotel Jefferson, Peoria, Illinois. This immediately precedes the annual meeting of the Illinois State Medical Society which commences on May 16th. The medical profession is cordially invited. There will be no registration fee.

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Dr. Gilbert E. Seaman, Milwaukee, and Dr. Jessie P. Allen of Beloit were visitors at the offices of the State Medical Society, Madison, in March.

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Dr. Wilson Lancaster, formerly of Browns Valley, Minnesota, has taken over the practice and hospital of the late Dr. Guerdon C. Buck of Platteville.

—△—

Mr. J. G. Crownhart, Secretary, was one of the speakers on the program of the Milwaukee County Dental Society, Milwaukee, held on March 15th. His subject was "Basic Principles of Health Legislation."

On Wednesday, March 23rd, Mr. Crownhart spoke before a meeting of the Sauk County Medical Society at Baraboo on "Poor Relief."

He also gave an address on "Legislation That Affects Health Problems" over Station WHA, University of Wisconsin, on March 29th. This talk was sponsored by the Wisconsin Women's Legislative Council.

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Dedication of the new St. Joseph's hospital at Rice Lake was held on March 17th and 18th. The Rt. Rev. Theodore Reverman, Bishop of the Superior diocese, opened the ceremonies with a high mass at St. Joseph's church, followed by open house at the hospital which was continued through the following day.

The new hospital is the culmination of many years of planning. In the latter part of 1916, Dr. Allan S. White of Rice Lake was instrumental in bringing to Rice Lake three Sisters of the Order of St. Francis, and on January 8, 1917, the Sisters founded the first hospital in Rice Lake in an old boarding house. The hospital made steady progress and in November, 1918, a larger home was purchased and subsequently a wing was added. In April, 1932, an adjoining building was annexed for additional space and in the following month definite plans were announced for a new hospital. The following September work was begun on the new building. It is three stories in height and contains sixty-four rooms, forty-one of which are private rooms, and is fitted throughout with modern equipment. The group of Sisters now numbers seventeen.

Dr. Allan S. White is the chief-of-staff and Dr. W. Rydell is assistant.

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Dr. P. L. Scanlan, Prairie du Chien, returned on March 20th from Washington, D. C., where he spent three months in historical research on Fort Crawford and Indian treaties and wars. Besides securing many photostatic copies of important documents, Dr. Scanlan secured an original letter of Father Mazzuchelli, Jesuit missionary, who erected St. Gabriel's

church at Prairie du Chien, the oldest church in Wisconsin.

In recent years, Dr. Scanlan has made similar studies in Quebec, studying records there and subsequently at St. Louis. On these two trips he was accompanied by his daughter, Marian, who is assisting her father in historical researches.

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MILWAUKEE

The Medical Business Bureau, an agency of The Medical Society of Milwaukee County, formerly located at 606 W. Wisconsin Avenue, has moved its offices next door to those occupied by the Society in the Bankers Building at 208 E. Wisconsin Avenue. On February 1st, Mr. Carleton I. Prosser began his duties as manager of the Bureau, succeeding Mr. Gregory Gramling.

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Committees appointed for 1933 have been particularly active during the month of February. Although a short month, thirteen committee meetings were held, besides two meetings of the Board of Directors.

The Program Committee met on February the 6th and laid plans for Society meetings for 1933.

Dr. J. P. Simonds of Northwestern University and Dr. W. F. Lorenz, Madison, have accepted invitations to appear before the Society on April 14th.

Dr. Simonds' address will deal with newer problems of immunity and infection in disease. Dr. Lorenz will discuss some phases of neurosyphilis.

Mr. Henry Vaughan, commissioner of health, Detroit, Michigan, has been secured for the May meeting. His subject will be "Medical Participation in Public Health Work," which will be illustrated with lantern slides.

Meetings are discontinued during the months of June, July, August, and September.

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Dr. Norbert Enzer, who went to New York on February 27th, for the purpose of studying diseases of the blood at Mt. Sinai Hospital, returned on April 1st.

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Dr. T. L. Harrington, a member of the staff of the Wisconsin Anti-Tuberculosis Association, delivered a series of health talks in four Cudahy schools on February 28th. He spoke at the Cudahy High School, the Washington School, the Kosciuszko School, and the Lincoln School.

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At the meeting of the Milwaukee Maternity Hospital and Dispensary Association, held on March 7th, Dr. A. J. Hood was elected chief-of-staff at the Milwaukee General Hospital. Dr. G. A. Hipke was elected first vice chief; Dr. J. Victor Bolger, secretary, and Dr. H. S. Schumacher, treasurer.

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Dr. Ralph D. Bergen, formerly a member of the medial staff at the Sacred Heart Sanitarium, is now associated with the Drs. Jermain in their clinic, located at 1705 W. Wisconsin Avenue.

LEGISLATIVE ACTION

Because of the fact that ten days elapses between the date this Journal is sent to the press and the date of its receipt by the reader, members are referred to their weekly legislative bulletins for current action on bills previously reported.—Editor's Note.

On March 3rd, Dr. Eleänore Cushing–Lippitt entertained at luncheon, in her apartment in the Hotel Astor, a group of Wisconsin women physicians. Plans were made for the entertainment of the women physicians who are expected to attend the 1933 meeting of the American Medical Association, which is to be held in Milwaukee from June 12–16th.

Dr. Cushing–Lippitt has been appointed chairman of the sub-committee on Women Physicians by Dr. Stanley J. Seeger, chairman of the local committee on arrangements.

—△—

Dr. and Mrs. Roland S. Cron, who have been vacationing in Arizona for the past several weeks, returned to Milwaukee on March 5th.

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Miss Bena M. Henderson, superintendent of the Milwaukee Children's Hospital for the past ten years, resigned on March 9th, because of illness. Miss Henderson left at once for her home in Vermont.

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Dr. Henry B. Hitz was elected chief of the medical staff of the Milwaukee Children's Hospital at a meeting of the hospital's board of directors on March 7th.

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The Medical Veterans of the World War will hold their annual meeting during the 1933 meeting of the American Medical Association in Milwaukee in June.

Dr. Gilbert E. Seaman has been elected President by the executive board which is made up of Dr. J. O. McReynolds, the present president, Dr. R. E. Patterson, Surgeon-General of the United States Army, Dr. Charles E. Riggs, Surgeon-General of the United States Navy, and Dr. Hugh S. Cummings, Surgeon-General of Public Health Service.

Dr. R. E. Patterson will be the principal speaker at a dinner which will be given,—the exact date and place of which have not as yet been announced.

A registration desk for the use of medical veterans will be established during the week of the meeting.

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Dr. and Mrs. Chester C. Schneider and family returned to Milwaukee about the middle of March after having spent the past six weeks vacationing in Florida.

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Dr. Otto H. Foerster, 208 E. Wisconsin Avenue, has been honored by being elected a corresponding member of the Vienna Dermatological Society.

Dr. Thomas Willett was the guest speaker at the meeting of the West Allis Rotary Club on March 2nd. He addressed the members on "What We Really Know About Vitamines."

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The following health talks, sponsored by the State Board of Health and delivered by Mr. Theodore Wiprud, executive secretary of The Medical Society of Milwaukee County, will be broadcast over the Milwaukee Journal Station, WTMJ, during the month of April:

April 7—"Improving The Complexion."
April 14—"Have You a Heart?"
April 21—"Infantile Paralysis."
April 28—"That Tired Feeling."

These talks are broadcast each Friday from 4:00 to 4:15 P. M.

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The following committees for the annual meeting of the American Medical Association, to be held in Milwaukee June 12–16, have been appointed by Dr. Stanley J. Seeger, Chairman, Local Committee on Arrangements, and confirmed by the Board of Directors and President James C. Sargent:

Local Committee on Arrangements:
Stanley J. Seeger, Chairman.

Subcommittee on Sections and Section Work:
Carl Henry Davis, Chairman.

Subordinate Committees on:

Practice of Medicine: R. W. Blumenthal, Chairman; E. L. Belknap, W. J. Egan, L. F. Jermain, L. M. Warfield, R. J. M. Russell.

Surgery—General and Abdominal: F. A. Stratton, Chairman; Joseph J. Adamkiewicz, E. H. Mensing, J. L. Yates, F. B. McMahon, A. C. Gorder.

Obstetrics, Gynecology and Abdominal Surgery: C. A. Evans, Chairman; W. C. F. Witte, R. W. Roethke, N. E. McBeath, H. W. Shutter, Benjamin E. Urdan.

Urology: E. A. Fletcher, Chairman; W. K. Gray, W. M. Kearns, J. W. Kleinboehl, S. J. Silbar, A. G. Jenner.

Orthopedic Surgery: F. J. Gaenslen, Chairman; L. D. Smith, John O. Dieterle, Edward Quick, H. C. Schumm, D. J. Ansfield.

Gastroenterology and Proctology: F. W. Mackoy, Chairman; H. W. Johnson, M. E. Gabor, J. G. Paschen, H. M. Hawkins, C. W. Morter.

Radiology: J. Edwin Habbe, Chairman; A. M. Dorr, H. W. Hefke, C. A. H. Fortier, H. B. Podlasky, S. A. Morton.

Ophthalmology: W. E. Grove, Chairman; F. H. Haessler, C. S. Beebe, J. E. Guy, M. J. Bach, T. A. Judge.

Laryngology, Otology, and Rhinology: C. J. Coffey, Chairman; A. C. Kissling, Leon Guerin, T. L. Tolan, J. E. Mulsow, E. M. Rice.

Diseases of Children: A. B. Schwartz, Chairman; H. O. McMahon, M. G. Peterman, R. M. Hall, R. M. Greenthal, J. F. Shimpa.

Pharmacology and Therapeutics: Harry Beckman, Chairman; F. R. Janney, J. F. Haug, Wm. M. Jermain, Roy W. Benton, W. A. Brussock.

Pathology and Physiology: Norbert Enzer, Chairman; E. L. Tharinger, E. F. Barta, J. J. Seelman, John Grill, E. J. Oesterlin.

Nervous and Mental Diseases: John L. Garvey, Chairman; H. W. Powers, W. F. Wegge, D. W. Roberts, F. C. Studley, W. T. Kradwell.

Dermatology and Syphilology: O. H. Foerster, Chairman; M. J. Reuter, S. M. Markson, C. A. Baer, R. G. Washburn, J. W. Smith.

Preventive and Industrial Medicine and Public Health: John P. Koehler, Chairman; T. S. O'Malley, T. L. Squier, H. E. Dearholt, S. H. Wetzler, J. B. Matthews.

Subcommittee on Transportation: Ernest W. Miller, Chairman; O. R. Lillie, R. E. Morter.

Subcommittee on Technical Exhibits: Harry W. Sargeant, Chairman; Eugene Smith, H. J. Olson.

Subcommittee on Scientific Exhibits: Francis D. Murphy, Chairman; Joseph King, H. R. Farrell.

Subcommittee on Hotels: Harry J. Heeb, Chairman; A. L. Curtin, L. W. Hipke.

Subcommittee on Publicity: Mr. Theodore Wiprud, Chairman; Dexter Witte, J. W. Truitt, R. P. Schowalter.

Subcommittee on Finance: Charles Fidler, Chairman; P. M. Currer, R. W. Garens, Harvey E. Webb.

Subcommittee on Women Physicians: Eleänore Cushing–Lippitt, Chairman; Florence MacInnis, Rose Kriz-Hettwer, Irene T. Stemper, Elsa B. Edelman, Marian Lewis, Edith McCann, Ida Schell, Frances Johnson, Helen Jane Zillmer.

Subcommittee on Entertainment: Ralph P. Sproule, Chairman.

Subordinate Committees on:

Dinner to Delegates: James C. Sargent, Chairman; Rock Sleyster, R. W. Blumenthal, W. E. Bannen (La Crosse), J. F. Smith (Wausau), F. G. Connell (Oshkosh), Mr. J. G. Crownhart, Mr. Theodore Wiprud.

Opening General Meeting: Arthur W. Rogers, Chairman; A. W. Gray, Wm. J. McKillip.

President's Ball and Reception: Reginald Jackson, Honorary Chairman (Madison); D. E. W. Wenstrand, Chairman; Carl W. Eberbach, Millard Tufts, L. J. Foley, A. J. Patek, H. R. Foerster, M. Q. Howard, C. H. Stoddard, H. B. Hitz, J. P. McMahon, W. L. Herner, O. E. Lademan, S. E. Gavin, (Fond du Lac), R. M. Carter (Green Bay), Otho Fiedler (Sheboygan), H. M. Stang, (Eau Claire), J. F. Zivnuska, B. J. Birk, G. A. Carhart, E. L. Baum, E. J. Carey, Gunnar Gundersen (La Crosse).

Golf: John W. Powers, Chairman; John O. Dieterle, G. H. Fellman, J. C. Griffith, W. F. Grotjan, E. W. Miller, S. R. Mitchell, C. W. Morter, H. S. Roby, Ralph P. Sproule.

Alumni Dinners: J. Gurney Taylor, Chairman; John Huston, D. E. W. Wenstrand, C. W. Long, J. J. Pink, John Gordon, Oscar Lotz, John L. Garvey, R. E. McDonald, J. Steele Barnes, Irwin Schulz, F. W. Madison, L. W. Hipke, J. E. Habbe, W. J. Carson,

A. W. Johnson, Forrester Raine, H. B. Podlasky, A. I. Rosenberger.

Subcommittee on Registration: C. C. Schneider, Chairman; W. P. O'Malley, A. A. Schaefer, J. E. Rueth, B. Lieberman, W. A. Ryan, E. F. Cook, F. E. Drew, Edward Jackson, J. J. Lettenberger, S. M. Mollinger, H. B. Miner, A. R. Langjahr, J. G. Curtin, D. C. Ausman, R. H. Frederick, W. P. Blount, S. J. Cahana, E. O. Gertenbach, J. F. Blair, Thos. Willett.

Subcommittee on Printing and Information: H. J. Gramling, Chairman; T. J. Howard, S. J. Krzysko, W. V. Nelson, W. L. Stranberg.

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The Speakers Bureau, sponsored by the educational committee of The Medical Society of Milwaukee County, was represented during the month of March as follows:

March 1—Dr. W. A. Ryan, "Wounds, Infections, Hemorrhages and Burns," Bureau of Home Nursing.

March 8—Dr. Frances Johnson, "Prenatal Care," Bureau of Home Nursing.

March 9—Dr. W. P. Blount, "Facts and Fallacies About Our Feet," Pioneer Club of Wauwatosa.

March 14—Dr. R. W. Blumenthal, "A Medical Career," Marquette University H. S., P. T. A.

March 15—Dr. J. L. Garvey, "The Nervous System," Bureau of Home Nursing.

March 17—Dr. Samuel Plahner, "Your Child and the School," Neeskara School P. T. A.

March 22—Dr. W. A. Ryan, "Menopause," Bureau of Home Nursing.

March 23—Dr. J. C. Sargent, "The Doctor Comes Up For Air," Kiwanis Club of West Allis.

March 24—Dr. F. R. Janney, "Health of School Children," St. Jude's School P. T. A.

March 29—Dr. D. W. Roberts, "Keeping Mentally Fit," Mt. Mary College.

MARRIAGES

Dr. Elgie Houghton, Lancaster, to Miss Rose Bausch of Cassville on February 21st at Madison.

DEATHS

Dr. Neil Andrews, Oshkosh, died on March 7th at his home, 209 Lake Drive, following a month's illness.

Dr. Andrews was born in the year 1869 and came to Oshkosh in 1904. He was a graduate of Northwestern University School of Medicine in 1904. He made several trips to Europe for the purpose of postgraduate study. He was a veteran of the World War during which he served in the United States Army Medical Corps with the rank of captain. Dr. Andrews was one of the original group of physicians who took part in the establishment of the Oshkosh Clinic with which he was associated up to the time of his death.

He was a member of the Winnebago County Medical Society, the State Medical Society, and the American Medical Association. He was also a member of the American College of Physicians.

Survivors are his widow and three sisters.

Dr. Nils Omsted, Stoughton, died on February 28th at a Madison hospital of pneumonia.

Dr. Omsted was born in Norway in 1859, coming to the United States in 1882. He was a graduate of King Fredericks University Faculty of Medicine, Oslo. He lived in Racine until forty-eight years ago when he moved to Stoughton where he had since practiced.

He is survived by his widow, one daughter and two sons.

Dr. Hans Rasmussen, Milwaukee, died at his home, 2933 W. Vliet Street, on Wednesday, March 15th.

Dr. Rasmussen was born in Germany in the year 1867. His medical training was received at the Jefferson School of Medicine, Louisville, Kentucky, from which he graduated in the year 1896. He had practiced medicine in Milwaukee for about thirty-seven years.

Surviving Dr. Rasmussen are his wife, Mrs. Lydia Rasmussen and a son, George Rasmussen.

SOCIETY RECORDS

New Members

Kenneth G. Pinegar, Marinette.
James J. Lutz, Phelps.
G. G. Shields, Abbotsford.
B. L. Von Jarchow, 1519 Washington Ave., Racine.
Alvin Brusky, Seymour.
Wendell Marsden, 1 S. Pinckney St., Madison.
Thomas Leonard, Jr., 720 S. Brooks St., Madison.
H. L. Miller, 606 W. Wis. Ave., Milwaukee

Changes in Address

R. O. Bassuener, Sheboygan Falls to Warrens.

A. L. Millard, 112 W. College Ave., Appleton, to Marshfield.

George Klinger, Waukesha to National Bank Bldg., Waukegan, Ill.

P. J. Dailey, Elcho to Antigo.

OFFICIAL CALL

To the Officers, Fellows and Members of the American Medical Association:

The eighty-fourth annual session of the American Medical Association will be held in Milwaukee, Wisconsin, from Monday, June the twelfth, to Friday, June the sixteenth, Nineteen hundred and thirty-three.

The House of Delegates will convene on Monday, June the twelfth.

The Scientific Assembly of the Association will open with the General Meeting held on Tuesday, June the thirteenth, at 8:30 P. M.

The various sections of the Scientific Assembly will meet Wednesday, June the fourteenth, at 9 A. M. and at 2 P. M. and subsequently according to their respective programs.

Edward H. Cary, *President,*
Frederick C. Warnshuis,
Speaker, House of Delegates.

THE JOURNAL BOOK SHELF

BOOKS RECEIVED FOR REVIEW

Principles and Practice of Obstetrics. By Joseph B. DeLee, A. M., M. D., professor of obstetrics and gynecology at the University of Chicago; Chief of Obstetrics, Chicago Lying-in Hospital and Dispensary; Consulting obstetrician to Provident Hospital, to the Chicago Maternity Center, etc. Sixth Edition. Thoroughly revised. 1165 pages with 1221 illustrations on 923 figures, 265 of them in colors. Price $12.00 net. W. B. Saunders Company, Philadelphia, 1933.

The Medical Secretary. By Minnie Genevieve Morse, member Board of Registration, Association of Record Librarians of North America; author of "Case Records in Small Hospitals." Price $1.50. The Macmillan Company, New York, 1933.

Diseases of The Heart. By Sir Thomas Lewis, M. D., Hon. D. Sc. (Michigan), physician in charge of department of clinical research, University College Hospital, London; physician of the staff of the Medical Research Council; Physician in Chief (Pro Tem) Peter Bent Brigham Hospital, Boston. Price $3.50. The Macmillan Company, 60 Fifth Ave., New York, N. Y.

Clinical Diagnosis. By Neuton S. Stern, A. B., M. D. (Harvard) associate professor of medicine, University of Tennessee School of Medicine, Memphis. Price $3.50. The Macmillan Company, 60 Fifth Ave., New York, N. Y.

Surgical Clinics of North America. (Issued serially one number every other month.) Volume 13, No. 1. (Pacific Coast Surgical Association Number —February 1933). 247 pages with 90 illustrations. Per Clinic Year (February 1933 to December 1933) Paper, $12.00; Cloth, $16.00 net. W. B. Saunders Company, Philadelphia.

Common Skin Diseases. By A. C. Roxburgh, M. D., F. R. C. P., London. Physician in charge of the skin department and lecturer on Diseases of the Skin, St. Bartholomew's Hospital; physician and lecturer, St. John's Hospital for Diseases of the Skin; Editor of the British Journal of Dermatology and Syphilis. 8 plates and 110 illustrations in the text. H. K. Lewis & Co. Ltd., 136 Gower St., W. C. 1, London, England.

Diseases of the Eye. By Hofrat Ernst Fuchs, former professor of ophthalmology in the University of Vienna. Fifteenth German edition of the Lehrbuch Der Augenheilkunde as revised by Maximilian Salzmann, professor of ophthalmology, University of Graz, Austria. Authorized translation by E. V. L. Brown, M. D., professor of ophthalmology, University of Chicago. Tenth English edition. 255 illustrations in the text and 41 colored figures. J. B. Lippincott Co., Philadelphia.

The Pelvis in Obstetrics. By Julius Jarcho, M. D., F. A. C. S. Consulting gynecologist, Hastings Hillside Hospital; attending obstetrician and gynecologist, Sydenham hospital. 140 illustrations, 51 tables. Price $6.00. Paul B. Hoeber, Inc., New York, N. Y.

Chronic Arthritis and Fibrositis. By Bernard Langdon Wyatt, M. D., directer, The Wyatt Clinic, Tucson, Arizona. Author of "Chronic Arthritis and Rheumatoid Affections, With Recovery Records." Price $3.50. William Wood & Company, Baltimore, Md.

Physiology and Anatomy. By Esther M. Greisheimer, B. S. (in Education), M. A., Ph.D., M. D. Associate professor of Physiology, University of Minnesota, Minneapolis. 358 illustrations. Price $3.00. J. B. Lippincott Co., Philadelphia.

Specific Changes in the Blood Serum. By S. G. T. Bendien, Serological Laboratory, Zeist, Holland. Translated by A. Piney, M. D., director of the Pathological Department, The Cancer Hospital, London. With 64 illustrations. Price $3.50. C. V. Mosby Co., St. Louis, Mo.

BOOK REVIEWS

Any scientific publication reviewed in this column may be obtained for inspection. Orders for such inspection should be directed to the Medical Library Service, 424 N. Charter Street, Madison, Wis.

Food in Health and Disease. By Katherine Mitchell Thoma, B. A., director of dietetics, Michael Reese Hospital, Chicago. Price $2.75. F. A. Davis Company, 1914–16 Cherry St., Philadelphia, Pennsylvania.

This is an eminently practical book for the training of nurses in the problems of dietetics. An unusually good balance is maintained between the different nutrient materials discussed. The statements made about clinical conditions are simple, to the point, and accurate to the best of our knowledge at the time it was written. The volume can be commended for the use of clinicians who want a simple book on dietetics, and it is one of the best books for a course in dietetics to nurses in training, the chief purpose for which it was written. E.L.S.

The Pelvis in Obstetrics. By Julius Jarcho, M. D., F. A. C. S., Consulting gynecologist, Hastings Hillside Hospital; attending obstetrician and gynecolo-

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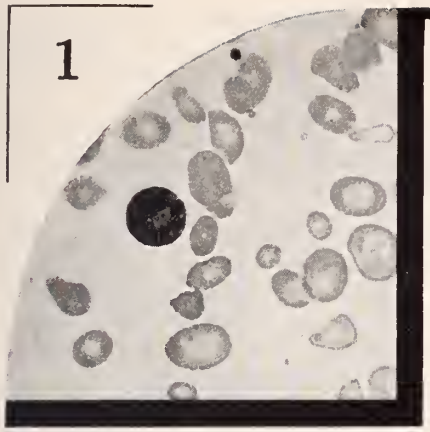

At left—Pernicious Anemia pretreatment level. R. B. C. 820,000 per cu. mm.; Hb. 17%. Started Ventriculin 40 Gm. daily.

At right—Fourth day of treatment. Reticulocytes 54%; R. B. C. 1,120,000 per cu. mm.; Hb. 24%.

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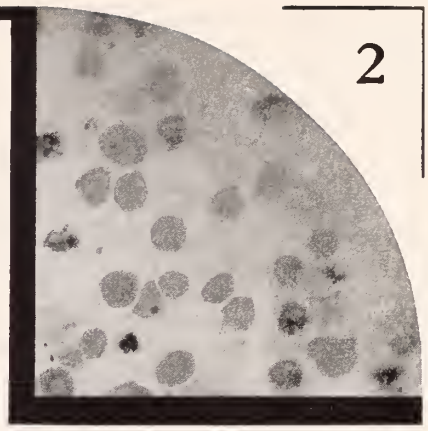


BACK OF EVERY DOSE OF VENTRICULIN IS THE PRECISE HEMATOLOGIC RECORD OF ACTUAL CLINICAL TESTS MADE ON SUITABLE CASES OF PERNICIOUS ANEMIA

Each manufactured lot of Ventriculin (Desiccated Defatted Hog Stomach) is clinically tested and approved by the Thomas Henry Simpson Memorial Institute for Medical Research of the University of Michigan, Ann Arbor, Mich., before it is released for commercial distribution.

The required dosage is accurate and easily determined—10 grams daily for each million deficit in the erthyrocyte count. The average maintenance dose is 10 grams daily. Elderly patients and those with complications may require more.

Ventriculin, P. D. & Co., is palatable, non-hygroscopic, and stable. It is suitable for prolonged treatment and does not induce nausea or aversion on continued administration. Accepted by the Council on Pharmacy and Chemistry of the American Medical Association

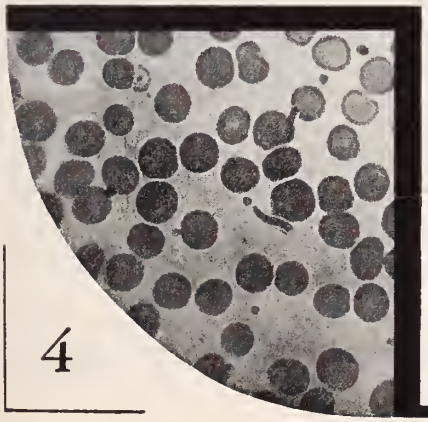
PACKAGES

Supplied in packages of 12 and 25 vials, each vial containing 10 grams—also in an "Economy Package," a 100-gram bottle.

PARKE, DAVIS & COMPANY

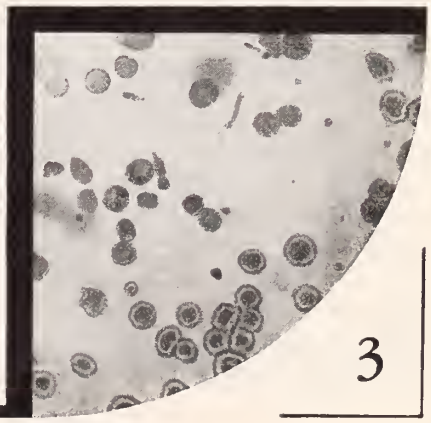
The World's Largest Makers of Pharmaceutical and Biological Products

4



At right — Seventeenth day of treatment. R.B.C. 2,440,000 per cu. mm.; Hb. 56%.

At left — Sixty-sixth day of treatment. R.B.C. 4,610,000 per cu. mm.; Hb. 84%.



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gist, Sydenham Hospital. 140 illustrations, 51 tables. Price $6.00. Paul B. Hoeber, Inc., New York, New York.

The author states in the preface that there is no book in the English language which adequately covers the subject of the pelvis in obstetrics. I know of no book in any language that so completely and thoroughly presents this most important subject. The author has brought together all that is known of the pelvis in its relation to parturition and presented it in a clear and concise manner. It represents an enormous amount of work as evidenced by the bibliographical references which alone require twenty-six pages to list.

The importance of pelvic mensuration is being increasingly appreciated and in this volume the reader can find all the methods—new and old—with explicit directions and logical evaluation and interpretation.

While the reviewer does not wholly share the author's faith in present-day roentgen-ray pelvimetry, it is difficult to find other points of criticism in this book. The reviewer would like to express his appreciation both to the author and the publisher for the production of this book. To the obstetrician it will prove invaluable, and to the physician in general practice and to the medical student it affords a volume of valuable study and reference. J. W. H.

Diseases of The Eye. Sir John Herbert Parsons, C. B. E., D. Sc., F. R. C. S., F. R. S. Sixth Edition. (Reprinted). 678 pages, with 21 plates and 348 text figures. The Macmillan Company, New York, 1931. Price $5.50.

This well known text book has been before the profession since 1907, when the first edition appeared,—this alone indicating its popularity. In the present, the sixth edition, the text has been revised, with no great changes aside from some additions to the text and illustrations.

The subject matter is divided into eight sections, with three brief appendices.

The first section of 67 pages is devoted to Anatomy, Physiology, Elementary Optics, Elementary Physiological Optics, and the Neurology of Vision. No better brief presentation of these fundamentals could be found anywhere.

Section II consists of 51 pages, devoted to External Examination, Ophthalmoscopic Examination, The Fundus Oculi, and Functional Examination. These subjects are presented in a concise and clear manner.

Section III is devoted to Diseases of the Eye, including a chapter on Operations Upon the Eyeball. The section is subdivided into 13 chapters covering the diseases of the eye which are dealt with according to anatomical classification, and 305 pages are devoted to this subject.

Section IV devotes 25 pages to Retinoscopy, Errors of Refraction, and Anomalies of Accommodation.

Section V is given to Disorders of Motility of the Eye and covers 25 pages.

Section VI is subdivided into two chapters, one concerning Ocular Manifestations of Diseases of the Nervous System, and one covering Ocular Manifestations of Other Diseases. This section is comprised of 19 pages.

Section VII relates to Diseases of the Adnexa of the Eye—The Lids, The Lachrymal Apparatus, and the Orbit. Forty-two pages are alloted to this section.

Section VIII consists of two brief chapters of 5 pages discussing the Causes and Prevention of Blindness, and the Hygiene of Vision. This brief section might well be read by the lay public, particularly school teachers, as well as the general practitioner.

Appendix I consists of a very comprehensive outline for a routine examination of the eye which would serve well as a model introductory lecture for a course in ophthalmology for undergraduates.

Appendix II devotes 4 pages to therapeutic notes, which includes the more common drugs used in eye work.

Appendix III covers requirements of candidates for admission into the public service of Great Britain.

The text is well illustrated and contains 21 excellent plates, most of them in colors.

The student and practitioner can find no more concise and reliable guide than this authoritative text.

F. A. D.

Surgical Clinics of North America. (Issued serially one number every other month.) Volume 13, No. 1. (Pacific Coast Surgical Association Number —February 1933). 247 pages with 90 illustrations. Per clinic year (February 1933 to December 1933) Paper, $12.00; Cloth, $16.00, net. W. B. Saunders Company, Philadelphia.

Some 24 workers have contributed to this volume. In it may be found an enlightening and interesting discussion of a variety of surgical conditions. It should serve as a very useful reference guide.

J. W. G.

The Sex Technique in Marriage. By Isabel E. Hutton. Price $2.00. Emerson Books, Inc., New York.

The importance of sex education is being increasingly appreciated and no phase of the subject is more important than that of the sexual aspects of marriage. Dr. Hutton has written a small book for the lay reader that can be highly recommended to anyone interested in the subject. The book is thoroughly in accord with present-day scientific knowledge, nevertheless the subject matter is presented in a clear and understandable manner. The book contains more than its title indicates. There are excellent chapters dealing with the physiology and hygiene of menstruation and the menopause, and an especially commendable discussion of inheritable diseases.

The book is one that the physician can well recommend to his patients and especially to those about to be married. J. W. H.

Why "Sweeten" the Baby's Bottle?

DEXTRI-MALTOSE IS A CARBOHYDRATE THAT DOESN'T CLOY THE BABY'S APPETITE

When the time comes to feed soups, vegetables and cereals to the infant whose formula has been modified with Dextri-Maltose **(not a sweetener)**—both the physician and the mother are gratified to notice the baby's eager appetite for solid foods, because

Dextri-Maltose Does Not Cloy

Viosterol

USE OF VIOSTEROL DURING PREGNANCY

To the Editor:—Please advise me whether administration of irradiated ergosterol to pregnant women could cause a premature calcification of the fetal head, resulting in dystocia, with possibly damage later to the child.

M.D., Waco, Texas.

J.A.M.A., Dec. 19, 1931, p. 1914

ANSWER.—There is no danger to mother or child from therapeutic doses of viosterol (irradiated ergosterol) given during pregnancy. In fact, such medication probably would be of advantage, owing to the excessive drain of calcium and phosphorus that takes place during this period. This medication is especially indicated in cases in which the intake of calcium compounds has been insufficient.

Safe in Pregnancy

Extra Calcium in the Diet

In palatable, readily assimilable form, Mead's Cereal supplies added food calcium (220 mgm. Ca per oz.) which is utilized by Mead's Viosterol.

MEAD'S VIOSTEROL IN OIL 250D, because of its well-known effect upon calcium absorption, is attracting increased interest among obstetricians for use during pregnancy. Aside from its mineral nutritional aspect, Mead's Viosterol in Oil 250D has a marked effect in lowering blood coagulation time. Samples and literature on request. Mead Johnson & Co., Evansville, Ind., U.S.A. Pioneers in Vitamin Research.

Please enclose professional card when requesting samples of Mead Johnson products to cooperate in preventing their reaching unauthorized persons.

» » » CORRESPONDENCE « « «

"ASSUMES NO RESPONSIBILITY"

MARQUETTE UNIVERSITY SCHOOL OF MEDICINE
Department of Pediatrics
Milwaukee, Wis., March 7, 1933.

To the Editor,
Wisconsin Medical Journal,
Madison, Wis.
Dear Sir:

In the February, 1933, issue of the Wisconsin Medical Journal, Vol. 22, p. 77, there appeared an article "The Role of the Upper Respiratory Infections as a Cause of Death in Immature Infants" by A. B. Schwartz, M. D., Milwaukee, with the designation that this publication came from the Milwaukee Children's Hospital and the Department of Pediatrics, Marquette University School of Medicine.

You are hereby informed that this article was published without the knowledge or approval of the Department of Pediatrics of the Marquette University Medical School and that therefore the Department assumes no responsibility for the article.

Yours truly,
M. G. PETERMAN, M. D.,
Director, Department of Pediatrics.

MGP:LS

STATE SERVICE IN AUSTRIA

5 Fallmerayer Strasse
Care, Frau Von Saar
Innsbruck, Austria

Dear George:

Medical Economics was already a somewhat trite and outworn subject of conversation when I left Milwaukee last September but perhaps you and your readers would be interested in the situation as I see it in Vienna in these rather turbulent times. Any figures that I may quote are not statistical evidence and I will not vouch for their accuracy. I'll only attempt, in a few words, to give a cross section of the opinions of five or six more or less prominent Viennese physicians.

Vienna at present has approximately two million inhabitants of which 180,000 are out of work. These and their families are being cared for in the free municipal hospitals and clinics. Of the remainder, approximately 80% are members of various health insurance companies (Krankenkassen). The insurance companies are both municipal and semi-private corporations but in any case closely controlled by municipal regulations.

About 20% of the money collected by the insurance companies is paid out to physicians. The remaining 80% is consumed in the overhead of the company upkeep of offices, state and municipal taxes and assessment and the building of dwelling houses for the unemployed.

The average general practitioner receives 3 shillings for an office call and 5 for a house call. The specialist receives 4 shillings for an office call and 7 for a house call. The shilling is worth approximately 12 cents. Operative fees are of corresponding size. It was stated by one surgeon that he prefers to take his insurance patients to his own municipal operative clinic, where all work is done free of charge, rather than be inconvenienced by operating at another hospital in order to collect the small fee.

In view of the great discussion concerning state medicine I contribute these few statements for what interest they may hold for the medical public.

With best regards to you and family,
JOHN HITZ, M. D.

"CONFERRED AN HONOR"

Albany, Georgia, March 22, 1933.

Mr. J. G. Crownhart,
Secretary, State Medical Society of Wisconsin,
Madison, Wisconsin.
Dear Sir:

Your kind letter in which you advise me that you have used as a front cover editorial a paragraph from my article appearing in the February issue of the Journal of the Medical Association of Georgia was received, and also the copy of your splendid Journal. You conferred an honor upon me which I greatly appreciate.

Sincerely yours,
J. A. REDFEARN.

NATIONAL BOARD RESOLUTION

Milwaukee, March 10, 1933.

Mr. J. G. Crownhart,
Wisconsin State Medical Society,
Madison, Wisconsin.
Dear George:

I know that you are interested in the meeting of the Federation of State Medical Boards and the Council on Medical Education and Hospitals in Chicago on February 13, 1933. The National Board of Medical Examiners held a meeting and adopted the enclosed resolution.

Sincerely yours,
J. GURNEY TAYLOR, M. D.

RESOLUTION REGARDING THE ADMISSION OF THE GRADUATES OF FOREIGN MEDICAL SCHOOLS TO THE EXAMINATION OF THE NATIONAL BOARD OF MEDICAL EXAMINERS OF THE UNITED STATES ADOPTED FEBRUARY 12, 1933

That no student, either American or European, matriculating in a European medical school subsequent to the academic year 1932–33 will be admitted to the examination of the National Board of Medi-

PHYSICIANS' EXCHANGE

Advertisements for this column must be received by the 25th of the month preceding month of issue. A charge is made of $2.00 for the first appearance of copy occupying 1 inch or less of space and $1.00 for each succeeding insertion of the same copy. Kindly accompany copy with remittance to cover number of insertions desired. Advertisements from members of the State Medical Society will be accepted without charge. Such copy will be taken out after its second publication unless otherwise requested. Where numbers follow advertisements replies should be addressed care Wisconsin Medical Journal.

FOR SALE—Centrifuge with one 15cc head, one 50cc head, hood, glass tubes and shields. E. H. Sargent's incubator 9017; oven 6237; Duboscq Colorimeter 2561; Sanborn's Handy Kymograph; Handy (Portable Basal Metabolism); E. Leitz' Inc. MacKenzie Ink Polygraph Dressier Modification No. 585; wrist syphymograph with breast plate. Best offer or trade for electric cautery; tonsillectomy suction apparatus. Address M. J. Robertson, M. D., Bayfield, Wis. MA

LOCATION WANTED—By general surgeon with some orthopedic experience. Capable of doing high grade surgery. Would consider partnership or will buy a good, going practice. Address No. 903 in care of the Journal. FMA

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FOR SALE—Good location southern Wisconsin. Small investment, easy terms. Competition light. Address No. 906 in care of the Journal. AM

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cal Examiners who does not present satisfactory evidence of premedical education equivalent to the requirements of the Association of American Medical Colleges and the Council on Medical Education of the American Medical Association, and graduate from a European medical school after a medical course of at least four academic years, and obtain a license to practice medicine in the country in which the medical school from which he graduated is located.

Wisconsin Women Physicians Plan Entertainment in Connection With Milwaukee A. M. A. Sessions in June

The plans of the women physicians of Wisconsin, for the entertainment of colleagues of their own sex who will attend the June convention, are nearing completion. Dr. Eleänore Cushing–Lippitt, Milwaukee, is Chairman of the subcommittee on program for women physicians.

About one thousand of the women physicians of the United States are members of the Medical Women's National Association, which requires its active members to belong to the A. M. A. This group has branches in practically all the large cities of the United States, branch No. 10 being located in Milwaukee. This group cooperates with other women physicians in planning for the M. W. N. A. and A. M. A. conventions. The M. W. N. A. meets on the two days preceding the opening of the A. M. A. sessions. It holds social and business meetings only, the social meetings being continued through the entire convention week, but being carefully arranged so that they will not conflict with any A. M. A. scientific or social functions.

The headquarters for women physicians are at the Hotel Astor. The plans for the coming June include a motor trip on Sunday through Milwaukee and suburbs, followed by a buffet supper at the Wisconsin club, tendered by the women physicians of Wisconsin. Later Sunday night, the officers of the local group (Eleänore Cushing-Lippitt, Irene Stemper, Elsa Edelman, Rose Kriz-Hettwer) will hold an informal reception at the Hotel Astor.

Community meals for the entire week have been arranged for the medical women, except at times when A. M. A., Fraternity and Alumni functions are occurring. At each of the community meals a medical woman has been asked to talk briefly and informally on medical-sociological or other timely subjects. Among the talks to be given are:

"History of Medical Women"—Kate C. Mead, Haddam, Conn.

"Opportunities for Medical Women"—Bertha Van Hoosen, Chicago.

"Scholarships for Women Medical Students"—Martha Bass, New Orleans.

"The Woman Physician and Legislation"—Louise Taylor-Jones, Washington, D. C.

"The Woman Physician and Public Health"—Speaker to be announced.

"American Women's Hospitals"—Esther Pohl Lovejoy, New York.

"Preventive Medicine in the South"—Rosa H. Gantt, Spartenburg, South Carolina.

"The Story of Pellagra Prevention"—Lillian South, Kentucky.

"The Story Illustrated by Moving Pictures,"—Hilla Sheriff, North Carolina.

"Medical Women of Wisconsin"—Ida Schell, Milwaukee.

"The Women's Evening Clinic"—Eleänore Cushing-Lippitt, Milwaukee.

"The Century of Progress Exposition"—Lena K. Sadler, Chicago.

If anything suitable for use at the A. M. A. sessions is presented at these meals, it will be developed further and offered to the A. M. A. for the 1934 convention.

On Monday, the executive board of the Medical Women's Association, will give its report, including abstracts of the reports of the sixteen standing committees. The election of officers will follow. Any time not consumed by the business of the organization will be devoted to a discussion of the majority and minority reports of the Committee on the Costs of Medical Care, and to the consideration of other plans advanced to supply adequate medical care for the low-income family.

On Monday evening the annual banquet for medical women takes place. A laywoman internationally known is expected to be the guest speaker on this occasion. Other lay guests have been invited and a complete list of acceptances will appear in the next number of the Wisconsin Medical Journal.

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Tuesday evening will see the group at Doctors' Park, enjoying an early picnic dinner. This function is being planned by Dr. Marian Lewis of Milwaukee. At 8 P. M. they will attend the general meeting of the A. M. A. at the Auditorium. The balance of the week will be devoted to attendance at the A. M. A. sessions, and reunions at community, fraternity or alumni gatherings.

After spending much of three days together before the A. M. A. sessions begin, the women will have accomplished, for the time being, one of the objects of their organization—that is, "to bring medical women into association with each other and * * * encourage social and coöperative relations within and without the profession".

The New Deal for the Veterans

By AN OBSERVER, M. D.

The writer, who prefers to remain anonymous, is a member who has had the opportunity for a real insight into the problem of care for the veteran. We present his notes as being of particular interest at this time. Editor's Note.

The Veterans' Administration should be placed under the supervision of a Cabinet officer. Many troublesome questions could be ironed out satisfactorily to both government and claimant, whereas as now administered the President declines to interfere in disputed cases and the administrator is both judge and jury of his own actions. This makes for discontent.

Congress has repeatedly refused, and properly so, the setting up in the Veterans' Administration of a medical unit such as now exists in the Army, Navy, and Public Health Service, permitting retirement and other privileges.

The Veterans' Administration has already become a menace to the free will of the people. It is bankrupting hospitals, embarrassing the medical profession, and robbing the veteran of his choice of medical attention, and its power should be curtailed. Far better and much more economical results would be secured by reversion to the type of medical care for veterans that existed prior to 1918, viz., Medical Boards in practically every county of the several states. Such a method would save the cost of transportation and subsistence of the veteran from his home to a veteran hospital. (In many cases he is unable to travel). The compensation of the Boards, or individual physicians where a Board is not advisable, to depend upon a fee in each case. The local physician would also guard the government against the malingerer.

The objection advanced by the administrator that the local physician is incompetent for such work, is ridiculous. The active practitioners of today carried the medical and surgical work of yesterday when the nation was endangered.

The Service or Pension Act, passed a short time ago, was not initiated by any of the service men's organizations, but was a Congressional gesture only. The Civil War veterans did not receive such recognition until June 27, 1890, over twenty-five years after Appomattox, and then only a pension based on disability, the maximum allowance being twelve dollars per month.

In considering the repeal or amendment of this Act, property distinction which savors of pauperism, should be meticulously avoided. If amendment is to be preferred to outright repeal, then make a disability of at least 75 per cent the line of demarcation. Venereal disease should never have been made compensable.

NON-SERVICE DISABILITIES

The Veterans' Administration sponsored the hospitalization of non-service connected disabilities and it has become an expensive experiment. In 1925, one year after the passage of legislation allowing hospitalization in government hospitals for non-service connected cases, this type of case formed 14 per cent of the total hospital load. In 1931 it was 54 per cent. For the fiscal year ending June 30, 1931, 102,226 veterans were admitted to the hospital; 24,618 (22 per cent) service connected, 75,427 (68 per cent)

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non-service connected, and 2,181 (2 per cent) were admitted for examination or observation (non-service connected). The above are the figures for World War veterans. Other wars had 7,423 of which amount 6,311 were Spanish War veterans. In addition 460 Allied Veterans were treated, plus an additional 326 miscellaneous beneficiaries (civil service commission) U. S. employees, etc.

On June 30, 1931, there were in operation 54 veterans' hospitals with 22,732 beds, an increase of seven hospitals and 3,575 beds during the year. In addition there were available 9,732 beds in various Army, Marine, and Navy hospitals, Public Health Buildings, etc.

In 1931 the program called for 3,024 additional hospital beds and 350 domiciliary beds, the last item at National Home. Since then these 350 beds have been converted to hospital beds. The net per diem for all hospitals was $3.72; T. B., $5.19; Neuropsychiatric, $2.69; General Medical and Surgical, $4.49, and all the above costs are decreases over 1930.

Why the government should treat non-service connected cases, especially in times of great financial stress, is hard to understand and it should be stopped with consideration, however, in such serious cases, as was mentioned under the Pension Act, viz., no charity line but the extent of disability.

Service connected cases, which, after all is said, are the bases of compensation and hospitalization, should be carefully studied. In every case of permanent and total disability, where the veteran is hospitalized or under domiciliary care (Soldiers' Homes) no further compensation should be paid except where there are dependents, beyond a small amount for comforts or minor luxuries—shaving, tobacco, etc.

In mental cases it is ridiculous to permit large amounts of money to accumulate in county courts to the credit of an imbecile, only to become subject to future litigation without one iota of benefit to the veteran. The government at least should be the custodian.

HOSPITALIZATION

The enormous capital investment, ever increasing under the present laws, and the operation of these enormous units is becoming a serious problem in many ways. The solution, in part at least, is local hospitalization. We have to consider three classes of patients:

1. Mental cases. These are increasing in number and their proper place is in government owned and operated institutions.

2. Tuberculosis. These are diminishing because of death, or the arrest of the disease, and can be cared for in local sanatoria just as efficiently as in veterans hospitals and with much more comfort to the soldiers' families.

3. General medical and surgical cases are gradually being reduced to stages where domiciliary care, (Soldiers' Homes) and not hospitalization proper, is the remedy.

The Saturday Evening Post of January 7, 1933, says editorially:

HOME-TOWN CARE FOR VETERANS

"Hospitals throughout the country are feeling the cramping effects of current conditions more severely than almost any other class of institutions. Even in good times, they are run at a loss and must look to charitable citizens and to local welfare organizations to meet their deficits. This winter they are under pressure to give more free services than ever, with fewer paying patients to offset their costs.

Medical men, even those with large practices, are feeling the pinch of poverty, for they report that they are collecting only from ten to twenty per cent of their bills. Doctors and surgeons may starve, hospitals may go broke, but such are the traditions of medicine that the sick must be cared for at any cost.

Our hospital situation is becoming more and more grave. Only five-eighths of our existing accommodations are being used. More than three-eighths of the available beds—thirty-eight per cent, to be exact—are empty. In the face of these conditions, Congress, with its unfailing genius for devising new ways in which to spend other people's money, threatens to make them worse by building all over the land elaborate and costly hospitals for the care of sick and disabled veterans. Such a course is as detrimental to the best interests of veterans as it is to sound public policy. Already there have been bitter complaints from the mothers of veterans that their boys have been sent to hospitals so far from home that it is impracticable for their families to visit them. Such complaints are well founded. They will

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multiply in proportion as the practice becomes more widespread.

Veterans are entitled to care as near home as hospital facilities permit. It is manifestly unfair to send them to distant medical centers for treatment when they can be given as good care among friends and neighbors, where their families can visit them without inconvenience or expense and where they can still have some share in home-town affairs. Local hospitals are local enterprises and they are usually sponsored by the best element in their communities. The Government, instead of setting up destructive competition with these quasi charities, should utilize their vacant accommodations and pay a fair price for service rendered. Such a policy would be to the interest of veterans and would react favorably upon struggling institutions from coast to coast."

This summary is so concise and so true to existing conditions that it is quoted in full.

There should be no distinction made in amounts paid to a disabled veteran on account of the War in which he served. The ex-service man would welcome local examinations and local hospitalization, and it would tend to ease the drastic revision which is inevitable if we continue to exist as a nation.

Degree of Skill Required by Doctors Interpreted by Court*

In a recent decision in a suit against a physician for alleged malpractice, the Supreme Court of Connecticut placed a new and significant interpretation on the universally recognized rule that a physician in the treatment of patients should exercise the average degree of skill, care and diligence exercised by members of his profession in the same and similar localities.

The Connecticut court in its opinion declared that it is not unreasonable to require that the physician have and exercise the skill of physicians and surgeons in similar localities in the same general neighborhood, and that, "under modern conditions there is perhaps less reason than formerly for the restriction of the skill required to that possessed by physicians and surgeons in the same locality, since there is no lack of opportunity for the physician or surgeon in smaller communities to keep abreast of the advances made in his profession and to be familiar with the latest methods and practices adopted."

Excluding entirely the legal angles, this dictum touches on one of the essential factors in the advancement and maintenance of the high standards of medical practice generally.

For years, leaders in medicine have emphasized the importance of constant and continuous effort on the part of members of the medical profession themselves to increase their knowledge of scientific medicine and their skill in the practice of medicine. It has been said that when the physician ceases to try to learn more about the intricacies of modern scientific medicine and to improve his skill in application of that knowledge, he has reached a point where retirement from active practice is indicated.

As the Connecticut tribunal has pointed out, under modern conditions there is little, if any, excuse for any physician not availing himself of the numerous opportunities offered for keeping abreast of the advances and progress of medicine. He owes it to his clientele, as well as himself and his profession, to take advantage of the various ways offered to increase his knowledge and improve his skill.

The fact that the courts—at least this one—have begun to recognize that the difference between good, bad and mediocre medical service is not to any great extent a matter of geography is evidence that those outside the medical profession are not unaware of the fact that the average physician can, if he has the desire, progress and keep abreast of medical advancement. Moreover, it indicates that the public more and more is beginning to discriminate between the physician who shows a willingness to increase his knowledge and improve his skill and the one who does not.

This awakening on the part of the public, as exemplified by the Connecticut decision, should be an added stimulus to every physician to utilize every means offered to make himself a better physician and incidentally

* From the Ohio State Medical Journal, March 1, 1933.

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Medical Course At least two years of college work, including English, foreign language, physics, chemistry and biology, are required for admission. The course requires at least four years for completion. During the first two of these years the work lies chiefly in the basal medical sciences outlined above. The third year of the course is devoted to didactic and practical instruction in the wards and out-patient department of the Wisconsin General Hospital. The fourth year of the course is devoted to practical instruction under the supervision of preceptors in the Wisconsin General Hospital and in affiliated institutions.

Courses in Nursing Courses in nursing are offered in the School of Nursing affiliated with the medical school. A residential course of 32 months is offered in the Wisconsin General Hospital to those who have completed a semester of specified work in the College of Letters and Science. This course leads to a certificate of graduate nurse. A residential course of 27 months is offered to those who have completed three years of college work in specified subjects either in the College of Letters and Science or in the Department of Home Economics. These courses lead to a certificate of graduate nurse and to a B. S. degree.

Graduate Courses Opportunity is offered for graduate work in the preclinical and the clinical medical sciences and in hygiene and public health. For further information address C. R. Bardeen, Dean, Medical School, Madison, Wis.

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become a greater asset to the community he serves. Incidentally, the physician who is consistently active in medical organization, who attends medical meetings and participates in scientific discussions, is usually most active in keeping abreast of scientific advances. It is usually the non-member who is a laggard.

THERAPEUTIC NOTES

New and Nonofficial Remedies

In addition to the articles previously enumerated the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Abbott Laboratories:
- Abbott's A-B-D Malt Extract with Cod Liver Oil and Viosterol 5D.

Jensen–Salsbery Laboratories, Inc.:
- Undulant Fever Bacterial Vaccine.

Eli Lilly & Co.:
- Gas-Gangrene Antitoxin (Combined).
- Tetanus-Gas-Gangrene Antitoxin (Combined).
- Plague Vaccine, Prophylactic, three 1 cc. vials package.

National Drug Co.:
- Tuberculin Intracutaneous for Mantoux Test.

G. D. Searle & Co.:
- Tablets Chiniofon-Searle Enteric Coated, 0.25 Gm. (4 grains).

E. R. Squibb & Sons:
- Typhoid Vaccine (Immunizing), one 5 cc. vial package.
- Typhoid Vaccine (Immunizing), one 20 cc. vial package.

Ulmer Laboratories:
- Biliposol:
  - Ampoules Biliposol Solution, 2 cc.

The following articles have been included with the List of Articles and Brands Accepted by the Council But Not Described in N. N. R. (New and Nonofficial Remedies, 1932, p. 487):

Hollister-Stier Laboratories:
- Protein Extracts Diagnostic-Hollister-Stier.

McCormick & Co., Inc.:
- McCormick's English Mustard.

United States Standard Products Company:
- Vaccine Virus (U. S. S. P.).

The Wilber Co., Inc.:
- Tablets Digitalis-Wilber.
- Tincture Digitalis-Wilber.

John Wyeth & Brother, Inc.:
- Wyeth's Capsules Digitalis Leaf Defatted.

Lederle Laboratories:
- Solution Liver Extract (Lederle) for Oral Use.

Parke, Davis & Co.:
- Diphtheria Toxin Diluted for Schick Test.
- Diphtheria Toxoid, 30 cc. vial hospital packages.

Don Baxter Intravenous Products Corporation:
- Sterile 5% Dextrose Solution in Vacoliter Container.
- Sterile 10% Dextrose Solution in Vacoliter Container.

Hille Laboratories, Inc.:
- Colloidal Mercury Sulphide–Hille.

Hoffmann–La Roche, Inc.:
- Ampules Scopolamine Stable–Roche, 1/100 gr., 1 cc.

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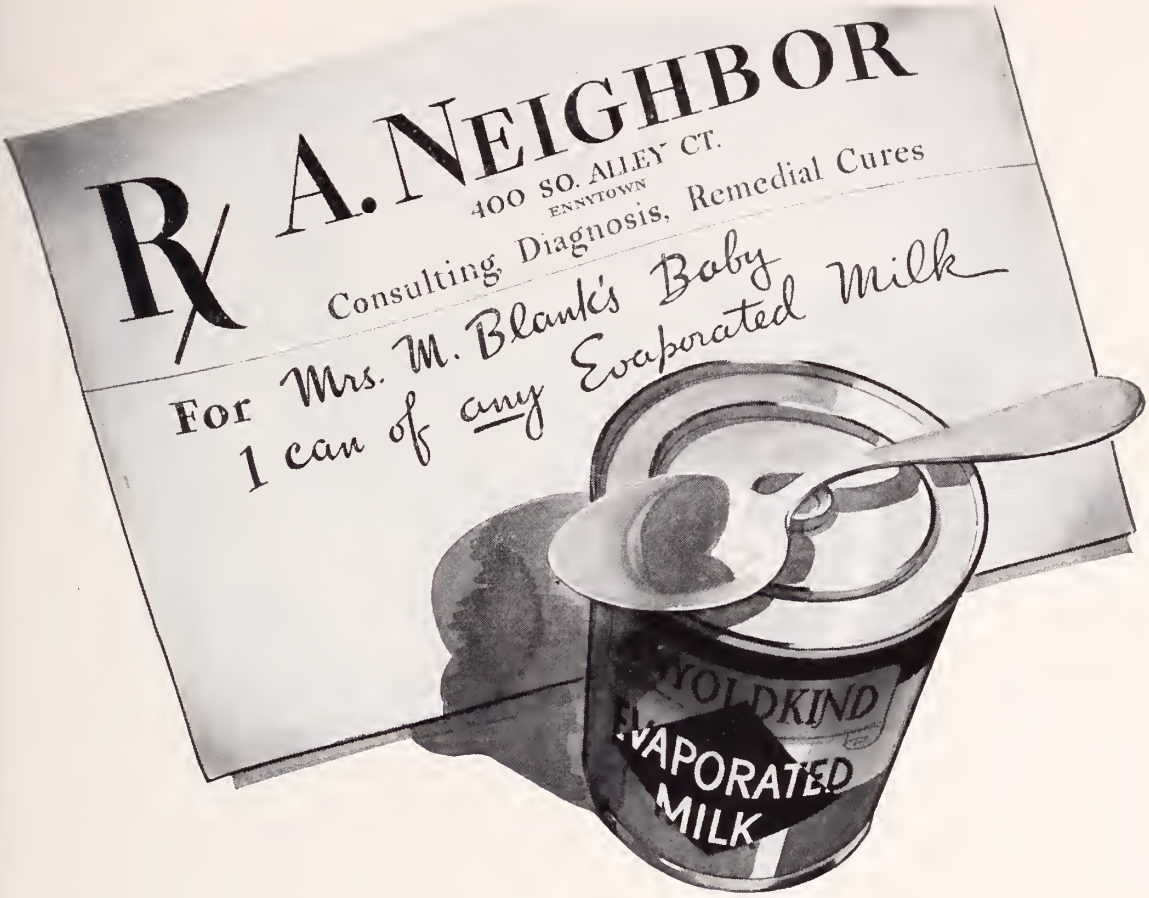

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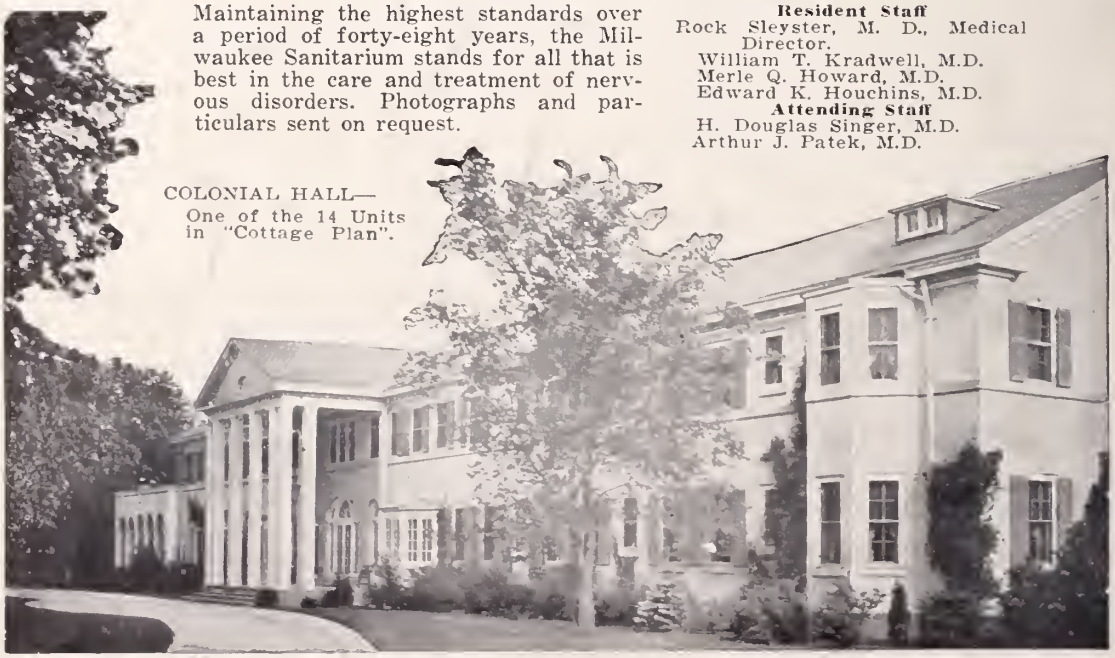

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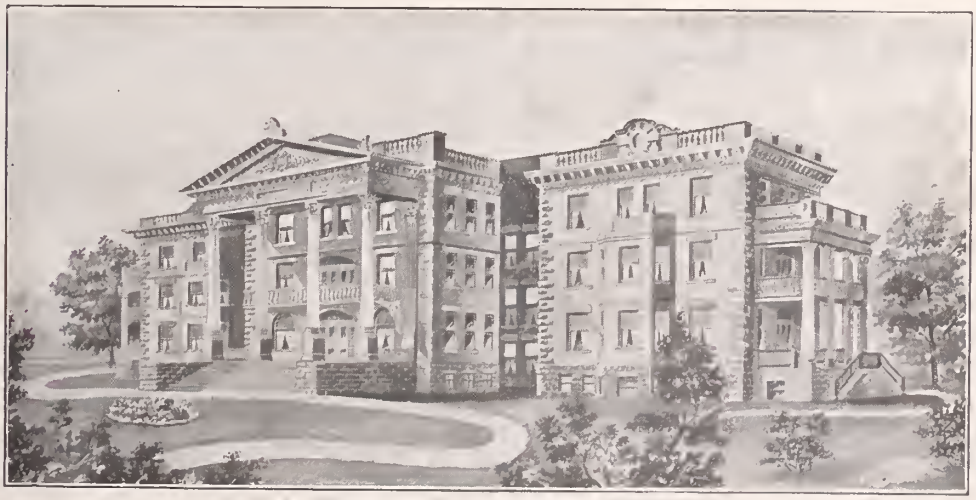

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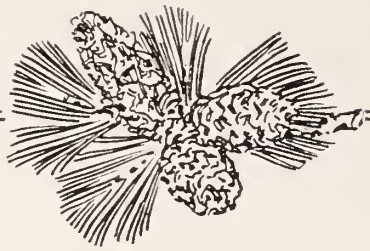

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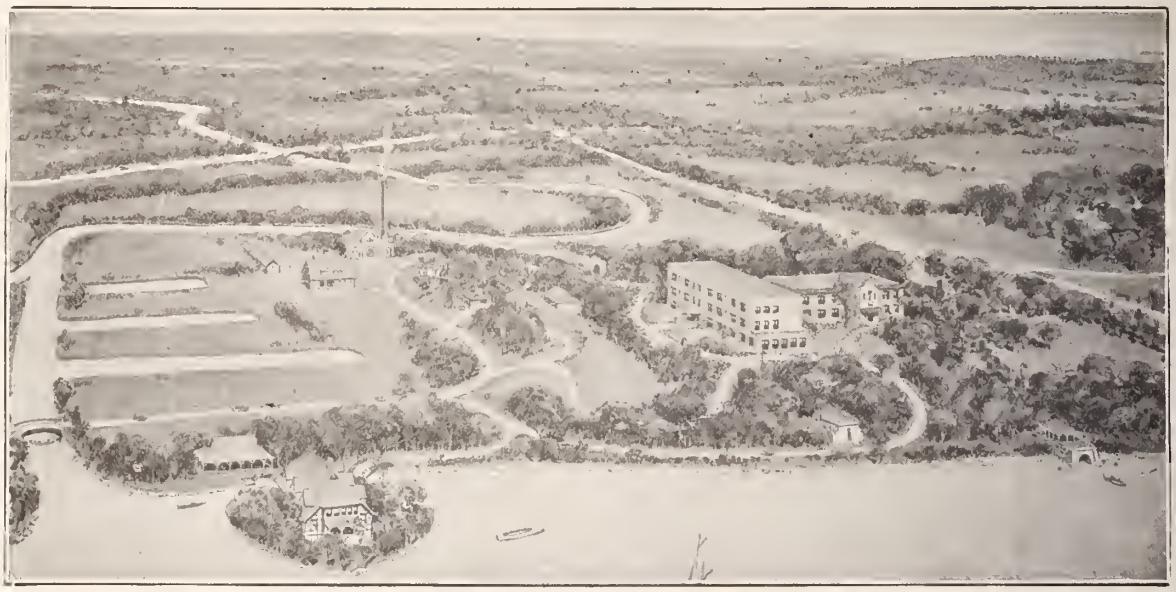

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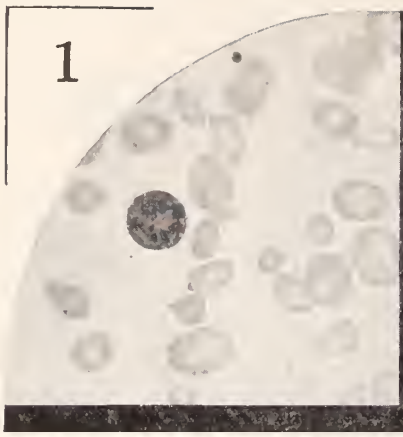

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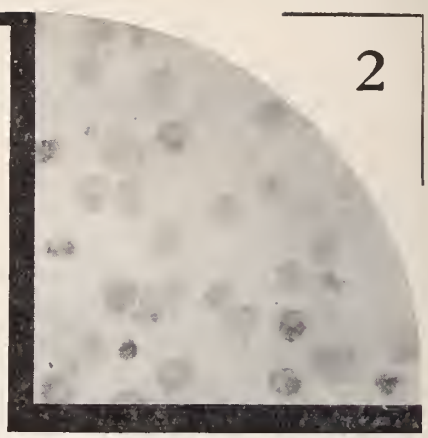
At right—Fourth day of treatment. Reticulocytes 54%; R. B. C. 1,120,000 per cu. mm.; Hb. 24%.



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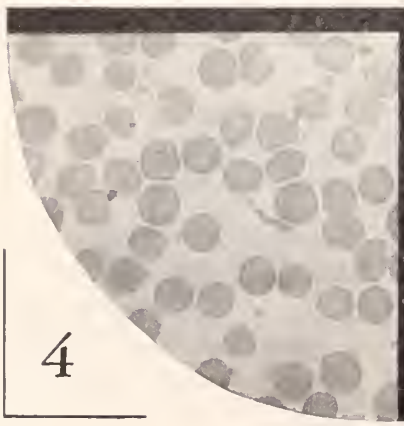
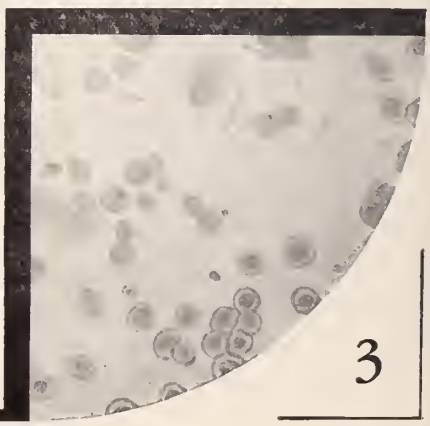


At right — Seventeenth day of treatment. R.B.C. 2,440,000 per cu. mm.; Hb. 56%.

At left — Sixty-sixth day of treatment. R.B.C. 4,610,000 per cu. mm.; Hb. 84%.



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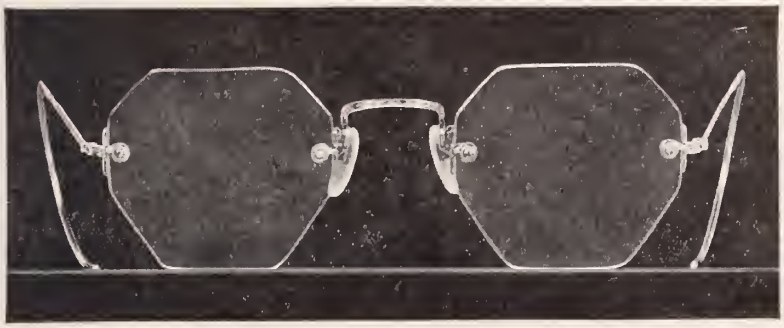

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The Wisconsin Medical Journal

Volume XXXII MAY, 1933 No. 5

Recent Trends in Medical Education*

By C. R. BARDEEN, M.D.
Dean, Medical School, University of Wisconsin
Madison

I can only briefly touch upon some phases of the subject assigned to me today in the twenty minutes at my disposal. I shall restrict myself to discussing recent trends in medical education in relation to training for general practice.

SCIENTIFIC PREPARATION

Scientific practice involves the use of scientific knowledge in treating the sick. It is interesting that the term "physician," which dates from the middle ages, means one versed in natural science, and that this term has seldom been stolen by quacks. With the rise of modern science, especially during recent years, it has become possible for the scientifically trained physician to replace more and more mysticism and empiricism with rational knowledge. In the advance in medical education which has taken place in this country during the past generation the first step was to insist upon more preliminary educational requirements than had hitherto been generally enforced, premedical college work in the basal sciences, and more time, better laboratory facilities and more teachers professionally trained in science than had hitherto been common in the preclinical branches. At the same time it became recognized that a professional teacher of science should be an investigator as well as a teacher if he is to be a good teacher and that this especially true in the medical course. Only an investigator is likely to inspire the spirit of investigation. Every patient presents a problem which needs study by scientific methods. A scientific practitioner requires acquaintance with scientific methods even more than he needs specific scientific knowledge. A fact can be quickly looked up if he knows how to use books and periodicals. Skill in the use of eye, ear, hand and brain requires experience. Since our modern universities are the chief centers for scientific research and teaching and the medical sciences are closely correlated with other sciences, medical schools have become integral departments of universities. (Flexner 1910, 1912, 1925; Cutter 1930; R. M. Pearce, 1913).

Neither medical science nor adequate medical education can be made self-supporting. Both require liberal public support through taxation or endowment. In no fields are the returns to the public greater. As the public has learned to understand this the support has become more and more liberal. (Bardeen, 1923, 1930).

Science advances by specialization. It is made useful in practice through synthesis, through bringing to bear on a given case knowledge derived from many sources. One of the most fundamental problems in medical education today is correlation of premedical with preclinical training, correlation of the various preclinical courses with one another and with preventive medicine and these in turn with clinical work. If time sufficed I should like to describe original efforts made along these lines at each of our two schools. (Ryerson, 1923; Bardeen 1925, 1930).

CLINICAL MEDICINE AS A SCIENCE

The next step in the development of medical education in this country has been in the clinical branches. This has called for the establishment of special teaching hospitals under medical school control as well as for the wider use of other hospitals for teaching purposes. (Bardeen, 1929). The remarkable growth of teaching hospitals under

* Presented before 91st Anniversary Meeting, State Medical Society, Milwaukee, September, 1932.

university control since the war has been due largely to the aim to promote research in clinical medicine and to the aim to provide experienced teachers with opportunity to supervise carefully the early clinical training of students. The more carefully the student can be supervised in his early dealing with patients the more he can be trusted directly with patients. Didactic work is being more and more superseded by practical training. While physicians have always been generous, at times perhaps overgenerous, in the time they have devoted to clinical teaching, it is usual in special teaching hospitals to compensate with salaries those members of the clinical staff who devote a large part of their time to teaching and research. In some universities there has been an endeavor to treat the clinical branches as sciences essentially similar to the preclinical branches. In these universities it has become customary to place the leading members of the clinical staff upon "full-time" salaries, usually considerably higher than that of corresponding academic professors. At Chicago, where the point of view of the clinical branches as sciences has been carried furthest, both the clinical and preclinical branches constitute a part of the Biological Division of the University. (Flexner, 1925; McLean, 1927).

CLINICAL MEDICINE AS AN ART

Clinical medicine, however, involves more than the science of disease in the living, although as a university discipline it may be looked upon from this point of view. It also involves the art of dealing with a sick person with due regard to his individual economic and social situation. As a science medicine deals with the abstract, with generalization. As an art it deals with the concrete, with a given person at a given time and place. What the sick person wants is personal help. The physician needs scientific medical knowledge and experience to be of real help, but he also needs sympathy, an understanding, an integrity of character that are outside the realm of abstract scientific knowledge but are equally necessary for the art. As a rule the student gains an appreciation of the art of medicine best through the time honored master-apprenticeship method that has come down to us from the Greeks and has always existed in some form. In a rather simple form it was the most valuable part of medical education in this country previous to the present medical school development. In a modified form it is proving highly successful in the small group method of clinical teaching at Marquette and in the training of fourth year medical students under the preceptor system at the State University. (Bardeen, 1928). The intern year, now so generally required, though of value, does not quite take its place. In a teaching hospital medicine as an art, as opposed to medicine as a science, is not likely to be well developed unless the hospital plays a real part in the community as an important means of satisfying the hospital needs of that community as a whole as well as the educational needs of the school. For this reason it is a practically universal practice in teaching hospitals to have some provision made for all economic classes of the community, from those who can afford nothing for hospital care to those who can pay liberally for medical services, although in a teaching hospital, as contrasted with an ordinary general hospital, the provision for private patients is limited as compared with that for public patients. (Wilbur, 1923; Bevan, 1926; Davis, 1932).

The primary aim in the undergraduate medical course should be an all around training to fit a man for general practice. (W. A. Pusey, 1925). We need specialists as teachers in order to keep knowledge and technique up to date, but the work of these specialists should be so coordinated as to present diagnosis and treatment from the standpoint of general practice. Premature specialization leads to narrow specialization and we need breadth as well as depth in the practice of medicine. It has been charged with some justice that therapy, both drug and physical, which after all is what the patient seeks, is a subject too much neglected in the medical curriculum, although the latter is overloaded with special details in various fields. (Charles P. Emerson, 1931;

O. T. Osborn, 1932). A student's training should include some house visiting as well as clinical experience at the office and at the hospital in- and out-patient services (O'Hara, 1932).

There is evidence that a well-trained, intelligent and sympathetic family physician can treat well at the home or in the office eighty-five to ninety percent of the ailments for which medical care is ordinarily sought and can treat these conditions better than anyone else because of his familiarity with the familial and social background of his patients. (Rappleye, 1930). If people can be taught the value of the stitch in time and to think of their physician as a personal health officer he should likewise be the one best fitted for work in this field. As a specialty that of the ideal family physician requires more all around training and more character than for any other calling. The family physician who later becomes a specialist in a more restricted field is the better specialist for having had his experience as a family physician. When medical help is needed the family is apt to pass the general practitioner by and to seek the aid of specialists far away or nearby. From the popular standpoint all specialties look more or less alike, optometry and ophthalmology, chiropractic and orthopedics, osteopathy and pediatrics. General surgery stands out more or less from other specialties but there is no criterion by which to distinguish the well trained from the bungler except popular reputation, not always well founded. The trustworthy family practitioner should know much better than the patient when special help is needed and where best to obtain it. His medical education should make him familiar with special practice relative to general practice. Nothing is more important for the social good than to give the family physician the prestige he deserves. Nothing is more important in medical education than to train students to be physicians worthy of this prestige. Weir Mitchell said that the rate of advance in medicine is to be tested by what the country doctor is. (cited by Garrison, History of Medicine, p. 763).

SOCIAL MEDICINE

Control of disease and promotion of health are of fundamental importance both for each individual and for the commonweal. If the physician is to take the lead which he should in directing measures for these purposes his education should include study of the social and economic problems of medicine. Lack of sufficient attention to this subject is now regarded as one of the most serious defects in our modern medical schools. Thus J. Tandler of Vienna has stated that "All reforms of medical education up to the present will, however, prove inadequate unless the need is realized of familiarizing a doctor with the social structure of the society in which he lives." The chief reasons for this, as stated by G. Roussey of Paris, are:

"(1) The evolution and constant progress of medical science, and

"(2) The new trend of modern medicine which has hitherto been essentially curative, but which is becoming to an ever increasing extent, preventive and social." (Boudreau, 1932).

Disease of the individual is not only a personal misfortune,—it is a social misfortune. If the disease is of an infectious nature the sick individual may be a danger to the health of others unless properly cared for. If the disease affects the mind the patient may be a danger to his fellows unless cured or given custodial treatment. If disease does not make the patient a danger to society in this or similar ways it none the less constitutes more or less of a social as well as a personal burden in nearly every case. It has been estimated (predepression) that disease costs the United States directly and indirectly as much as fifteen billion dollars per year, of which less than twenty-five percent is spent for treatment or prevention, about seven percent for physicians' services, below one percent for public health work and less than a tenth of a percent for medical research and education. These estimates, especially the first, are all very rough and indicate merely a general order of magnitude. Real progress, however, has been made in the last fifty years in the control of disease. The annual death

rate has been reduced perhaps half; the average life span has been increased by some fifteen years. This has been due in large part to advance in medical science, in medical education and in the application of this science to meet human needs. But a start has been made in this direction and no public expenditures are likely to prove more fruitful than those directed toward the training of public spirited physicians.

The problem of giving the student adequate training in the social and economic aspects of medicine is a vastly more difficult one than that of adequate scientific training which faced medical educators at the beginning of this century. (Warbasse, 1932). While there have been periods when social organization has been relatively fixed it has now become not only very complex but in a state of constant change with conflicting interest between the conservatives who would keep it as it is, the reactionaries who long for the gilded past and the idealist who aims at a golden-rule future. It is almost impossible to treat social questions with the same objective impartiality with which biology or physics may be studied. Furthermore social problems are so interwoven that classification is more difficult than when dealing with the natural sciences. I can merely indicate here a few of the social problems of medicine in which the student should be led to take an intelligent interest.

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Education in knowledge of medicine and hygiene, professional, technical and popular, importance, methods and means of support. Educational associations and publications. On methods of keeping up-to-date.

Official agencies for prevention of disease and promotion of health, national, state, and local. Vital statistics. Sanitation. Regulation of social habits through law and education. Cooperation with practitioners in control of infections and contagious diseases. Public laboratories for aid in diagnosis. Other official institutions than Boards of Health which aid in promoting public hygiene. Special problems involving the practice of medicine, prenatal, natal, and postnatal care, health of preschool and school children, mental hygiene, tuberculosis, venereal diseases, cancer and degenerative diseases. Relations of official agencies to national state and local philanthropic organizations for promotion of health and the prevention of disease.

Medical practice. "Medicine presupposes two people: the sick person looking for help and the physician who dispenses it. Medicine in the study of the manifold relations between these two people." (Sigerist p. 222). Types of private practice: general, special, group; urban and rural; office, domiciliary, hospital, industrial, military and other institutional practice; contract and panel practice; and the like. Interrelations between these and relations with public and philanthropic agencies. Relations to others engaged in the care of the sick, dentists, nurses, pharmacists, technicians. Physicians only ten percent of the total thus engaged. Medical cults. Medical economics. Costs of medical care. The physician lives to serve but he also serves to live. Activities of the A. M. A.

Hospitals and Public Clinics. Conversion of hospitals from charitable asylums for sick paupers into hygienic institutions for the specialized care of the sick, be they rich or poor, from places with meagre medical facilities into highly equipped workshops for physicians. Types of hospitals from the standpoint of kind of medical service rendered and from standpoint of support and control. Outpatient departments and public clinics. Hospital economics. Taxation. Hospital community service. Hospitals as educational institutions. Hospital associations and publications.

Availability of medical care. Distribution of physicians, dentists, nurses and others engaged in the care of the sick. Distribution of hospitals and clinics, private, philanthropic and governmental. Unequal distribu-

tion of the burden of sickness and of means to meet this burden. Attempts made to equalize these differences through donation of professional services and through philanthropic and governmental support of agencies providing professional care of the sick. The public value of adequate care of all who are sick is so great that public assistance toward the care of those financially unable to pay for costs of care is today to be looked upon rather from the point of view of public welfare than from that of charity.

Sickness insurance. This is essentially an effort to distribute individual burdens of sickness among the members of a group. The regular insurance companies provide fixed sums in case of injury or disability rather than for medical service as such. Workmen's compensation a form of insurance wide spread in this country. Other forms of group insurance for medical care of employees. Insurance for hospital care. European experience with compulsory subsidized insurance. Health activities of life insurance companies.

Medical jurisprudence including licensure.

Social welfare work. A rapidly growing profession. Over 25,000 professional workers. Philanthropic and public support. Aims and methods. Objective social adjustment rather than bestowing alms. Problems involving medicine and hygiene. Dependency both a result and a cause of disease.

Endowments and foundations for public welfare work including medicine and hygiene. Studies and publications.

These and similar conditions and problems face the practicing physician. Some of the subjects are now included in the average medical curriculum but usually without sufficient emphasis on the social aspects. Many of them may be interwoven with subjects now taught. We should not overburden the curriculum with more formal teaching than necessary but should endeavor to arouse in the student an interest in the social background of his life's work. At the state university we try to bring each student into contact with various social phases and require for graduation a thesis on some social aspect of medicine.

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FOUNDATIONS

Various foundations, especially the Rockefeller Foundation, the Commonwealth Fund, the Julius Rosenwald Fund and the Milbank Fund have been publishing valuable studies and reports bearing on the social aspects of medicine.

Congenital Hypertrophic Pyloric Stenosis*

By E. H. SPIEGELBERG, M. D.
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Congenital hypertrophic pyloric stenosis is a definite clinical entity in which there is always a demonstrable increase in the circular muscle layer of the pylorus.

Historically, the disease is not new, as a reference to the anomaly was made by George Armstrong as early as 1777. Again Hezekiah Beardsley of Connecticut, in 1788, described in minute detail the clinical symptoms and postmortem findings in a child who died at the age of five with symptoms dating from infancy. Fifty years later, in 1841, Williamson of London, and in the following year, 1842, Siemon–Dawosky in Germany made mention of the projectile character of the vomiting. In 1887 Hirschsprung made observations of the clinical symptoms and presented two necropsy specimens. Finkelstein in 1896 first called attention to the presence of a palpable tumor.

The evolution of the present simple surgical operation can be traced with interest through such complicated procedures as jejunostomy, pylorectomy, gastroenterostomy and pyloroplasty down to the simple extramucous pyloroplasty commonly known as the Fredet–Rammstedt operation.

The first surgical procedure designed to relieve this clinical entity was performed by Cordua in 1893 and consisted of a jejunostomy. In 1898 Willymeyer of New York and Stern of Germany each reported a case in which gastroenterostomy was performed. The first successful operation, also a gastroenterostomy, was performed by Lobker in 1898, and for a period of about fifteen years it remained the operation of choice. In the hands of capable surgeons the results were quite satisfactory and the mortality was not prohibitive.

I have the happy recollection of observing, during my student days in 1905, Dr. Dean Lewis do a gastroenterostomy in the old amphitheatre at Rush Medical College on one of these little patients.

In 1907 Fredet performed the submucous pyloroplasty by means of a linear incision down to the mucosa and suturing the longitudinal wound into a transverse one. In 1912 Rammstedt advised omitting the transverse sutures and leaving the wound gaping.

The pathology as described by numerous authors is very uniform and characteristic. The appearance and feel of the pyloric canal is that of a hard cylinder some 2.5 cm. long and varies in size from that of the distal phalanx of the thumb to that of the little finger; is somewhat olive or spool shaped, according to the phase of the contraction when palpated, and ends abruptly at the duodenal junction. The rest of the wall of the stomach is also thickened, which gives to the vomiting its projectile character. As a rule there is some secondary gastritis, which accounts for the traces of blood so frequently met with in the vomitus or gastric lavages. There is also a dilatation of the stomach which can be demonstrated by the opaque meal and lavage.

ETIOLOGY

The pathogenesis, although discussed at great length in the literature, still remains obscure. Of the many theories advanced concerning the causation of this condition, only two are receiving any degree of support. The first is that of Hirschsprung—that there is a primary developmental hypertrophy of the circular fibers of the pyloric ring and canal and that the reduction of the lumen of the canal by the thickened muscle causes the obstruction. Secondly, Steen quoted Hector Cameron, viz., that there is an incoordination between the pyloric sphincter and the muscle of the pylorus. His idea is that failure of the sphincter to relax causes the resistance which leads to hypertrophy of the pylorus.

Equally hard to explain is the hereditary aspect of the disease. There is a marked

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predominence of males over females (averaging about ten to one) suggesting an etiology similar to other hereditary diseases, such as hemophilia.

DIAGNOSIS

The clinical picture is a striking one and is most remarkably uniform. It usually occurs in breast fed male infants, frequently the first born. It may affect one twin, skipping the other. A previously healthy baby begins to vomit persistently and forcibly. In a short time there is marked constipation, scanty urine and progressive loss of weight. Although there is some variety in time, the onset of symptoms in the majority of cases is in the second to the fourth week of life. The appearance of symptoms after the fifth week is rare, and after the eighth week is exceptional.

There are instances of pyloric obstructions reported in older children and adults caused by a congenital lesion and no doubt many go unrecognized. I will here pause to refer to an admirable article on "Hypertrophy of the Pyloric Muscle in Adults" by C. C. McClure of the Cleveland Clinic, published in the May 1931 volume of Surgery, Gynecology and Obstetrics. McClure reports five cases (one discovered at autopsy, death being due to myocardial degeneration and decompensation). The other four were operated upon. The ages of the operative cases were 31–34–44 and 45. In two of his cases the condition appeared to be of the congenital type, as symptoms had been present practically from birth.

The vomiting is characteristic, being forceful and projectile, occasionally the food is shot from the mouth for a distance of several feet, and consists of slightly altered coagulated material and some mucus. It is free from bile, but may contain bright red blood, due to the accompanying slight erosions of the gastric mucosa or gastritis. The amount of vomitus is large and may be repeated after each feeding. If the baby vomits infrequently, the amount ejected at one time is larger than the volume of the last feeding. There is no fever, and at the outset no impairment of the appetite.

Visible Gastric Peristalsis is present in every case. These waves of peristalsis begin at the left costal arch, cross the epigastrium and fade out in the right hypochondrium. Similar waves have been observed in the very rare cases of congenital atresia or stenosis of the duodenum, but the presence of the symptoms from birth and the bilious character of the vomitus are sufficient to distinguish the difference in these anomalies.

Palpation of the Pyloric Tumor. This is a most important diagnostic sign, and if proper and diligent search is made it can be found in every instance. It is easily accomplished after the stomach has been evacuated by vomiting or aspirated by means of a soft rubber catheter. The infant is kept quiet by means of a sugar pacifier so that the abdominal muscles are perfectly relaxed. The pyloric tumor, hard, oblong, movable, and about the size of the distal phalanx of the little finger can usually be made out to the right of and slightly above the umbilicus; less often high up under the liver or even just below the ensiform in the midline of the abdomen. In old cases where the emaciation is extreme, the tumor is obvious.

The secondary symptoms, such as constipation, scanty urine and loss of weight (dehydration) are simply the results of the vomiting.

Differential Diagnosis. (A) Congenital defects and deformities are extremely rare. Porter and Carter cite a case found in the files of the University of California Hospital in which the deformity of the mucous membrane of the pylorus was of such a nature as to act as a valve obstructing the pyloric end of the stomach, which produced symptoms that mimicked those of a congenital pyloric stenosis. (B) Pylorospasm has no palpable tumor. (C) Congenital atresia or stenosis of the duodenum, as previously mentioned, has the onset of symptoms at birth and in this rare anomaly bile is also present, which readily distinguishes the lesion from that of congenital hypertrophic pyloric stenosis.

CHOICE OF TREATMENT

The medical measures usually advocated by the pediatricians are the administration of atropin, re-feeding with breast milk after

vomiting, gastric lavage and the feeding of the so-called "thick formula". These methods of treatment are mentioned only to be condemned (except only when operation is refused). It means that the treatment must extend over a period of weeks and months, during which careful and expert supervision is essential and required, and, in addition, expert nursing. It also demands protracted hospital care of these little patients and the dangers of such a regime are to be condemned. There is also the danger of increased susceptibility to infection and the possibility of permanent damage to the growing infant from impaired nutrition during the most critical weeks of its development. *Medical treatment implies weaning of the infant* and in my opinion no treatment that necessitates this procedure is desirable. Furthermore, after weeks of medical care, with a weak, dehydrated, artificially fed infant, the prognosis is very poor for surgery. In artificially fed babies the surgical mortality is three times as great as in breast fed babies (Goldspoon and Spence), then again, there is no known method of determining the ultimate severity of a case of congenital pyloric stenosis even if at the outset the symptoms are comparatively mild. The mild condition of affairs may suddenly become severe, in which vomiting becomes incessant, resulting in rapid dehydration and consequent loss of weight, truly a precarious condition. Given a hitherto thriving, healthy infant of three or four weeks of age who begins to vomit, then wean it, and with great effort keep the weight practically stationary for three or four months, then, provided the little patient has survived, the possibility of a recurrence of symptoms in later life seems to me poor therapeutic judgment.

If, as soon as the diagnosis has been definitely determined, the infant had been referred to the surgeon for a very simple operative procedure, permanent cure could have been accomplished. The operative mortality depends on early diagnosis and the choice of surgical in contra-distinction to medical treatment.

Cases of congenital hypertrophic pyloric obstruction seen late, say in the third or fourth month of life, make up the real problem in the choice of treatment. In these cases, if the weight is slowly increasing and the baby is not markedly underweight and would not involve weaning, medical treatment should be continued. In the late severe cases seen in the fourteenth to sixteenth weeks of life, the outlook is poor for any form of treatment.

PROGNOSIS

In the very mild cases, when vomiting is only occasionally present, with a slow gain in weight, if in from eight to twelve weeks the vomiting ceases altogether, no form of treatment is required, and to all appearances the little patient has recovered. In the more severe cases the course of the disease is from bad to worse, dehydration and emaciation is rapid, and, if left untreated, these patients usually die in from two to five or six weeks of the onset of symptoms. Between these two extremes, cases of every degree of severity are possible. Either death or recovery takes place in this grade of case between the second and the fourth months. If the disease lasts over sixteen weeks these little patients are likely to recover. I have no statistics of cases treated medically. Some one has said that statistics are usually what we would like to have them, not what they actually are. A conservative estimate of the surgical mortality, in breast fed babies, seen early and promptly operated upon, should be about one per cent. The most important single factor in the mortality is the duration of symptoms prior to operation. In artificially fed infants the mortality increases threefold over that of breast fed babies. I know of no more satisfactory surgical procedure than the Fredet-Rammstedt operation on a breast fed baby in good condition.

PREPARATION FOR OPERATION

All of these little patients are dehydrated to a certain degree and some preoperative preparation is usually necessary. The subcutaneous or intra-peritoneal routes, using Ringer's or salt solution, twelve hours before operation, is a good procedure. In the more severe cases the superior longitudinal sinus or the external jugular vein may be used.

In the emaciated and dehydrated infants, when symptoms have existed for some time, operation is delayed for two or three days, to allow for the frequent administration of fluids and possibly also one or more transfusions of blood. In the giving of fluids, repeated as often as is deemed necessary, not more than an amount corresponding to 5% of the body weight is given at any one time.

Considering the choice of anaesthesia, opinions and preferences may differ somewhat, but in our experience the anaesthetic of choice is ether given by the open drop method. Should there be a contraindication for the use of ether, (as for instance extreme emaciation, asthenia or respiratory infection), local infiltration with 1% novocaine solution is used, the infant being kept quiet by means of a sugar pacifier.

The technique of operation needs no special comment. Any good system of surgery describes the technique admirably. To those interested I would refer to the most excellent article by Downes and Bolling in Lewis' system of surgery published by W. F. Prior and Co.

The mention of a few points in the technique may not be amiss. It is always wise to empty the stomach by means of a catheter before the peritoneum is opened. In one of my cases I omitted this simple procedure and the enormously dilated stomach rushed violently out of the wound and I am of the opinion that this dilated stomach would have ruptured and collapsed like a toy balloon and with disastrous results, had it not been for the accompanying hypertrophy of the muscular coats of the stomach which is part of the pathological picture.

Care should be taken not to open into the mucosa of the duodenum, as the muscle fibers of the pylorus end abruptly at the duodenal end. At this point I wish to call your attention to an article in the February, 1931, volume of the Surgical Clinics of North America written by Edwin Miller of Chicago on "Bowel Obstruction at Birth". In this article Miller mentions the liability of perforating the duodenal mucous membrane and also the possibility of permitting a few strands of muscle fibers at this point to remain undivided.

To lessen the possibility of these accidents and omissions, Miller advises the use of an ordinary magnifying glass at this stage of the operation, also for the accurate closure of the abdominal wound; a very fine suggestion indeed. Of course, careful hemostasis at all stages of the operation is essential and the selection of a comparatively bloodless area of the pylorus through which to make the incision renders the ligation of these fine vessels in the pyloric region rarely necessary.

The postoperative management of these little patients is comparatively simple. Points to be stressed are maintenance of the body temperature, slowly increasing the diet; an adequate supply of breast milk and an abundance of fluids.

Barbour of Peoria has recently published a series of cases treated by x-ray and radium and claims to have obtained some results with the method. Further reports on the results of this method of treatment will be awaited with interest.

The Psychiatrist's Responsibility to the Public*

By ANDREW I. ROSENBERGER, M. D.
Milwaukee

At no time in the history of medicine has the neuropsychiatrist been exposed to the searchlight of public opinion as he is today. Neuropsychiatry only too often is the butt of ridicule and jocosity by our materialistic brethren. It has been called the sick sister of medicine. Dr. Louis J. Karnosh, in a recent address before the convention of the Inter-State Postgraduate Medical Association of North America, stated "It has been said of the psychiatrist that he now remains the one peripatetic in modern medicine and that he can still practice his specialty successfully and keep both hands in his pockets the while".

On November 24, 1931, there appeared an editorial in The Milwaukee Journal entitled

* Delivered before joint meeting of the Milwaukee Neuropsychiatric Society and The Medical Society of Milwaukee County on January 8, 1932.

"Psychiatrists' Inferiority Complex". In this article, we are charged with failing to meet our obligations and our responsibilities. The article is so worth while that I shall read it.

"When the movement was first started to introduce psychiatry as an integral part of a modern system of penology, the psychiatrists as a class were greatly interested. Knowing, as many of them did, the entirely unscientific basis of the present 'reform' machinery, they rightly felt that here was a place where psychiatry could properly aid. Now, after dozens of penologists, judges, physicians and laymen have espoused the cause of a board of experts to determine the treatment to be accorded to the individual prisoner, some of these psychiatrists are backing down. One of these addressed the recent convention of medical men in session at the Auditorium.

" 'Psychiatry is still too young a branch of medicine and still has a lot of research work to do before it can be used to revolutionize the treatment of the criminal,' said this man, Dr. Louis J. Karnosh, professor of nervous diseases at Western Reserve University. Some months ago, speaking before the Committee on Crime and Criminal Justice in Madison, Dr. Wm. F. Lorenz, a distinguished Wisconsin psychiatrist and a former member of the State Board of Control, made similar statements. In other words, now that prescription of treatment by a board of experts is becoming remotely possible, these psychiatrists are beginning to sidestep a distantly proffered responsibility.

"The science of psychiatry is, to be sure, an infant among the medical sciences. In certain directions, it is woefully undeveloped. The terminology is confused. Diagnoses by different psychiatrists are frequently diametrically different, especially in borderline cases. But some of these difficulties still exist in much older branches of medicine, and yet doctors as a whole do not refuse to bear responsibility for physical ills. Why then should these doctors of the mind diseased?

"Psychiatrists engage in the practise of their profession privately without apparent fear that their knowledge is insufficient for the demands made by patients. Their research, so far as they undertake research, is through experience with these private patients. There is no reason why that research should not be extended to the inmate populations of penal institutions. The only way the science can advance is by controlled experimentation and research, and what better source of material could be had than prisoners?

"Psychiatry may be an infant science, but at least it is a science, which is more than can be said for contemporary penology. Its use, coupled with psychology, endocrinology, case sociology, etc., for treatment prescription for prisoners certainly would be more beneficial than anything we now know. And, by use, the science itself would be advanced.

"Man learns by doing. Psychiatrists are no exception. It is, therefore, inexcusable that they should refuse what amounts to both a duty and an opportunity."

When I read this article, I, at first, was quite indignant because I still have to learn in what manner the psychiatrists of Milwaukee County have failed in meeting their responsibilities to the public.

On December 28, 1931, Dr. Willard C. Rappleye, Dean of the School of Medicine of Columbia University, was quoted as saying "Our meager understanding of the underlying mechanism of many of the mental, emotional and functional disorders is comparable to that which existed in regard to general medicine fifty years ago, before the introduction of accurate, measurable criteria of study, which transformed medicine and surgery from mysticism, empiricism and guesswork to what, in many instances, now approaches scientific certainty."

The doctor further states "No field of medicine has received so much publicity and propaganda on as uncertain and insecure a basis as the nervous and mental disorders. This is unfortunate, for the problem is one of the most important to health, educational and public problems of our time, and there is urgent need of at least a few fundamental studies in the field".

We should not condemn the layman too seriously if he at times appears rather illogical and unscientific in his criticism. He is

not entirely at fault. I believe that the lack of understanding and appreciation of the work of the neuropsychiatrist is, in part, due to the indifference of members of the medical profession.

Dr. Lloyd H. Ziegler, professor of neuropsychiatry at Albany Medical College, in an address before the American Medical Association in June, 1931, stated that he had interviews with 103 physicians practising medicine and surgery within a radius of 75 miles of Albany, New York. This survey was made to obtain some information referable to the interest of the medical profession in neuropsychiatry. There were no outright neuropsychiatrists in this group. Only five of the 103 were informed concerning mental hygiene; 28 out of 95 were much interested in nervous patients, and only 12 out of 93 were greatly interested in mental patients. 26 out of 91 manifested a special interest in neurologic lesions of the brain and peripheral nervous system. I believe these excellent findings of Dr. Ziegler fairly well represent the neuropsychiatric interest of the medical profession in any metropolitan section of this country.

Recently, the Educational Committee of the Milwaukee County Medical Society offered a short course in neuropsychiatry to the doctors of Milwaukee County. Only 50 out of a membership of about 660 responded. I am not quite certain why there were not many more. Have we neuropsychiatrists failed in not stimulating sufficient interest? Do we take the general practitioner into our confidence? Have we neglected his problems and have we failed to show him that our consultation and advice, approached through medicine and neurology, should be helpful and sympathetic to his difficulties? I must admit that these criticisms and accusations are not without much merit. We must first educate the general practitioner psychiatrically before we can hope to arouse proper enthusiasm, understanding and sympathy in the minds of the lay public.

The psychiatric field service of the State Board of Control under the efficient direction of Dr. Frank C. Richmond and his associate, Dr. Stuart McCormick, is doing a work that merits praise and encouragement. I believe that it will surprise you to know that every individual in this state, convicted of a felony, receives a psychiatric, psychometric and physical examination by these gentlemen and their helpers. In other words, an unfortunate individual, who is mentally sick and who has been sent to prison without the knowledge of his illness having been made known, will be removed from the prison and placed in a hospital where he rightly belongs. I believe that this procedure safeguards the rights of the accused in such a manner that there need be no criticism from the over-enthusiastic social worker and reformer.

Before I enter into the main theme of this paper, I desire to discuss briefly certain matters that are of extreme interest not only to neuropsychiatrists but to any group of public-spirited citizens.

IN CRIMINOLOGY

Recently, there has been much notoriety given to new methods of obtaining the truth from the accused by the use of the lie detector and the so-called truth serum. The lie detector is an ordinary sphygmomanometer with a cuff about the arm and a pneumograph tube about the chest. These are both connected with an instrument that is equipped with two metal elevator arms with pen attachment that make a tracing on paper, the character of the tracing depending upon blood pressure and respiration. The theory is that innocent persons are generally in a state of relaxation, while the guilty individual becomes extremely tense with the resulting increase in blood pressure and respiratory movements. Lieutenant-Colonel Calvin Goddard, the ballistic expert and head of the Northwestern University School of Crime Detection, recently said that this instrument would soon be of more aid to police departments than is the science of identifying bullets and revolvers. A certain judge, however, stated, sometime ago, that the use of a lie detector on a prisoner, in an effort to solve crime, smacks of the Middle Ages. I believe that before we become enthusiastic about these new-fangled ideas, we should first know something about the emotional makeup of the individual upon whom these instruments are to be used. I believe that the hard-

ened criminal with the vagus type of emotional makeup would react in a perfectly normal manner to any untruth that he might relate. On the other hand, the fearful and apprehensive accused, who comes before his inquisitors, is usually tense, the pulse is rapid, the respirations are increased, and the blood pressure may be elevated. This type of individual, subject to such an examination, might well show the reactions of increased blood pressure and respiratory movements, no matter what question is asked him. As long as the individual has emotions that are controlled by his sympathetic nerve system, there can be no validity in any instrument that claims to detect the truth or falsity of a statement by determining blood pressure changes and alterations in respiratory movements.

Again, in recent months, certain individuals have been using the so-called truth serum upon those coming in conflict with the law. Some men have been using one of the scopolamin group. I understand that Dr. Lorenz and his associates at Madison have been experimenting with sodium amytal.

I do not wish to appear biased in my attitude toward this new-fangled method, because my opinion is not based on actual experience. We must, however, consider whether this procedure can be used without permission of the accused. The use of such methods raises serious constitutional questions in this country. The fifth amendment of the Constitution of the United States says in part "No person shall be compelled in any criminal case to be a witness against himself." I also seriously doubt the scientific accuracy of both the truth serum and the lie detector. In the lie detector, we must depend upon the emotional disturbance in a conscious, normal individual, while in the so-called truth serum, the patient is questioned when under the influence of a drug. His inhibitions are at their lowest ebb and he is unable to properly evaluate his replies to questions. A prominent psychiatrist recently gave his opinion of this matter in the following words: "I doubt the legality of such measures for obtaining confessions. I do not think they would be admitted to evidence, and I think that it borders on charlatanism to lead the public to believe that there is any merit whatsoever in that sort of proceeding. Evidently, it does not occur to some people that in using a truth serum psychiatrists may be simply substituting their finesse for the brutality said to be practiced by the police in using the third degree methods". Dr. Wm. F. Lorenz gives as his opinion that the method has some value but only if in the hands of a physician with some psychiatric experience. He also states that a confession obtained under the influence of a drug should not be used against the individual who submitted to the examination. I would urge that both attorneys for the prosecution and for the defense refuse to allow the use of the lie detector and the truth serum until their accuracy has been proven in, at least, ninety per cent of the cases in which they have been tried. Before any new drug is accepted by the medical profession, it must first be accepted by the Council on Pharmacy and Medicine of the American Medical Association. Should not the so-called lie detector and truth serum be subjected to a similar scientific, critical investigation before it is released to the public?

STERILIZATION

In recent years, over-enthusiastic social workers and misguided reformers have taken it upon themselves to solve the eugenic and moral problems of the state by advocating wholesale sterilization of the mentally unfit. I do not wish it understood that I am unalterably opposed to sterilization. At the same time, I hesitate on sitting in judgment upon the unfortunate one by forcing upon him a procedure that conflicts with his constitutional rights. Fortunately, the administration of the law in this state is done in a most conservative manner. I am told that the only persons ordered sterilized by the State Board of Control were a few of the so-called insane, where there was evidence of a mental deficiency. Sterilization has also been applied to a select group in two colonies and training schools for the feebleminded. This latter group represents about twenty per cent of the present population of the institution. If the feebleminded person, or his guardian, or friends, object to sterilization, nothing is done because the procedure cannot be carried

out without the consent of the patient or his guardian. In other words, the inoffensive, non-delinquent in limited numbers is isolated from society unless sterilized, while no criminal, as such, has ever been sterilized in Wisconsin. Indeed, if there is an indication for sterilization, is it not in those cases of the vicious and delinquent feebleminded, who have sexual instincts of animals and the mentality of children?

Again, who is to sit on the Sterilization Board? Are we to allow this important matter to be decided by inquisitive non-medical busybodies, or is it to remain in the hands of the Psychiatric Service of the State Board of Control? I firmly believe in the theory that we, neuropsychiatrists, could render a much more valuable service to the public if the psychologist and a certain type of social worker would stay out of the field of neuropsychiatry and confine their efforts to assisting us in the problem of mental hygiene.

In February, 1931, in an article published in The Milwaukee Journal it was stated there was a waiting list of more than four hundred persons for institutionalization without any available facilities for caring for these people. At the present time, in Milwaukee County there are fifteen feebleminded children awaiting commitment to one of our training colonies. The mothers of these children in many instances are already overburdened with the care of other members of the family. With the added problem of looking out for the unfortunate defectives they frequently become nervous and physical wrecks. There is no place for these children, and I understand that no new buildings will be constructed for this humane work, unless the psychiatrists by some means devise a method of preventing the increase in the number of insane and feebleminded. The superintendent of the Southern Training Colony recently stated that there were 616 feebleminded individuals in his institution, while the bed capacity is 468. Beds have been placed in corridors and in every available space in order that the sick defectives might have care and shelter. I believe you will agree with me that this is not only a distressing but a needless situation. We psychiatrists, however, appreciate our responsibilities in this matter, and if our political-minded friends will show a real humanitarian spirit, much distress and suffering can be avoided. If they know of any way in which we can add to what we are already doing in aiding the mentally sick, let them voice their sentiments.

SANITY TRIALS

There is another problem of the neuropsychiatrists that recently has caused much newspaper comment in this state. I refer to the right to trial by jury of the so-called criminal insane. For at least ten years prior to May 12, 1931, we could point with pride to the splendid cooperation between our courts and the neuropsychiatrists in handling the mentally sick. Wisconsin had developed a nation-wide reputation in its modern administration of justice to the insane. "The battle of mental experts" was rapidly becoming a matter of history. Our Municipal Court under that fearless, honest and efficient judge, the Honorable George A. Shaughnessy, with the help of Dr. Bushong of the Milwaukee County Mental Hygiene Clinic, and other neuropsychiatrists, recognized the psychotic or the feebleminded prisoner as one mentally sick and transferred him to a hospital where he could obtain proper care and treatment.

On May 12, 1931, there was handed down a decision by our Supreme Court that suddenly threw our Criminal Courts into a state of bewilderment and apprehension. It appears that on September 3, 1930, one Steve Ribansky, husband of Josephine Ribansky petitioned Judge Shaughnessy requesting a re-examination into the sanity of said Josephine Ribansky with a demand for jury trial to determine this question. It appears that almost six years before this petition, on December 16, 1925, the Court, acting on the opinion of two doctors, who had examined Josephine Ribansky, found the said Josephine Ribansky insane and ordered her committed to the Central State Hospital at Waupun.

Under the decision of the Supreme Court on May 12, 1931, the said Josephine Ribansky was entitled to a jury trial upon the question of her sanity. A hearing was held.

Two doctors from the State Board of Control and two physicians appointed by the court examined the petitioner and testified that she was insane. One doctor employed by the petitioner was unable to give an opinion because he had not had sufficient opportunity to examine the patient. Before the case was brought to the jury, Mr. Quick, attorney for petitioner, withdrew his application for a hearing of his client's sanity and patient was transferred to the Hospital for Mental Diseases at Mendota. I believe that this attitude of Attorney Quick was most altruistic. I also suspect that he had confidence in the intelligence and veracity of the doctors and was willing to abide by their opinions. What would the possibilities have been, however, if he had been the type that puts personal reputation or desire for publicity above duty to State and County?

I now come to a sanity hearing that should teach us a most valuable lesson. I refer to the re-examination of Mr. E. Ray Tompkins. You already know much about this case since the newspapers published almost everything of importance that transpired. You recall that this man is a murderer and an ex-schoolteacher of remarkable intelligence. When he was first found insane by a commission of seven doctors, two of whom were neuropsychiatrists, a report of his mental condition was presented to the Court.

When Mr. Tompkins recently came to Milwaukee, he asked that his friends, the newspaper reporters, be present at the examination made by the neuropsychiatrists. Unfortunately, there were no objections to this innovation, it being contended that he had a right to have his friends present. This contention was based on Chapter 4 of Section 51.11 of the Wisconsin Statutes, which states "The petitioner and parties notified and any friends or relatives of the person to be examined, may appear at such examination, offer testimony, and be heard". I maintain that this has no reference to the actual examination before the court proceedings, but only refers to the mental inquisition made at the time of the trial. This proceeding was extremely harmful to the applicant and at the same time was embarrassing to prospective jurors. You recall that the questions of the doctors and the answers of the applicant were given newspaper publicity that could not escape the notice of the readers. Is it not possible that the prospective jurors had gained a false impression before they actually heard the testimony in Court?

This hearing continued over a period of five days under the wise and impartial direction of Judge Gehrz. Again, there was no "battle of experts". The applicant, because of his grandiose delusions, refused medical help and I am happy to say that I know of no psychiatrist in Milwaukee County who would have testified that E. Ray Tompkins was sane and fully knew right from wrong. The medical testimony given by five physicians, all of whom can qualify as neuropsychiatrists, was that the applicant was insane and a fit person to be retained in the Central State Hospital. I also understand that two of the physicians stated that Mr. Tompkins was incurably insane. After the conclusion of the medical testimony the jury was asked to determine whether the said E. Ray Tompkins was sane or insane. In the event the jury found the petitioner insane and a fit person to be retained at the Central State Hospital, they were also asked to answer the following question: "Is the insanity found by you incurable?" This question was answered in the affirmative. If this verdict stands, and there is no reason that it should not, it means that the unfortunate man will remain permanently in the Central State Hospital. This indeed is a precedent. A lay jury is asked to determine whether a man is incurably insane or not. The opinion should be based entirely upon medical testimony, but it is a rather sad situation to have a medical problem forced upon a group of laymen because of our medieval statutes.

Fortunately, no great damage was done in the Tompkins case. This is largely due to the fearlessness of Judge Gehrz, the altruistic attitudes of the guardian ad litem, and the attorneys for applicant and state. I feel that there has not been sufficient credit given

to the jury in this instance. These six men are representative citizens, men of intelligence, who were willing to make a great sacrifice by fulfilling a civic duty that is too often ignored.

What might have been the result in this case if the attorney and guardian ad litem of the applicant had not had such a high sense of duty?

Even though the floodgates against the unfortunately mentally sick at Waupun have been temporarily closed, there is great danger of an intolerable expense facing the taxpaying public of Milwaukee County. At the present time, there are 345 patients at the Central State Hospital with a bed capacity of 204. Over two hundred of this number are awaiting their turn to prove their sanity to a jury of non-medical laymen. A considerable portion of this number will eventually reach our courts unless the Legislature changes the laws.

The Tompkins episode cost Milwaukee County over $5000, and, if something is not done, this unscientific and ridiculous procedure will cost over a half million dollars. Although the neuropsychiatrist will profit most handsomely by these hearings, I, for one, want to go on record as protesting most vigorously against an expenditure that does not do the most good to the greatest number. Is the situation one that should be ignored? Are we doctors not failing in our duty to the public welfare if we fail to raise our voices in protest?

I am not unalterably opposed to the jury system, but at the same time I am convinced that no jury of laymen is qualified to determine a man's mental state. Would laymen attempt to differentiate between measles and scarlet fever? Could they tell whether a man had hysteria or paralysis agitans?

When a man is suspected of having a contagious disease, he is immediately quarantined on the order of the doctor. On the other hand, when an individual is mentally sick and actively homicidal, he cannot be held in a hospital against his wishes. He has the right to a jury trial by laymen to determine his mental condition. Is this not an extremely inconsistent and fallacious situation? Is a man with smallpox less dangerous than the mentally sick person, who may be driven to murder because of paranoid delusions? Is the average layman more competent to diagnose smallpox than to recognize dementia praecox of the paranoid type?

JURY TRIALS

Mr. Leon Green, Dean of the Northwestern University Law School, and a nationally known leader in legal educational circles, recently made the following statement: "Who is giving any study to methods of settling the disputes of citizens by the antiquated, cumbersome, expensive jury trial? I challenge your thoughts when I dare suggest that jury trial is the most expensive, most unintelligent and most useless incubus fastened upon the American government; that it has contributed more to the congestion and overplus of litigation, more to the low estimate in which government is held by citizens, more to the low morale of citizenship, more to the multitude of lawyers the country must support, more to the lowering of the ethical standards of the legal profession, more to what ought to be the rubbish of the law, than any of the numerous institutions which compose our governmental order".

If one were assured of a jury of the same caliber as was had in the Tompkins case and that applicant's counsel would be guided by a similar high sense of duty, the only objection to a jury trial to determine a man's sanity would be the needless expense and waste of time. Intelligent men only too often find excuses from serving on a jury. Is it that they cannot afford the time away from business or is it that they are indifferent to their responsibilities and duties?

If in the Tompkins case the guardian ad litem and the attorneys for the applicant had not agreed with the state to have intelligent, honest and public-spirited citizens on the jury, it is quite probable that the said E. Ray Tompkins would have been found sane. He then would have been tried for first degree murder. His defense would have been insanity at the time of the commission of the act. At this trial he would have called in the self-same doctors, who, in the previous in-

sanity hearing, believed him to be insane, not only at the present time, but at the time of the murder. The result of this farce under our present statutes would have resulted in the release of a dangerous insane man.

It might be interesting to you to know how a jury is chosen in a sanity hearing. Eighteen men are picked by the sheriff's office and from this number six are selected to serve. Often a sufficient number of men and women are not available, and men from the park and courtyard are picked up by the sheriff's men. Even recently, I read that some enthusiast suggested that the unemployed and indigent be placed on juries. It is indeed difficult to conceive of such a situation in our boasted modern civilization.

I object to laymen determining a man's mental condition, since giving opinions concerning the lack of responsibility because of a mental disease is oftentimes extremely difficult even for the trained psychiatrist. Occasionally, it is only after several days of careful study that we are able to give a worth while opinion. The old plea that an individual must be violent or grossly confused before he can be said to be insane is one that still pervades the mind of the average layman. However, the more dangerous type of insane man is often intelligent and logical and he may have sufficient insight to hide his delusions from the layman. In the Ribansky case I doubt whether the majority of that jury could be convinced that she was insane and had delusions of a persecutory and grandiose nature. This lady was a very clever witness; she was well oriented and her memory was intact. There was no apparent lowering of the intellectual level. It is not improbable that any layman, who, refusing to accept the opinion of experts in mental diseases, would have found the said Josephine Ribansky sane.

In the fall of 1922, I examined E. Ray Tompkins and advised his wife that he was mentally sick and actively homicidal. I also suggested commitment to the Milwaukee County Hospital for Mental Diseases. It was not, however, until a year later, a few weeks before he beheaded his wife, that he was taken to the Johnston Emergency Hospital for mental observation. The next morning, he was released by one of the attending physicians presumably because the hospital authorities had no legal right to hold him.

Let us assume that a petition had been made to the Court asking for an inquiry into his mental condition. Two physicians would have been ordered by the Court to examine him and to report their findings. It is certain that he would have been found insane and ordered committed to the Milwaukee County Hospital for Mental Diseases. I am satisfied that the patient immediately would have consulted an attorney and a demand for a jury trial would have been made. I am also convinced that any jury selected in those days would have found him sane. A dangerous and mentally sick man would have been restored to his rights and permitted to carry out his homicidal ideas. Are the rights of a dangerous and insane man to be more respected than the life of the wife and her offspring?

CLARIFICATION NEEDED

My plea is to devise some method to clarify the insanity laws of Wisconsin. I suggest that the Milwaukee County and State Medical Societies in conjunction with the Milwaukee City, County and State Bar Associations ask their respective legislative committees to aid us in clarifying the statutes by drafting and sponsoring before the Legislature a measure that would allow the re-examination of the criminal insane, if it could be shown by the unbiased psychiatrists of the State Board of Control that the said applicant, because of the improvement of his mental condition, was entitled to a re-examination. This examination should be conducted by two or more impartial experts appointed by the Court having proper jurisdiction in these matters. Their opinions in conjunction with the report of the experts from the Psychiatric Service of the State Board of Control would certainly be fair to the petitioner and at the same time the public would be properly guarded.

Dr. Winfred Overholser, Director of the Division for the Examination of Prisoners, Massachusetts Department of Mental Diseases, in The Journal of the American Medical Association, of September 14, 1929, makes the following statement: "To Dr. L.

Vernon Briggs belongs the credit for the passage in 1921 by the Massachusetts Legislature of a law designed by Dr. Briggs to remedy the undesired status of expert testimony. This law in brief provides that all persons indicted for a capital offense and all persons indicted or bound over for a felony, who have been previously convicted of a felony, or indicted for any other offense more than once shall be reported to the State Department of Mental Diseases for mental examination before trial. The examination is thus routine affecting all who come within a certain legal category. No presumption as to insanity is required for this examination or is raised by it. The matter of selection, whether lay or expert, thus ceases to be a source of criticism. In this way one may have confidence that within the scope of the law no defendant is put on trial who is mentally unfit." Judge Shaughnessy of our Municipal Court during his term of office has made an attempt to follow a similar procedure. Unfortunately, in our State, there is no provision made to allow the examination of all persons indicted for a capital offense or for all persons previously convicted of a felony. I might suggest that our legislative committees also consider the desirability of examination of everyone who comes under these groups.

Another suggestion might be to have the defendant's mental state considered by a commission of impartial neuropsychiatrists after the jury has decided whether or not he has *committed a crime.* If the commission for the court found the man legally insane or mentally sick, he would then be transferred to a hospital where he would remain until he had recovered. He would then be sent to prison to serve his sentence and not released to an unprotected public as is more than possible under our present laws.

The judges in this city, who have had to do with the insane, fortunately have been fair, honest and humane in their dealings with those unfortunates, and at the same time have been giving more consideration to the mental makeup of those whc have come before them.

The neuropsychiatrists, on the other hand, have no desire to sidestep their responsibilities and duties. They are fully aware of the present chaotic situation and are anxious to give the mentally sick criminal a fair trial and at the same time protect the interests of the public.

May we, with the cooperation of the Bar, have laws enacted that will prevent the dangerous, mentally sick criminal from roaming at large! May our duties be to enlighten the public concerning the prevention of nervous and mental disorders, and may we instill confidence by properly treating the sick and by offering society every measure of protection! If we do this, we can fearlessly challenge the veracity of our unjust critics and at the same time point with pride to our record of public service.

Pulmonary Tuberculosis of Childhood*

By S. M. WELSH, M. D.
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The studies which have been made in various parts of the world, particularly during the last ten years, have made it possible to bring forth definite facts concerning tuberculosis in infancy and childhood. The child with tuberculosis that is recognizable clinically from the history and physical examination presents no great problem because the only logical procedure in such a case is sanatorium treatment. There is, however, another large group of children who have advanced pulmonary tuberculosis, but who present only vague or absent symptoms and signs. Many children acquire the infection, as is evidenced by the high incidence of positive tuberculin reactions, and yet apparently remain in perfectly good health. The majority of these will always remain in good health and will not need consideration, but a group of them will become clinically active and these are the ones which present the difficulty in early diagnosis and treatment.

The childhood type of pulmonary tuberculosis is the name adopted by the American

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Sanatorium Association to include the older terms of infantile, juvenile, or hilum tuberculosis. It is described as diffuse or nodular lesions in the lungs and tracheobronchial lymph nodes that have resulted from a first infection with the tubercle bacillus. This type of tuberculosis, as distinguished from the adult type, rarely occurs in adults, but occasionally may be found.

Although there has been a definite decrease in the mortality from tuberculosis in recent years, statistics indicate that the prevalence has diminished but little. In a study made in Philadelphia recently of school children, some reliable workers found that 37.7% gave a positive tuberculin reaction at the age of five years. At the age of eighteen 90.2% of these children gave a positive reaction. Latent tuberculous infiltration of the lung of the childhood type was found in more than 1% and latent tuberculous foci of lungs and tracheobronchial lymph glands in more than 10%. This incidence is much higher than that found in rural districts and less thickly settled areas, but it suggests that tuberculous infection is prevalent to a greater degree than is ordinarily suspected and that the spread occurs in schools, probably being due to a case of open tuberculosis appearing there.

In a study of 4,719 school children in Norway, believed to be representing an average as to social and economic states, Ustvedt[22] found the von Pirquet to be positive in 8% entering school at the age of eight and 40.5% to be positive when they left school at fifteen years of age. This study proved that the greatest infection takes place during the school age and corresponded closely to findings in Norway in 1914 except that there were 24% positives entering and 60.5% positives leaving the schools at that time. The more recent results correspond very closely to those in this country where Dicky[3] and Seitz[3] found that 46.6% of 3,500 children given the intracutaneous test in San Francisco gave positive reactions at the age of fourteen.

PREDISPOSING FACTORS

Summing up the vast amount of evidence found in the literature on tuberculosis in children, we find that the social state of persons and families is an important factor in the development and control of pulmonary tuberculosis. The sputum from an active case is the principal source of infection and if children are exposed to droplettes from such a case, they are predisposed to the disease. In the crowded conditions present in many of the larger cities, entire families become infected because of the repeated and careless exposure they have to an active case of tuberculosis. The living quarters are often inadequate and of such a nature that fresh air and sun light are entirely insufficient. Both of these qualities are essential in the prevention and treatment of tuberculosis and where they are combined with crowded conditions, the exposure is so much greater.

Poor, or inadequate food, combined with the poor hygienic conditions often found tend to lower resistance. A lowered resistance tends to favor infection by the tubercle bacillus. Therefore, poorly nourished, underweight children are more susceptible than are children from families whose living conditions are of a higher standard.

The economic state will modify the social state to a large extent. Those families who are able to supply the needs and proper treatment of a tuberculous member will be able to protect the family to a similar degree, while those who are less fortunate must necessarily be handicapped, but, with discretion and proper care, can give the family sufficient protection.

A study made by Opie[17] and McPhedran[17] indicated that in families in which some member suffered with tuberculosis and expelled tubercle bacilli in his sputum, the incidence of latent tuberculosis was very high, 80% of contact families reacting to tuberculin before they reached the age of five, whereas at the same age only 30% of children in non-contact families react positively. Approximately one in ten of the children exposed to open tuberculosis had

acquired manifest lesions before they reached adult life.

In a search made in England among house contacts of 185 sputum positive cases, Turner[21] found 833 contacts. He found that the death rate among these was eight times the control rate and that the incidence was ten times the control rate. These conditions are similar to those found in this country and where crowding is present, the contacts will of necessity be greater.

It has long been thought that acute infections have an important relationship to the development of tuberculosis. Shapard[18] states that pneumonia and influenza in adults, and whooping cough and measles in children apparently produce a temporary lowering of immunity to tuberculosis. This is shown by Simons[19] who noted mild epidemics of whooping cough and measles and within a year was able to demonstrate active tuberculosis in four children in a rural community, three of whom had had either measles or pertussis during the epidemic. Hendricks[6] has shown, contrary to the belief of others, that influenza is an etiological factor in the production of tuberculosis and that the cases develop very slowly and insidiously. This, of course, is more important in the adult type than it is in the childhood form, although its possibility in the latter cannot be denied.

Whether or not there is a racial tendency in the development of tuberculosis is a question. In a study made in New York by Barnard[1], Amberson[1] and Loew[1], there was so little group unity and tuberculous infection was so widespread that no one age, sex or racial group could be separated. It is usually stated, however, that the Jews, Russians and Italians have greater resistance, while Scandinavians, Indians and Negroes have greater susceptibility. Shapard[18] does not believe this is due to either racial or geographical tendencies, but depends on opportunities for infection.

Calmette, using the tuberculin test, found that infection was extremely rare among the people in certain parts of Africa, but he believes this is due to isolation rather than immunity because, when once introduced, the disease is very fatal among them. Opie[15], in a study in this country, found minor tuberculous infection less frequent in colored than in white children, but found a graver infection more often in the colored. Manifest tuberculosis was found in 0.6% of white children between the ages of twelve and eighteen and in 2.4% of colored children of the same ages. This would tend to show that a protective infection occurs less frequently in colored children than in white, but it is doubtful whether isolation is a factor in America.

Shapard[18] explains the relative immunity of the Jews on the basis that for thousands of years they have lived in crowded and adverse hygienic conditions during which time tuberculosis was prevalent. The death rate among the Jews was high in medieval times, but was gradually lessened due to a complete optimal tuberculization with its resulting immunization. At present, immunity is the only satisfactory explanation for the resistance of some races and lack of it apparently explains the susceptibility of others.

MODE OF INFECTION

At one time it was believed that intrauterine infection played a very important part in childhood tuberculosis but today we find that this idea has been practically abandoned; likewise, tuberculous infection from a tuberculous midwife is a very far-fetched idea. At one time infection through the milk supply was a very common cause, but today, due to our pasteurization of milk and tuberculin testing of cattle this source of infection has been practically eliminated. The remaining great source of infection is that of intimate contact of the child with the parent or guardian, and, as far as our knowledge goes today, this source of infection is the greatest, outstanding etiological factor in the development of many cases of tuberculosis among most children of this country. In 50% of our cases of tuberculosis, history of intimate contact with parent, relative or guardian is always obtained.

TYPE OF BACILLI

There is both the human and bovine type of tuberculosis. The avian type which is spoken of in the literature is, I believe, one which needs little comment here. The bovine type of tuberculosis was always more or less noticed a generalized lymph adenopathy with possibly only slight involvement of the lung parenchyma. This bovine type of tuberculous infection has been practically eliminated throughout the past five or ten years due to our state and county health programs necessitating the tuberculin testing of cattle and the killing of the infected animals, thus making the herd free from contact with diseased animals. In the infection with the human type of tubercle bacilli it is generally the lung parenchyma or the intestinal tract that is first involved. A review of the literature is suggestive that the primary infection occurs in the lung parenchyma in about 90% of the cases and in the intestinal tract in probably less than 10%.

PATH OF INFECTION

Entrance of the tuberculous organisms into the body is generally through the respiratory or intestinal systems as above stated, and, in view of the fact that the situation of the primary lesion is found in the lungs in over 90% of the cases, the respiratory route is generally believed to be the first path of infection. Because over 90% of the tuberculosis is found in the lungs, either in the hilum region or in the pulmonary tissue, this type of infection is the most important one to consider.

In the childhood type of tuberculosis the hilum is most often involved, and if the lung tissue is involved it is found just as often in the basal lobes as in the apical lobes. This is contrary to the adult type of tuberculosis; in fact, childhood pulmonary tuberculosis is rarely found at the apices. In children with a suspected history of tuberculous infection, a Mantoux or von Pirquet test should always be made and, if negative, it should be repeated to be absolutely sure that the child has not received a tuberculous primary infection. If the tuberculin test is positive an x-ray of the chest should always be taken and the stereoscopic x-ray film will give more detail than the flat chest plate. A study of such x-ray films should always be made by a competent roentgenologist. In visualizing a stereoscopic film one looks for a primary focus and the involvement of the tracheobronchial lymph nodes in the hilum draining that portion of the lungs where the primary lesion is located. In large numbers of cases only one focus of infection is found in the lungs but occasionally there may be more than one. This primary focus usually starts subpleurally and goes through the various stages of infiltration, caseation, encapsulation and finally calcification and healing. It is probably only after calcification that this lesion can be found on x-ray. The primary focus may be covered or encapsulated by hilar shadows and therefor invisible. However, if the primary focus is lateral to the hilum we can often see heavy trunk shadows radiating from the primary focus in toward the hilar lymph nodes. If these heavy trunk shadows are found radiating in from the primary focus they are still stronger evidence of childhood tuberculosis than if the primary focus alone is found. Occasionally a primary focus without hilum involvement is found and then we know the lesion healed very quickly before involvement of the hilum lymph nodes could occur.

PATHOLOGY

Whether or not a person will develop tuberculosis depends on: (1) resistance, (2) virulence of the organism, and (3) dosage of the organism. In children the first of these is more apt to be wanting and this is usually the cause of the primary infection.

Infection may take place by inhalation, ingestion, through an abrasion in the skin, or transplacentally. In adults there may be a genital route. Inhalation is by far the most common route, and Kudlich[8] found that autopsies on 136 children with tuberculosis in Ghon's Institute revealed the primary infection to be by way of the lungs in 90% while 2.5% showed a primary intestinal infection. If a primary alimentary tract infection takes place, the tubercle bacilli enter the tonsils and pharynx and thence the lymph

nodes of the neck and lymph stream, or they invade the lymphatic areas of the intestine or gain access to the mesenteric lymph nodes whence they are drained via the thoracic duct to the venous system and to the lungs. The transplacental and dermal routes can be dismissed as being rare and of minor significance.

Assuming the infection has reached the lungs, localization may take place. If the primary focus is near a vein or lymph vessel, rupture may cause a dissemination throughout the entire body, causing a miliary type of tuberculosis. Around the primary focus the tubercle is formed with the characteristic giant cell, epithelioid cells and lymphocytes.

In children the focus is rapidly followed by an infection of the lymph nodes draining the area and in the direction of the lymph flow, and the disease in the nodes may progress more rapidly than at the primary site. This type of the disease is also seen in adults who have escaped a childhood infection. According to Opie,[16] general dissemination almost invariably occurs in early infancy, but with increasing age the resistance of the child increases, so that process becomes arrested in the nearest lymph nodes by encapsulation and calcification.

In the adult type of tuberculosis, the lesion is usually apical and the tracheobronchial glands are not included. Cavitation tends to develop in this type and it progresses as the usual typical case of pulmonary tuberculosis. This type is to be remembered as it is often seen in children seven or eight years old or younger, according to Dixon[4], and means that it is a re-infection, a first infection having taken place at some earlier date.

SYMPTOMS

The symptoms of tuberculous infection in children may be very vague or entirely wanting. One does not find a cough, weight loss, night sweats, or chills and fever as occurs in adults; in fact, a study made by Barnard[1] and her co-workers of 1000 New York school children indicated that the weight was of very little value, only 12.2% of those infected and 9.8% of those with lesions were 10% or more underweight. Happ[5] states that the characteristic symptoms in the infant and young child are lack of appetite and indifference to food; fever, highest in the afternoon; gastrointestinal symptoms, such as diarrhea or occasional vomiting; nervous symptoms, such as wakefulness, restlessness, and irritability; failure to gain, rather than an actual loss of weight; fatigue and poor color.

This author gives the following rule: "Any child who runs a low grade elevation of temperature not satisfactorily explained, who tires easily, who is wakeful and restless and has loss of appetite, should be under suspicion for tuberculosis until proved otherwise, even in the absence of a known contact and a negative physical examination."

Willingham[23] agrees to the above, but points out that these symptoms may be caused by a number of other conditions such as diseased tonsils, sinusitis, uncinariasis, pyelitis, or cardiac disease.

DIAGNOSIS

The history of contact is very important in diagnosing tuberculosis in children. If a parent or a member of the family is a sputum-positive case it makes the diagnosis much more definite in the child, and this information, plus a history of any of the foregoing symptoms, is important evidence in favor of infection. If, added to this, is a history of phlyctenular conjunctivitis, fissure in ano, erythema nodosum, unexplained hoarseness, or of pleurisy, one should be very suspicious of tuberculosis.

Physical examination is of little value, the lesions being of such a nature that very little can be brought out by the usual methods. It has been found that D'Espine's sign is positive in only a small number of those that have enlarged tracheobronchial lymph nodes, demonstrable by x-ray. Stewart[20] states that if a value of 100% is assigned to the Pirquet test as measuring the efficiency in the discovery of childhood tuberculosis, x-ray has a reliable efficiency of about 25%, and the physical examination a small fraction of one percent.

The tuberculin test has been shown to have the most value in determining infection and has become of tremendous importance. The incidence of tuberculous infection is decreasing and as it continues to decrease the tuber-

culin test will become of greater value. Since 1907 various tests have been employed for the detection of tuberculosis infection, such as the Pirquet, the Mantoux, the Moro and Calmette tests. There have appeared numerous modifications of them. Sufficient time has elapsed and enough studies have been made by way of comparison so that we have been able to determine which is best. The intracutaneous or Mantoux test has been found to be the most accurate.

At one time the following objections were made to this test: 1) a needle must be employed, 2) something is injected into the child's body, 3) it is difficult to prepare and keep in stock the proper dilutions of tuberculin, and 4) it is too time-consuming.

After the test was put into actual practice these objections began to fall by the wayside. It has been found that most children do not object to the use of a needle any more than to the blunt instrument used in applying the Pirquet test. Most children prefer the intracutaneous test to the Pirquet test and it is always possible for the physician to state that the tuberculin injected into the skin in proper dosage is entirely harmless. When this needle is used very few people object to the test, while they may object to placing the same material on an abraded area of the skin. The preparation of the proper dilutions is extremely simple. The dilutions which are most commonly used are dilutions 1:10000, 1:5000, 1:1000, 1:100 and 1:10. It is generally safe in the average suspected case to begin with a dilution of 1:1000 for the initial Mantoux test. If the initial test is negative, stronger dilutions of 1:100 or 1:10 should be applied. By so doing we may rule out tuberculosis of any significance in a large group of the children of most communities. To most of us the tuberculin test has its greatest value in a negative way. In the average community the number of children reacting positively will always be small. At times if we reduced the number of opportunities for children to be exposed we would expect the number of infected children to become smaller until finally tuberculous infection would be reduced to a minimum.

It is a well known fact that occasionally a person with tuberculosis will react negatively to the tuberculin test. This is true both of children and adults but this condition is so rare that it may be almost ignored. Again, a positive tuberculin test does not mean that active tuberculosis is present but indicates that at some time the tubercle bacillus has invaded the body. A positive tuberculin test plus other signs of activity should lead one to keep the suspected child under observation.

Moncrieff[14] studied the Mantoux test in 206 children recently and concluded that a positive tuberculin, even in the very young, should not be allowed to establish a diagnosis, but should merely be taken as a piece of evidence. He states that the value of a negative tuberculin is reduced by several factors, among which are: impotence of the tuberculin; the patient may be in a state of acute tuberculosis or anergy such as exists during measles or pertussis; or the injection may be given improperly.

At one time we placed considerable emphasis upon the laboratory examination, particularly the study of the sputum. Most children with the childhood type of tuberculosis do not have tubercle bacilli in the sputum. We believe it is only the occasional child. Therefore, if we depend upon positive laboratory findings we shall again fail to detect the vast majority of children with the childhood type of tuberculosis, and shall discover only the occasional child whose lesions break down sufficiently to discharge tubercle bacilli.

Stools should be examined in suspected cases, and some authors go so far as to advise examination of stomach washings. This, however, seems rather far-fetched as a means of diagnosis. However, the laboratory is certainly more of an aid in the diagnosis of the active adult type of tuberculosis than it is in the diagnosis of childhood tuberculosis.

The x-ray has proved to be of great value in the diagnosis of tuberculosis of children. Films should be made of every child reacting positively to the tuberculin test. If these films reveal no evidence of disease, others should be made of the cervical and abdominal regions in an attempt to detect calcification in the cervical and mesenteric lymph

nodes. If evidence of disease is found in the chest, or in the cervical, or the abdominal region, in the presence of a positive tuberculin reaction, one is reasonably safe in making a diagnosis of tuberculosis, but if the x-ray examination is negative, one cannot say that tuberculosis does not exist any more than one can say that tuberculosis is absent when the sputum is negative to tubercle bacilli. There are lesions so new and so slight as to escape detection by x-ray and again it is well to remember that there are lesions even in the chest in such obscure positions that the x-ray does not reveal them. One must also bear in mind that the first infection type of tuberculosis is not always in the cervical, thoracic or abdominal regions, but that it may exist elsewhere and thus entirely escape the examiner.

The use of the x-ray is a most useful and helpful means for discovering the presence of an infection. In children, the presence of parenchymal shadows or of "Ghons" nodes, together with enlargement of the glands draining this area, are of diagnostic importance. Dixon[4] states that the hilum alone may show evidence of disease, the primary focus being in some remote part of the body and that if the enlarged glands are not demonstrable, any deviation of the trachea occurring in childhood should suggest the presence of enlarged glands. Willingham[23] suggests a pair of stereoscopic posterior anterior films and an oblique or lateral in each patient and states that the x-ray fails to demonstrate the lesions in their early stages due to the fact that calcium requires from two to three years to be deposited. Aside from this there is also the possibility of the ribs, spine or heart obscuring the primary focus so as to hide it from view in an ordinary flat plate.

TUBERCULOUS HILUM

The tuberculous hilum is a more important guide to the diagnosis of tuberculosis from the x-ray film than the finding of a primary focus. The hilum is always infected secondarily to the lung tissue and this involvement is usually more extensive, remains longer and leaves more recognizable scarring than the pulmonary primary infection.

However, the misinterpretation of hilar shadows leads to many diagnostic errors. Pathological changes in the hilum may be due to many different processes, some of which do and some of which do not represent tuberculous involvement, and it is in these cases that anamnesis including contact history, complete physical examination and a Mantoux or von Pirquet test can be used to the greatest advantage.

The tuberculous hilum can best be understood from the standpoint of its pathological condition, namely, hyperplastic caseated lymph nodes with fibrous capsules; calcification or fibrosis of the lymph nodes; fibrous pleuritis with adhesions to the mediastinum, pericardium, walls of the chest or spinal column; pressure atelectasis; fibrosis of the surrounding lung tissue; consolidation of the surrounding lung tissue to extensive infection. These conditions always give the typical hilar shadow, triangular in shape with the base superimposed on the mediastinal shadow with the apex reaching out to the pulmonary field. The shadows are generally of unequal density or have a hazy, moth-eaten, snowstorm appearance. They may be fairly regular in outline or at other times may be very irregular. As healing is occurring, there will be areas of calcification present in various localities. If the peritracheal lymph nodes are involved there will be an increase in the mediastinal shadow to one or both sides. This may be represented by a bulging shadow or by a straight line with a fuzzy border.

A loss in the clear air-containing space between the right hilum and the right heart border is of greatest importance in making a diagnosis of pathological changes. The right hilum is always more easily seen and observed than the left hilum as the left hilum may be partially or completely obscured by the heart shadow.

MILIARY TUBERCULOSIS

Miliary tuberculosis occurs very frequently in children and is almost 100% fatal. In only about 50% of these cases can a diagnosis be made from the x-ray of the chest because the tubercle or primary focus is often too small to cast a dense enough shadow to

be visualized on the x-ray film. When the tubercles are dense enough to cast a shadow the film has a snowflake appearance and the distribution is general to the very periphery of each lung field. Often in films where the miliary tuberculosis is readily seen there may be no evidence of a primary focus or of any enlarged hilum. However, there may be a partial healing of the primary focus or hilum as evidenced by calcification.

A very diffuse bronchial pneumonia may simulate miliary tuberculosis, and a differential diagnosis can only be made by a previous x-ray film or by the clearing of various portions of the lung field on successive films, or by a distribution of the involved lung tissue which is not so general to the periphery of the lung fields. A differential diagnosis may also be made by the absence of a positive tuberculin test and by the clinical appearance and course of the disease. However, it has been found that the tuberculin test is positive only in about 50% of the cases of miliary tuberculosis.

FULMINATING TUBERCULOSIS

Other than the cases of miliary tuberculosis, these cases are not common. In these rare cases a diffuse consolidation of all lobes is found with resulting death in a few weeks.

EPI TUBERCULOSIS

This is a term used for a type of consolidation that is found in tuberculosis of children. It is believed to be due to a toxic reaction in the lung tissue surrounding a tuberculous hilum rather than to the tubercle bacillus infection itself. In other words, it is a local pulmonary allergic reaction as found in the skin to the tuberculin of the Mantoux or von Pirquet tests. The consolidation may involve one lobe or a portion of a lobe.

It is very difficult to make a differential diagnosis from pneumonia on one film alone, but successive films throughout the course of the disease make the diagnosis more evident. Typical tuberculous hilum nodes on the film and a positive tuberculin test aid the diagnosis. The disease generally runs a benign course thus differentiating it clinically from pneumonia. The condition often lasts weeks or months with a low temperature and with very few clinical findings. The spread is very rapid from the hilum to the periphery and the resolution is always very slow from the periphery toward the hilum. This variety of the disease is often called perituberculous infiltration.

TUBERCULOUS BRONCHIAL PNEUMONIA

This occurs in the form of an extensive mottling of the chest, generalized in type, extending from the hilum to the periphery with large discrete and conglomerate shadows, generally one centimeter or smaller in diameter. The child with such a condition generally appears in good health, practically free from fever. However, it runs a strong skin test to tuberculosis and at the present time I know of two cases that have been observed for over a period of eighteen months with practically no change in the pulmonary pathology.

As far as x-ray findings are concerned it is believed to be a type of tuberculous bronchial pneumonia running a very chronic course with very little systemic reaction and which clinically resembles epi tuberculosis, although on the x-ray film it resembles general miliary tuberculosis. The condition and final termination is completely different from acute miliary tuberculosis and the condition itself is always differentiated on the x-ray film from acute miliary tuberculosis by large shadows which may be unilateral or bilateral and by its chronic course running over a period of months or years with only slight benign systemic reaction. I have never seen a postmortem on a case of tuberculous bronchial pneumonia.

CALCIFICATION

Many roentgenological diagnoses of tuberculosis have been made on the supposed presence of calcium. I believe that the frequency of calcified nodes in the chests of children is overestimated. Dr. Bigler of the Children's Memorial Hospital of Chicago found the frequency with which calcified nodes were diagnosed by x-ray and postmortem was at considerable variance. This comparison of roentgenological and patho-

logical findings proved how often error was made in the supposed presence of calcified lymph nodes. Moreover, he found that in many of the series reported in the literature only 40% to 50% of the cases whose roentgenograms were supposed to show calcification had positive tuberculin tests. Such evidence as this leads me to believe that many of the so-called calcifications were densities due to some other cause, possibly vascular trunks running parallel to the axial ray.

However, we must remember that reaction to tuberculin tests may change from time to time. True calcification in the lungs of children can in almost 100% of the cases be considered tuberculous.

It is stated by some authorities that it takes about three years for calcium to be deposited but this is not always true, as I have seen calcified lymph nodes on two different occasions in children under two years of age and Dunham reports in a recent article that it has been found in early infancy.

A calcified lesion always casts a definite shadow. They are found only rarely in infancy but increase in frequency with age. It is an area of increased density, usually irregular in outline, sharply demarcated from surrounding tissue and visible even when beneath a rib. At an early age it is rarely a solid shadow but presents a speckled effect in appearance. In children up to ten years of age it is most common as an irregular, rounded circumscribed shadow of equal or unequal density and by such appearance it can be differentiated from vascular trunks which are often multiple and which are larger near the hilum and smaller as they extend out to the lung fields and are of even density with smooth margins that are not as sharply demarcated from the surrounding lung tissue.

Calcified lesions in children are more important than those in adults because they frequently represent only partial healing from which a disseminated tuberculosis may originate.

In 171 postmortem examinations on children under five years of age, Bigler reports only three cases found with definite calcification in the pulmonary tissue and Wallstein reports only eighteen cases of calcifications in 1,320 done on children under two years of age.

TREATMENT

Prophylaxis is of utmost importance in the control of tuberculosis. It is necessary to educate the people in order to bring this about and this is quite adequately done by the various Anti-Tuberculosis associations who come in contact with the children and their parents through the schools and who teach them the nature, manner of spread, and control of tuberculosis. In order to control the disease, active patients must be taught not to cough in public without covering their mouths and the proper manner in which to dispose of their sputum. Tuberculinization of herds and pasteurization of milk have done much to control the spread of tuberculosis, and where this is not done in 100% of the communities, every effort should be made to have it done. Vaccination has not been used successfully as yet, but work is still being done on it, especially in Europe. Here, naturally, the danger of contamination with virulent tubercle bacilli is the greatest hindrance to its being more widely used and tried.

The treatment of the child sick with the disease can be briefly stated as being hygienic. Plenty of rest, fresh air, and abundant food are the essential elements necessary. Whether a child should be institutionalized depends upon the circumstances found in each family. Discipline and education are the only factors in favor of an institution, provided the family is able to meet the necessary requirements of essential rest, food and fresh air at home.

Medication plays a small part in the treatment. Vitamin therapy may be of value for its nutrient effect and some recent work tends to show that Vitamin D tends to produce an increased calcification in tuberculosis. The question of heliotherapy is somewhat disputable, although it is generally stated to be contraindicated in the adult type but indicated in the childhood type. Surgery, of course, plays no part in children unless the advanced adult type of lesion is found.

Shapard concludes that the proper treatment of the patient is of less importance from a public health standpoint than the isolation of active cases in influencing the death rate. He gives three factors as being responsible for the decrease: (1) tuberculization, or immunity, (2) physical well-being, and (3) availability of good public health and medical facilities.

The last word, however, has not been said because recent work tends to show that many of the present conceptions regarding tuberculosis are erroneous and it may soon be necessary to discard them for newer and more conclusive evidence.

CONCLUSIONS

Especially for those who read only titles and conclusions I would once more emphasize, as fully as I know how, that the purpose of this paper is to advocate the importance of a careful history, and, if suspicious, all the methods available should be used to determine whether the child has had or now has tuberculosis.

1. There is a large group of children who have advanced pulmonary tuberculosis but who present only vague or absent symptoms.

2. The social state of persons and families is an important factor in the development and control of pulmonary tuberculosis.

3. The economic state will modify the social state to a large extent because those families who are able to supply the needs and proper treatment for a tuberculous member will be able to protect the family to a similar degree.

4. Inhalation primary infection is by far the most common route. Postmortem of 136 cases showed the primary infection to be by way of the lungs in 90% of the cases.

5. Any child who runs a low grade elevation of temperature, not satisfactorily explained, who tires easily, who is wakeful and restless and has loss of appetite should be under suspicion for tuberculosis until proved otherwise, even in the absence of a known contact and a negative physical examination.

6. Every child under suspicion for tuberculosis should have the benefit of the following diagnostic aids: 1) careful history, 2) physical examination, 3) x-ray of chest, 4) tuberculin test and 5) sputum examination. The history of exposure to tuberculosis is of great importance, for we believe that if a child is exposed over a sufficiently long period of time he will become infected with the tubercle bacillus. In a good sized group of children suffering from tuberculosis one may see more than 50% giving no history of exposure. A negative history is of no significance largely because of the fact that so many unsuspected cases of tuberculosis exist. A careful search among the associates of children with the childhood type of tuberculosis will reveal spreaders of bacilli that have never been suspected. One must also take into consideration the possibilities through the dairy herds. We are dealing with a communicable disease; therefore, every child who has the childhood type of tuberculosis has had direct or indirect contact with a person or animal suffering from tuberculosis or acting as a carrier of tubercle bacilli.

7. Prophylaxis is of utmost importance in the control of tuberculosis. This is best accomplished by the education of the general public in regard to the spread of the disease.

8. Rest, fresh air, sunshine and good food are the chief essentials necessary in the treatment of the tuberculous child.

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The Management of Orbital Cellulitis Secondary to Sinus Infection*

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The study of this subject was originally undertaken in the hope of finding some uniform method of approach in the treatment of orbital inflammations secondary to sinus infection. After reviewing some twenty-five various opinions by as many ophthalmic surgeons, it became apparent that there is, and can be, no standardized method of attack. The variability in the virulence of infection, the marked individual differences in the anatomic relations of the sinuses and orbit, and the variation in the time of onset and complications, all preclude any uniform method of surgical interference. Therefore only a review of the accepted principles of treatment and a report of a few cases relatively conservatively treated will be attempted.

Orbital cellulitis can be caused by a great number of agents and conditions. Authorities have generally agreed, however, that 60–70% are secondary to sinus infection. The ethmoids and antra are the chief offenders and the frontals and sphenoid more rarely. Phelps states that practically all cases in children are secondary to sinus infection.

The classical signs of orbital inflammation are too well known to dwell on at this time. A few pointers gleaned from the literature perhaps will not be amiss. MacCallan stresses the necessity of sinus x-rays because the clinical evidence of nasal disease may have disappeared at the time of examination. The x-ray will also show any anomalies in anatomy such as maxillo-ethmoidal cells or post ethmoidal cells between antrum and orbital floor. Occasionally a bony dehiscence can be demonstrated between the ethmoids and the orbit. Babbit emphasized the frequent similarity in symptomatology between orbital inflammation and cavernous sinus thrombosis. At times the

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differential diagnosis may be almost impossible. In cases of doubt it is probably best to treat these cases as an orbital abscess.

I have spoken of the many different methods of treatment. A few examples follow:

(a) MacCallan states that there is no fixed operation but in most cases an incision through inner one-third of the eyebrow, through the periosteum followed by an opening in the nose is the best in his hands.

(b) Phelps uses the same operation with a tube drain through the nose, closing the external incision.

(c) Gerretson advises, if sinusitis is a factor, an external frontal and ethmoid operation.

(d) Quoting from Beck: "After the abscess has formed it should be drained externally and drainage of the sinuses usually intranasally.

(e) Gittins, speaking of cases in children, urges intranasal drainage of sinuses first, then watch the orbital condition and if there is no subsidence do an external operation.

(f) Patterson reports five cases with recovery. No external operation. Two intranasal operations. He states that it is inadvisable to do intranasal operations in the acute stages unless it is forced upon one by necessity.

(g) Miller feels that many cases are caused by a thrombosis of the small veins and does only an orbital incision if there is no denuded bone or necrosis present.

(h) Jones reports five cases with two deaths from meningitis. All five had intranasal operations, two had external as well. In conclusion he states that the first impulse is to deal radically with these cases. Further experience is that, as a rule, more conservative treatment is indicated.

(i) Davis believes in a wide external incision with reflection of the periosteum at the upper inner angle with adequate drainage in the nose. He condemns the stab wound procedure with spreading by forceps.

CASE REPORTS

The following case reports are from the eye service of Doctor Beebe, Gordon and Henry B. Hitz at the Milwaukee Hospital.

Case I. R. B., male, white, aged 4½, was admitted in December 1925. The history is somewhat vague but the swelling around the right eye began about four days before admission. He had had a cold for the two weeks prior to admission. On examination the eye-ball was found to be pushed forward and laterally. The usual redness, swelling and chemosis of the lids was present. Fluctuation at the inner canthus was found. The right ear was draining. Nasal examination showed pus in the right middle meatus. Temperature was 101, blood count 16,900. Immediate operation was decided upon, an incision being made through the upper lid at the inner canthus. Pus was obtained. Rubber tube drainage was inserted. The patient improved steadily with free drainage from the orbital incision and the middle meatus until the fourth day postoperative when he developed a temperature of 104.5. The left ear drum was bulging and was incised. The temperature dropped within a few hours and recovery was uninterrupted from that point. On discharge the vision was normal.

Comment: The possibility of other complications in orbital cases due to primary upper respiratory infection must be kept in mind.

Case II. H. H., male, white, aged 6, was admitted in June, 1926, with a history of a severe cold with swollen glands starting two weeks before. Several days after the onset the left eye became swollen, painful and prominent. The general examination was negative. The left lids were swollen, red, but not indurated. The eye was prominent and displaced downward and to the left. There was suggestive fluctuation along the orbital ridge. Temperature was 100. The following day under general anesthesia an incision was made through the left eye-brow at the upper inner canthus. A small amount of pus was present. Denuded rough bone was found in the floor of the frontal sinus with pus exuding therefrom. The frontal sinus was not opened. Two days after operation a sinus x-ray could detect no abnormality in the sinuses. The patient was discharged eight days after operation, with very slight discharge, the eye having regained its normal position. The wound healed without any difficulty.

Comment: This is a case secondary to frontal sinusitis where the x-ray did not help or was not reliable.

Case III. E. B., female, white, age 66. The patient had had several swellings in right eye in the past. The last one occurred eight years ago and had to be opened at that time. One week ago she had some soreness and feeling of pressure in the right orbital region which had increased. With each previous orbital swelling there has been a profuse drainage from the right nostril. Physical examination was generally negative. The right eye showed a marked exophthalmos, certain limitation of motion, chemosis, swelling and redness of the

lids. The anterior chamber was shallow. Temperature 102.

The immediate treatment consisted of hot compresses and suction to the nose. The patient improved gradually until the tenth day after admission when the orbital swelling increased. Further delay in operative intervention was deemed unwise, and an incision was made through the inner one-third of the eyebrow. Pus was obtained and denuded bone could be felt with a probe in the inner wall of the orbit. An opening into the nose was made with a trocar. The patient made an uninterrupted recovery until she was lost track of.

Comment: This is a case of recurrent orbital abscess due to chronic or recurrent ethmoid disease which undoubtedly would have been benefited by an intranasal operation after her first attack.

Case IV. J. G., female, white, age 9, was admitted in March of this year with a history of a cold starting two weeks before, followed by headache and swelling of the right eye. The physical examination was negative except for a mucopurulent discharge in the right middle meatus, tenderness over the right antrum and frontal sinus, congested conjunctiva, edema and redness of the right upper lid and slight exophthalmos. The temperature on admission was 101. X-ray revealed cloudiness of the right antrum, ethmoid and possibly the frontal; the left sinuses were normal. Treatment consisted of shrinkage, suction and irrigation of the nose. Within one week the eye was back to normal and the nasal discharge was practically nil.

Comment: This is an early case of orbital inflammation cleared up by conservative treatment.

Case V. R. M., female, white, aged 6, was admitted in February of this year with a resolving pneumonia.

Four days before admission she was seized with a severe pain in the head, profuse nasal discharge and some puffiness around the right eye. Examination revealed the chest to be clear. Temperature 102. Mucoid discharge from the nose more profuse on the right, tenderness of the right antrum and puffiness of the right upper lid. The x-ray showed a marked cloudiness of all the sinuses on the right side. The left side was normal. Treatment consisted of hot compresses, shrinkage, and suction. There was gradual improvement for six days, followed in the next three by increased swelling and redness. Fluctuation was obtained and the orbit opened on the 10th day after admission. The incision was made through the brow at the inner canthus, pus was located. A communication into the ethmoid region was located with a probe and this was enlarged with a trocar. The patient made an uneventful recovery.

Comment: An early case not responding to conservative treatment.

Case VI. E. N., female, white, age thirteen, was admitted in February, 1932. The chief complaint was a red, swollen, painful left eye. Three weeks prior to admission the patient received a bump on the left eyebrow with someone's elbow. This pained her for about five minutes. There was no ecchymosis and no subsequent pain. A cold in the head and cough had been present for two weeks prior to admission. The redness and pain in the left eye developed four days before admission. The first actual exophthalmos was not noticed until the day of admission. Physical examination revealed the typical signs of orbital abscess in the left eye. X-ray showed cloudiness of left antrum, left ethmoids and left frontal sinuses. The cornea was hazy in the lower one-half. Temperature 99. Blood count 13,150. On the day after admission the orbit was explored through an incision in the eyebrow and also one through the conjunctiva, no pus was located. On the second day the antrum was punctured and purulent fluid was found. The next day the patient had a chill with a rise in temperature to 102. Four days after the operation a large amount of pus was discharged through the upper incision. In the following week the patient developed signs of an intracranial complication. Showing increased irritability, hydrocephalic cry, positive Kernig, bilateral Babinski, and blurring of nasal side of right optic disc. The spinal fluid, however, was clear and contained only four cells per cubic mm. These signs gradually abated and in another week had disappeared. Due to an obvious collection of subcutaneous fluid lateral to the orbit the patient was again taken to the operating room and an incision was made lateral to the end of the eyebrow. A large amount of pus was evacuated from the outer half of the superior wall of the orbit.

For the next six weeks the patient's condition was good. She was up and around the hospital and fairly comfortable. Profuse drainage continued, however, with occasional headaches and at time blurring of the right optic disc. At this time a probe could be dropped under the orbital margin one inch through the roof of the orbit into the cranial cavity. At this time, six weeks after the onset of intracranial symptoms, it was deemed wise to explore the cranial vault. An incision was made through the eyebrow. The frontal sinus was opened and found full of pus. The lining was apparently healthy, however, and no communication was found with the orbital cavity. The frontal duct was enlarged. The discharging sinus in the brow was located lateral to the frontal sinus. The surface of the frontal bone was rough and thickened. A trephine opening was made lateral to and above the supra-orbital notch which exposed an epidural pocket the size of a robin's egg filled with pus and granulation. Upon exploring upward the probe dropped into a subdural pocket from which about 4 ounces of pus escaped with a pulsating motion. A rubber tube drain was inserted. For the next two months the patient improved steadily and was in

good general condition, although the drainage from the brain abscess was quite profuse. At this time, four months after the original operation, it was found by x-ray that a bony sequestrum was present one and one-half inches above the supra-orbital rim. An incision was made therefore in the mid-forehead just below the hair line and the original bony opening enlarged. The sequestrum could not be located but another pocket of pus was found. The drainage tube was reinserted.

In the past six weeks the patient's condition has been excellent. The drainage is considerably less but still more than one would like to see.

Comment: In spite of prompt surgical interference, this patient developed an intracranial complication within two weeks after the onset of her orbital condition. It may be argued that in this case the complication might have been prevented by early radical sinus surgery. My personal feeling is that this would have added greatly to her chances for a rapid demise. Possibly it would be wise at this time to exenterate the ethmoids but we are hesitant about subjecting the girl to any more surgery than is absolutely necessary.

CONCLUSIONS

The variations in virulence of the infecting organisms and in anatomic structure of the sinuses and orbit preclude the possibility of developing any set surgical treatment or technique in the treatment of orbital cellulitis following sinus infection. A few broad principles of treatment are hereby presented for consideration.

(1) X-ray is invaluable for localizing the offending sinus, for determining anomalies of bony structure and for locating any dehiscence or bony necrosis of the orbital plate.

(2) When the characteristic signs of pus formation are present, I believe it advisable to open the orbit externally by a wide incision and to drain the abscess externally with tube drainage. If bare bone or bony necrosis of the orbital plate can be located. the opening should be enlarged by the use of a trocar or similar instrument.

(3) Any intranasal operation before the acute condition has subsided is a dangerous procedure and should be avoided whenever possible. After complete recovery of the orbital condition, the sinuses should be thoroughly investigated and any necessary operative treatment should be done at this time.

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Extradural Spinal Cord Tumor; Case Report

By JOHN O. DIETERLE, M. D.
Milwaukee

The following case is reported not only because of an interesting and unusual history but also to make note of the remarkable regenerative power of vertebral laminae after removal.

The patient, a white male age 38, was admitted on January 1, 1931, to Mount Sinai Hospital, Milwaukee, coming from The Mayo Clinic where a laminectomy had been done three weeks previously. His history briefly is that ten months prior to operation he began to experience severe sharp pain in the back, at first localized slightly to the right of the spine between the scapulae. This pain increased in intensity as time went on and it occasionally became girdle-like around the chest. He had consulted a number of physicians, none of whom made a definite diagnosis. About five weeks previously he suddenly began to lose power in the legs and was unable to walk. He was then seen by Dr. M. E. Gabor who made a diagnosis of spinal cord pressure probably caused by tumor and he was sent to The Mayo Clinic for treatment. The diagnosis was confirmed there and three weeks previously a laminectomy had been done. For some unknown reason he lost control of the sphincters after operation and an indwelling catheter was introduced. He also developed decubitus over the sacrum.

In a communication it was stated that at operation an extradural tumor had been found surrounding the cord, most marked on the left side and arising from the body of the sixth thoracic vertebra. The tumor was only partially removed, the fifth and sixth thoracic nerve roots were divided, the dura was left open and the cord covered only by arachnoid. The pathological diagnosis was a highly malignant sarcoma (type not stated). A bad prognosis was given and the patient was accordingly discharged to continue treatment in a Milwaukee hospital. X-ray therapy was not given at The Mayo Clinic and was thought to be useless in this case.

The only signs of any importance in the examination were those in the paralyzed lower extremities. Knee and ankle jerks were increased and clonus was present. A well defined Babinski could not be demonstrated. There was definite lessened touch and pressure sensibility below the umbilical level. A body cast had been applied including the head and an indwelling catheter had been inserted. X-ray studies at Mount Sinai hospital failed to show any signs of metastasis in the skeleton. The laboratory findings were entirely negative.

Some weeks after entrance it was noticed that the patient slowly began to regain motion and power in the legs. The body cast was removed and a brace substituted. The catheter was later removed. Muscular power now returned so rapidly that he was soon out of bed, and on the sixth of June, 1931, was discharged, walking with the aid of crutches. Repeated x-ray examination of the spine showed no extension of bone pathology, in fact the involved area appeared to be healing. By September, 1931, he was able to get about with a cane. He noticed however that power in the right leg lagged and by Thanksgiving time spasticity became evident in the feet. He dragged the right foot and there was a dissociation of sensibility. As the condition progressed both legs became spastic and adducted and he was finally unable to walk or stand. It was evident that recurrence of the original tumor had taken place and after localization a second laminectomy was done on March 21, 1932, at Mount Sinai Hospital. The incision was centered over the sixth thoracic vertebra and the dissection carried down to the cord with caution. One would naturally expect the cord to be covered only by scar tissue in a case of this kind but it was found that the laminae had regenerated over the spinal cord and in the mid-line there was a hair line groove separating these regenerated laminae. When these were removed a dark red, friable tumor presented on the left side of the cord. The cord showed marked indentation from pressure and when the tumor mass was removed it again assumed a straight line in the canal. The dura was not opened. It was seen that the tumor arose from the posterior portion of the sixth thoracic centrum. Laminae from the adjoining vertebrae were removed to insure a wider decompression.

Within a week's time the patient had regained considerable power in both legs. The entire cord pressure syndrome gradually disappeared and at present he is up and about in good physical condition. The last x-ray pictures show good spinal alinement and there is no further evidence of bone destruction.

Microscopical study of sections of the tumor were made by Dr. Enzer and were compared with frozen sections of the tumor tissue removed at the first laminectomy. No difference was found in the histological structure. The tumor tissue was classified as a plasma cell myeloma of the vertebra.

COMMENTS

We are evidently dealing with a solitary tumor of bone which manifested its malignant nature only when it eroded into the spinal canal causing pressure on the cord. Most interesting is the fact that nature's ability to regenerate the removed laminae forming a protection over the cord nullified the mechanical effect of the first decompression, thus again affording confine-

ment to this slowly growing benign tumor. The writer is of the opinion that regeneration of bone is the thing to be expected when the periosteum is stripped back in laminectomy.

An important consideration in a case of this kind is the question of x-ray or radium therapy. We have it on the authority of Dr. Max Cutler of Chicago that large doses of x-ray or radium may be used in the treatment of spinal tumors without harming the spinal cord. It should be stated that this patient has been given a series of deep therapy treatments.

Primary Torsion Omentum

By W. J. TUCKER, M. D.
Ashland

Torsion (primary) of the omentum is not a very common surgical condition. Search of the literature revealed reports of 29 cases. Cases of twisted omentum in hernial sacs are relatively common in the practice of every surgeon, but cases of primary torsion with no apparent etiology are rare. The condition is serious, as the torsion results naturally in a strangulation of the omentum with gangrene and abscess formation.

Etiologically, several theories are expressed in the literature. Trauma and abdominal pressure are given as an important cause as quoted by Cernezzi. Dancing, hard labor, excessive purgation and coughing are given by D'Errico.

Payr, quoted by D'Errico, evolved the theory that torsion is caused by hyperemia of the veins becoming turgid by trauma or pressure on the abdominal wall, the arteries are obstructed and form tense chords about which the omentum revolves and causes subsequent obstruction to the circulation and gangrene. Such a theory would explain the etiology of the case we are reporting:

Patient, J. H., age 35, carried a mail sack for a week, resting it on his right side. He had never done such work before. After three days he noted a pain over the right side which became increasingly worse. After 48 hours he was in such distress a physician was called and he was consigned to the hospital with a diagnosis of acute appendicitis. Patient when seen appeared in acute pain generalized over abdomen with localizing rigidity over lower right rectus. Vomiting had occurred in small amounts—light green in color—during the previous 24 hours. Leucocytes were 10,600 with 66% polymorphs. No temperature and no other physical findings. Diagnosis of acute appendicitis concurred in and operation done immediately.

Exploration showed slightly congested appendix with a large amount of serosanguineous fluid escaping on incising peritoneum. Further exploration revealed a mass in the region of the hepatic colon attached to abdominal wall and colon, which when freed and brought to surface proved to be gangrenous, foul-smelling omentum, the distal portion twisted on its axis three times. This was resected—appendix was removed—abdomen closed without drainage and convalescence was uneventful.

Supporting the theory of anatomic variations of blood supply of the omentum as a cause of torsion is the fact that the blood vessels, particularly the arteries, appeared as tense bands—veins were turgid and filled with blood. There is nothing in the history of these cases of primary torsion of the omentum that would give a clue to the proper diagnosis—all of the reported cases being operated upon for acute appendicitis. A clue might be had in the normal leucocyte count with acute abdominal symptoms in the presence of mild trauma. Treatment, of course, is surgical. Deaths have been caused by embolism in a large percentage of these cases.

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USE OF AUTOLYZED LIVER IN TREATMENT OF PERNICIOUS ANEMIA

Further work has substantiated the preliminary observations, and, because of their important relation to practical liver therapy and theories regarding the possible nature of the beneficial agent, William F. Herron and William S. McEllroy, Pittsburgh (Journal A. M. A., April 8, 1933), report the results of treatment of thirteen cases of pernicious anemia with autolyzed liver. They give a description of a method by which the material is concentrated under reduced pressure. The temperature is prevented from rising above 55 C., as the potent material appears to be partially destroyed by prolonged heating above this point. Although the dried material can be administered more conveniently, concentration is not essential, as the crude unconcentrated filtrate was found to be palatable and effective. The oral dosage requirement of autolyzed liver approaches the intramuscular requirement of other liver preparations.

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EDITORIALS

HOTEL RESERVATIONS FOR A. M. A.

IN THIS issue of the JOURNAL we are reprinting a list of hotel facilities presently available for reservations during the week of June 12 to 16 when the American Medical Association meets in Milwaukee.

Wisconsin members are urged to make their reservations now and to use the facilities of the outlying hotels that the downtown hotels may be occupied by our out-of-state guests who are less familiar with Milwaukee. It has been fifty years since Wisconsin has had the opportunity to be the host to the American Medical Association. Every Wisconsin member should plan to attend.

IS DIGITALIS A HEART STIMULANT?

THE question asked in the title has brought forth an enormous amount of work. Some of the work has been done on normal animals, obviously a poor method from which to draw conclusions of the effect of the drug upon ill human beings. Considerable work has been done with the heart-lung preparation. Here again conclusions can not be of great value to human medicine. A large amount of work has been done upon the effect of digitalis on the T-wave of the electrocardiogram. Investigators are not agreed concerning the cause of the T-wave. The most enthusiastic advocate of electrocardiography must admit that information obtained by the instrument reveals only the transmission of the impulse from the S-A node to the ventricles. It does not give us any important information about the strength of ventricular contraction, the minute—or volume—output or the relative size of the heart. Finally, many workers have used the statistical method to confirm their opinion that digitalis is a heart stimulant. Too many factors enter into the problem to make this method one of finality.

Then how shall it be determined whether digitalis is a heart stimulant or not? The problem is not simple, and is much confused by impressions gained at the bedside and transferred without critical analysis to articles and text books.

There is sufficient careful work by investigators in all lands which shows that digitalis (the active principle of which is digitoxin) acts primarily upon the terminations of the vagus nerve in the heart, upon the junctional tissues (chiefly the A-V node) and upon the heart muscle because, when reaching the heart, it is split into a carbohydrate and a principle which apparently stimulates contraction. There is also some evidence that it prevents the heart, under certain conditions, from over-dilatation and excessive hypertrophy. It does not constrict the peripheral vessels, it does not therefore raise blood pressure. Its apparent dilator action upon the

kidney arterioles is probably a secondary effect to its action upon an irregular heart to improve the blood flow.

In conditions characterized by irregularity of the heart beat with edema (auricular fibrillation, auricular flutter) digitalis has its greatest usefulness. But does it stimulate the heart? One can answer that it does not. It blocks many impulses going to the ventricles and allows the ventricles time for recovery. It therefore improves the coronary circulation which further aids in restoring heart force.

Does it stimulate the heart in infections such as pneumonia, scarlet fever, typhoid fever, streptococcic septicemia, etc.? Many doctors think it does. Others feel that it can not have any helpful action. Why is this difference of opinion?

Let us very briefly relate what happens in an infection. First let us remind the reader that certain fundamental facts have been discovered about the heart.

1. The heart has a huge reserve capacity.

2. A stimulus however slight causes maximum contraction of the heart.

3. The force of the contraction depends upon the diastolic volume, the greater the stretching of the fibres up to a certain point, the stronger is the contraction.

4. Anoxemia is the only condition (except destruction of muscle as in coronary occlusion) which causes dilatation of the heart.

5. The contraction of the heart and the efficiency of the circulation depend upon the venous return flow from the periphery.

6. All the blood does not circulate continuously. Much of it moves sluggishly in certain "depots" the chief of which are the spleen, liver, splanchnic area, the subpapillary capillary skin plexus.

7. The last two mentioned depots can hold out a large quantity of blood. It has been shown that the blood volume in the recumbent basal state is 800—1200 c.c. greater than that in the sitting position with the feet on the floor.

In infections, fever causes increased metabolism, increased blood flow, dilatation of capillaries. If the fever is high as the result of severe toxemia the blood collects in the depots. There is therefore decreased blood volume in circulation and lowered systolic blood pressure. The heart rate speeds up, the *ventricles become smaller*. Often this is sufficient for compensation. The further stage is further lowered blood volume, further diminution of venous return, further drop in blood pressure. The heart now has speeded up but has very little blood to throw into the circulation, the coronary circulation is decreased, the oxygen necessary for heart contraction is lessened, the heart wears itself out against no resistance and is poisoned not only by the toxemia of the infection but by the accumulation of lactic acid to which the heart is peculiarly sensitive. A common misconception is that under such circumstances the heart is dilated. On the contrary there is not sufficient venous return flow to stretch the heart in diastole and the heart is actually smaller than it normally should be.

Under such conditions what should logically be done? Certainly every attempt should be made to force the blood out of the "depots" and increase the venous return to the right ventricle. Is the heart weak? No, it is not. It is strong enough if it has blood to pump and nutrition for its work. From what we know of the action of digitalis, can any amount of digitalis remedy the conditions which are causing the heart to "fail"? Obviously not. The heart is not failing, the peripheral circulation has collapsed. Then why give digitalis? The answer is custom, habit, and fear of change. Something is done, the doctor and the family are satisfied.

If what has been so briefly outlined is true, then there is circulatory peripheral failure, not heart failure in the strict sense, and as digitalis cannot increase the venous return to the heart, the administration of digitalis is useless. In fact some maintain that it is harmful; as the drug, if it really has any effect upon heart contraction, is producing more violent contractions against less and less blood and therefore assists in wearing down the heart.

The answer then to the question in the title is, Digitalis is not a heart stimulant except under certain conditions mentioned above. It is not a heart stimulant to the so-called failing heart in infections.

At some future date the measures to combat circulatory failure will be considered. L. M. W.

THE PRESIDENT'S PAGE

Reginald H. Jackson

KNOW THY OPPORTUNITY—*Pittacus.*

HOW often it is true of members of our profession that in making an investment the more distant the project the more alluring the prospect and the more prone we are to overlook the treasure close at hand. The approaching meeting of the American Medical Association at Milwaukee unquestionably means to all physicians in Wisconsin a nearby investment opportunity the like of which will not be offered again in many, many years.

It is fifty years since Wisconsin has been favored by a meeting of the A. M. A. This parent organization of our profession with a membership of over 100,000 is not only keenly interested in the scientific advancement of its members but it is also the fountain head of authority in the field of socio-medical problems. Fellows from every state in the union and distinguished guests from foreign lands will make heavy sacrifices in time and money to attend this meeting. Every physician in Wisconsin who can possibly do so should plan now to attend one or more days of the sessions. In failing to do this he will

1st. Miss a unique opportunity to profit in a personal way from the addresses and discussions which will be presented by the masters of our profession in every field of medical endeavor.

2nd. He will lessen by just so much the favorable impression which the officials of your own State Society so much desire that all visitors should carry home with them as to the genial and friendly spirit of the medical profession of Wisconsin.

Let us exert ourselves to the utmost that this joint Milwaukee meeting of the A. M. A. and our State Society may be an outstanding one not only for its scientific merit but also for its hospitality. While there never has been a time when so many physicians were as "financially strapped" as at present, it is also true that too many of us are drifting into a tired, depressed, worried, anxious and semi-despondent habit of mind. The thought of making the effort to attend this meeting may not appeal to such but in reality they are the ones who are most in need of the exhilarating tonic effect of the complete change in environment and thought which such attendance will insure.

I heartily recommend to them and to the membership in general the following prescription:

For:

Mr. Every Member

℞ ATTENDANCE AT A. M. A. MEETING JUNE 12–16—*one to four days.*

THE GOOD WIFE—*the whole part to attend the social functions and Ladies Auxiliary meetings.*

THE THING THAT MADE MILWAUKEE FAMOUS—*q. s. to make you feel better.*

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Sig. Leave all care behind or this treatment will be n. g.

N. B. TO BE AT ALL EFFICACIOUS AT LEAST 1,000 MEMBERS OF THE STATE MEDICAL SOCIETY OF WISCONSIN MUST TAKE THIS ADVICE.

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Racine	W. C. Roth, Racine	Susan Jones, Racine.
Richland	B. I. Pippin, Richland Center	G. Benson, Richland Center.
Rock	F. E. Brinckerhoff, Beloit	E. C. Hartman, Janesville.
Rusk	L. M. Lundmark, Ladysmith	M. L. Whalen, Bruce.
Sauk	Roger Cahoon, Baraboo	A. C. Edwards, Baraboo.
Shawano	O. F. Partridge, Mattoon	A. A. Cantwell, Shawano.
Sheboygan	A. W. Sieker, Plymouth	A. C. Radloff, Plymouth.
Trempealeau–Jackson–Buffalo	R. R. Richards, Blair	R. L. MacCornack, Whitehall.
Vernon	C. E. Lauder, Viroqua	P. H. Hansberry, Hillsboro.
Walworth	S. G. Meany, East Troy	H. J. Kenney, Delavan.
Washington–Ozaukee	O. J. Hurth, Cedarburg	P. M. Kauth, West Bend
Waukesha	Margaret Caldwell, Waukesha	J. F. Wilkinson, Oconomowoc.
Waupaca	R. K. Irvine, Manawa	F. J. Pfeifer, New London.
Winnebago	D. G. Hugo, Oshkosh	M. C. Haines, Oshkosh.
Wood	F. X. Pomainville, Wisconsin Rapids	W. G. Sexton, Marshfield.

SOCIETY PROCEEDINGS

BARRON-WASHBURN-SAWYER-BURNETT

A meeting of the Society was held at the Land o' Lakes hotel at Rice Lake on April 6th. Following dinner, Dr. F. J. Hirschboeck and Dr. M. G. Gillespie of the Duluth Clinic gave addresses.

L. P. Charles of Chetek, director of Barron County emergency relief, addressed the society on the medical aspects of poor relief.

At this meeting Dr. W. Rydell of Rice Lake was elected secretary of the Society.

BROWN-KEWAUNEE

The regular meeting of the Brown-Kewaunee County Medical Society was held at the Bellin Memorial Hospital, March 23rd, thirty members being present. A resolution was passed inviting the members of the Door County Medical Society to join the Brown-Kewaunee County Medical Society and that, in the event of acceptance, the name of the Society be changed to include the County of Door. A committee was appointed to confer with the Brown County poor committee with a view of arriving at a fair fee schedule for the care of county indigent cases.

The very excellent scientific program which followed was furnished entirely by local members of the Society. This was a departure from the usual custom and proved unusually successful as evidenced by the deep interest and wide discussion aroused.

The program consisted of a talk on "Hyperacidity" by Dr. H. Hendrickson, Green Bay; "A Report of a Case of Hodgkin's Disease of the Spleen" by Dr. W. A. Killins, Green Bay; "Congenital Pyloric Stenosis" by Dr. Robert Cowles, Green Bay; and "Eugenics" by Dr. Wenzel Wochos of Kewaunee.

O. A. S.

CHIPPEWA

The April meeting of the Chippewa County Medical Society was held at the Hotel Northern on April 11th.

About thirty physicians were present from Chippewa and adjoining counties. The guest speaker for the evening was Dr. W. G. Sexton, Marshfield, who discussed "The Problems of Prostatic Obstructions." Dr. Sexton spoke to an audience of interested men and the discussion that followed showed that the newer methods of dealing with this painful condition are gaining in popularity as time and experience show their value.

Dr. W. H. Fortner of Bloomer talked upon the diagnosis, symptoms, and treatment of Vincent's Angina. He has found in an unusually large experience that Bismuth given intermuscularly acts specifically in the treatment of this disease.

An interesting discussion followed the talk.

The Chippewa County Medical Society will try to develop its local talent in the presentation of its programs, believing that the man in the local field should be able to interest the members of the society in the topics so frequently brought home to them in the daily practice. M. F.

DANE

Members of the Dane County Medical Society met on April 11th at Turner Hall, Madison.

Dr. R. M. Waters, Madison, spoke on "Choice of an Anaesthetic." Discussion was led by Dr. Maurice Seever, Madison.

FOND DU LAC

The meeting of the Fond du Lac County Medical Society, was held at the Hotel Retlaw, April 12th, 1933.

Dr. M. G. Peterman of Milwaukee spoke on "Convulsions in Childhood". J. C. D.

KENOSHA

Dr. H. O. Foerster, Milwaukee, was the guest speaker at a meeting of the Kenosha County Medical Society held on March 28th in the Chamber of Commerce rooms, Kenosha. The subject of his talk was "The Symptoms and Treatment of Acute Skin Disorders."

MILWAUKEE

Over two hundred members attended the meeting of The Medical Society of Milwaukee County which was held at the Milwaukee Athletic Club on April 14th.

The following program was presented:

"Neuro-syphilis"—W. F. Lorenz, M. D., Madison.

"Newer Problems in Immunity to Disease"—J. P. Simonds, M. D., professor of pathology, Northwestern University Medical School.

Dr. Lorenz's paper was discussed by Drs. E. A. Fletcher and A. T. Holbrook.

Following the scientific program, the meeting adjourned to the social hour.

OUTAGAMIE

The Outagamie County Medical Society met on Tuesday evening, March 28th, at the Conway Hotel, Appleton.

Dr. H. C. Hesseltine of the department of obstetrics and gynecology, University of Chicago, was the speaker of the evening.

ROCK

The March meeting of the Rock County Medical Society was held in the Hotel Hilton, Beloit, on the 25th. Dr. David S. Hillis of Northwestern University Medical School gave a talk on "Obstetrics."

SAUK

The Sauk County Medical Society held a meeting on March 23rd in the Warren Hotel at Baraboo.

Following the dinner, Mr. George Crownhart, Secretary, gave an address on "Medical Economics."

WINNEBAGO

The March meeting of the Winnebago County Medical Society was held on March 30th at the home of Dr. Wilbur N. Linn, Oshkosh, in commemoration of the 25th anniversary of Dr. Linn in the practice of medicine in Oshkosh.

Dr. J. T. Ozanne of Oshkosh read a paper entitled "Reminiscences."

Dr. John E. Guy of Milwaukee spoke on "The Role of the General Practitioner in the Treatment of Asthma."

MILWAUKEE ACADEMY OF MEDICINE

At the meeting of the Milwaukee Academy of Medicine held on March 28th, the following program was presented:

"Orbital Abscess" by Dr. L. H. Guerin.

"Malignancy of the Tonsil" (A Case Report) by Dr. Elsa B. Edelman.

At the April meeting, Dr. L. M. Warfield gave an address on "Treatment of Circulatory Collapse in Pneumonia," and Dr. Walter M. Simpson of Dayton, Ohio, read a paper on "Undulant Fever." Dr. Simpson was awarded the American Medical Association gold medal in 1928 for his researches in tularemia. He was also the first recipient of the Ward Burdick research award, American Society for Clinical Pathologists, 1929, for researches in tularemia and undulant fever.

MILWAUKEE HOSPITAL INTERNS

The April meeting of the Milwaukee Hospital Interns' Association was held at the home of Dr. Roland H. Frederick, 1038 S. 77th St., West Allis, on April 19th. Dr. Hans Hefke was the principal speaker. His subject was "Germany—Yesterday, Today, and Tomorrow."

MILWAUKEE OTO-OPHTHALMIC

At the meeting of the Milwaukee Oto-Ophthalmic Society, held at the University Club on April 25th, Dr. F. A. Figi, of The Mayo Clinic, was the guest speaker.

"Some Problems of Plastic Surgery From the Standpoint of the Oto-Laryngologists and Ophthalmologists" was the subject of Dr. Figi's address.

MILWAUKEE PEDIATRIC

The Milwaukee Pediatric Society held their thirty-seventh meeting at the Academy of Medicine, April 19, 1933. Dr. C. C. Schneider was the guest speaker and his subject was "Fractures in Children". Case reports were presented by Drs. H. B. Miner, B. J. Malnekoff, W. P. Zuercher, M. G. Peterman and R. P. Schowalter. President K. Kassowitz was in the chair. J. H. R.

THE WOMAN'S AUXILIARY

Mrs. Fred A. Nause, Jr., Sheboygan, *President*
Mrs. Eben J. Carey, Milwaukee, *President-elect*
Mrs. Walter Ford, Sheboygan, *Secretary*
Miss Ruth Buellesbach, Madison, *Executive Secretary*
Mrs. R. G. Arveson, Frederic, *Treasurer*
Mrs. James C. Sargent, Milwaukee, *Press and Publicity Chairman*
Mrs. James F. Percy, Los Angeles, Calif., *National President*
Mrs. Rock Sleyster, Wauwatosa, *National Convention Chairman*

National Convention, Milwaukee, June 1933

The President's Page

Dear Auxiliary Members and Doctors' Wives:

The Auxiliary convention is close at hand. Committees have been working tirelessly to make this the best convention the Auxiliary has ever had. The responsibility is not Milwaukee County's alone, although they must of necessity assume the greatest share of the work. Committee meetings in Milwaukee are an inspiration for nothing has been overlooked in planning for the entertainment and comfort of our guests. Even the children above six years of age are being provided for with story hours, play-ground activities, etc. Many families no doubt will plan to have two trips in one, the World's Fair Century of Progress as well as our convention. It was with this in mind that the committee planned for the entertainment of the children. Every county auxiliary in Wisconsin, therefore, should give Milwaukee county all the cooperation they can to make this convention a success.

The final convention program appears in this issue of the Journal. The program offers such a wide variety of entertainment as well as a splendid opportunity to become bet-

ter acquainted with the Woman's Auxiliary, that everyone should find something of particular interest to them. This is a great occasion for Wisconsin, let us make the most of it.

Let me again call your attention to the fact that all women attending the convention, whether Auxiliary members or not, are invited to participate in the entire program. Registration will be on the seventh floor of the Pfister Hotel. Be sure to register so the hostess committees can be of service to you.

The State Medical Society is dispensing with their annual state meeting in September this year, so we are doing the same. We are having a separate meeting during the National Convention. Routine business and election of officers will be held at this time. Bring your suggestions, questions and problems so we can have friendly discussions and make this a worth while meeting.

To those of you who have attended these conventions before, nothing need be said, but to you who are attending for the first time, let me assure you that not only will you be richer in the knowledge you have gained but in the friendships you have made through these contacts.

MRS. FRED NAUSE, JR.

Milwaukee Invites You

When you come to Milwaukee in June to attend the annual convention of the Woman's Auxiliary to the American Medical Association you will find a store of pleasures awaiting you. First of all, the program as arranged by the local committees under the chairmanship of Mrs. Rock Sleyster is completely planned for your pleasure and entertainment, and secondly, the city of Milwaukee is such a friendly and hospitable metropolis that the combination will leave a lasting impression on your memory.

Milwaukee is situated on the western shore of Lake Michigan, the largest fresh water lake in the country. Its beautiful harbor is the deepest and one of the largest on the Great Lakes. Through the city three navigable rivers wind their way into the heart of the down-town district. The pioneers found the rivers and the lake to be important means of transportation but they never guessed the value they would be to the commerce and industry of the new-born city in days to come. Today Milwaukee ranks the twelfth largest city in the United States with a population of approximately 600,000.

You may be surprised to learn that, besides being a commercial city, Milwaukee is really a beautiful residential city. Its parks and playgrounds cover an area of more than 1500 acres. Scattered along the lake shore and the courses of the rivers and dotted picturesquely throughout the city they offer the comforts of beauty, recreation and rest to all who come to them.

Lake Park, the northeast edge of Milwaukee, is a fine expanse of woodland on Lake Michigan and its approach from the downtown district, along Lincoln Memorial Drive, is one of the most beautiful features of the city. The Drive is a wide, concrete boulevard extending for six miles along the lake shore, passing by the wild life lagoon, the Coast Guard Station, the Yacht Club, the Gun Club, and many bathing beaches, and then leading directly into Lake Park from which it continues on through one of the exclusive residential districts.

Washington Park, on the west side of the city, has as its feature the nationally known Washington Park Zoo. It is the largest municipally owned animal exhibit in the United States. It boasts of a unique Monkey Island where every year thousands of people watch the many different types of monkeys frolicking about, unhampered on this island. Another new and recently completed attraction is a barless bear den, constructed as a natural refuge, separated from the onlookers only by a very deep moat from which the bears cannot escape.

Mitchell Park on the south side of town is famous for its conservatory and the wonderful displays of chrysanthemums, orchids and other rare flowers. In addition to this there is a formal sunken garden most beautifully arranged and planned.

Be sure to avail yourself of the privileges which Milwaukee women will afford you to see these and many other lovely parks and

gardens and the surprisingly beautiful residential districts.

Down town you will find the hotels modern and clean, and convenient to all convention activities as well as to the shops and tea rooms. The New Pfister Hotel, ("new" because it has been remodeled recently) is an old and famous hostlery where many of our country's presidents have stayed while in Milwaukee. You will particularly enjoy the extremely valuable art collection on the mezzanine floor. This hotel, as you know, will be our Auxiliary headquarters.

There is another important but very different reason for your coming to Milwaukee this year. Chicago, with its great World's Fair, "The Century of Progress", is only eighty miles away or two short hours by bus, train or electric car. When ever before was it possible to make two such interesting and advantageous trips in one?

Not only the doctors and doctors' wives but all of Milwaukee will welcome you most heartily when you come in June. Already the most minute plans for your pleasures and comforts are being made, and if you have any suggestions as to some particular service which you think our guests would appreciate, just drop a note with the suggestion to the General Convention Chairman, Mrs. Rock Sleyster, 1220 Dewey Ave., Wauwatosa, Wisconsin, and she will see that your wish is carried out if it is in any way possible.

Remember the Dates June 12 to 16 and begin now to tuck away the necessary dollars to make it possible for you to partake of the many benefits of the convention and of Milwaukee hospitality.

WOMAN'S AUXILIARY
to the
AMERICAN MEDICAL ASSOCIATION
Eleventh Annual Meeting

Milwaukee

June 12–16, 1933

Headquarters: Hotel Pfister, Milwaukee

FINAL PROGRAM

Monday, June 12, 1933

10:00 A. M. Pre-Convention Board Meeting—Hotel Pfister. Mrs. James F. Percy, Presiding.

12:30 P. M. Luncheon at College Women's Club in Honor of Past Presidents, followed by visit to American Medical Association Exhibits at Auditorium. Tickets $1.00.

2:30 P. M. Pre-Convention Board Meeting—College Women's Club. Mrs. James F. Percy, Presiding.

7:00 P. M. Dinner for National Board, Delegates, and wives of Officers and Delegates of the American Medical Association at Woman's Club of Wisconsin. Musical Program furnished by Artist Members of Auxiliary to Medical Society of Milwaukee County. Tickets $1.25.

Tuesday, June 13, 1933

9:00 A. M. General Meeting—Hotel Pfister. Mrs. James F. Percy, Presiding.

1:00 P. M. Luncheon and Bridge at the Wisconsin Club. Tickets $1.25.

2:30 P. M. Attractions available for those not wishing to play Bridge are Layton Art Gallery, Milwaukee Art Institute, Milwaukee Museum, Curative Work Shop and Vocational School.

or

Bus Trip to County Institutions, Milwaukee Children's Hospital Convalescent Home, and Washington Park Zoo.

8:00 P. M. Opening General Meeting of American Medical Association, Auditorium.

10:00 P. M. Informal Dance at Wisconsin Club. Courtesy of State Medical Society of Wisconsin. Hostesses: Woman's Auxiliary to the State Medical Society of Wisconsin.

On Tuesday evening, June 13th, following the general meeting of the A. M. A. at the Auditorium, Wisconsin will be the host to all A. M. A. members and their wives at a dance to be held at the Wisconsin Club. There will be dancing in the garden and in the ballroom and light refreshments will be served. Wisconsin people will be charged one dollar a couple to make it possible to have all "out of state" members as our guests that night. We hope that all Wisconsin members will plan to come and to feel that they are personally the hosts at the party and as such will help to see that the guests have a happy evening. Your prompt response to the ticket sale as it comes to you through your own County president, and an early report to the dance committee chairman, Mrs. James C. Sargent, 2924 N. Stowell Ave., Milwaukee, on the number of couples from each County, will be greatly appreciated by the dance committee.

Wednesday, June 14, 1933

9:00 A. M. General Meeting and Election of Officers—Hotel Pfister. Mrs. James F. Percy, Presiding.

12:30 P. M. Auxiliary Luncheon. Hotel Pfister. Mrs. James H. Hackett, toastmistress. Guests and Speakers from the American Medical Association. Tickets $1.00.

4:00 P. M. Teas in Private Residences.

8:30 P. M. Light Opera. International House Opera Company.

Thursday, June 15, 1933

9:00 A. M. Post-Convention Board Meeting—Hotel Pfister.

10:00 A. M. General Meeting. Hotel Pfister. Mrs. James Blake, Presiding.

11:00 A. M. General Round Table Conference.

12:00 Noon Trip to Oconomowoc Lake District. Luncheon 12:30 P. M., Carnation Milk Plant, Oconomowoc, Wisconsin. Transportation and Luncheon Courtesy of Carnation Milk Company.

or

12:30 P. M. Buffet Luncheon, Hotel Pfister. Tickets 75c.

2:00 P. M. Sight Seeing Tour of Milwaukee.

6:30 P. M. "Bring Your Husband" Dinner. Hotel Pfister. International-House-Cabaret. Tickets $1.50.

9:00 P. M. President's Reception and Ball, Schroeder Hotel. Hosts: The American Medical Association.

Friday, June 16, 1933

10:00 A. M. Golf Tournament.

All Trips Start from Hotel Pfister.

MRS. ROCK SLEYSTER,
General Chairman,
Wauwatosa, Wisconsin.

All Women attending the annual session of the American Medical Association are invited to participate in this program whether they are members of the Woman's Auxiliary or not.

REPORTS OF COUNTY AUXILIARIES

Manitowoc County

Members of the new Auxiliary to the Manitowoc County Medical Society were guests at a luncheon given by the officers, Mrs. M. P. Andrews, president, Mrs. A. P. Zlatnik, Two Rivers, president-elect, and Mrs. J. W. Steckbauer, secretary-treasurer, at the Andrews' home on N. Fifth street, Thursday, March 23rd. Mrs. Fred A. Nause, Sheboygan, president of the State Auxiliary, was guest of honor.

On April fifth, thirteen members of the Manitowoc County Auxiliary joined the members of the Sheboygan County Auxiliary at its luncheon at the Elsie Timm tea room, Sheboygan.

Milwaukee County

Approximately 125 members attended the April meeting of the Auxiliary to the Medical Society of Milwaukee County. The membership committee reported nine new members accepted into the Auxiliary. Most of the activities of the Auxiliary are being directed toward the coming A. M. A. Convention in June and incomplete lists of all committees have been announced and they are making every effort to make the convention a success.

Dr. W. W. Bauer, head of the Bureau of Instruction on Public Health of the A. M. A., gave a most interesting and clarifying talk on "Popular Beliefs That Are Not So".

Dr. F. E. Drew spoke on the intensive program of immunization sponsored by the Medical Society of Milwaukee County. This program attempts to arouse the medical profession to the problem of immunizing school children by conducting Saturday morning clinics at various hospitals. This is a step forward in preventing the socialization of medicine. Dr. Drew asked the cooperation of the Auxiliary in advertising the campaign and in transporting the children to and from the various clinics. The Auxiliary voted to organize a motor squad for this purpose and expressed its joy in being able to be of some concrete help to the Society.

Portage County

The Auxiliary to the Portage County Medical Society meets monthly at the homes of its members. In March they were addressed by Miss Mae Roach of the State Teachers' College on "Hygiene in the Rural Schools of Portage County". In April the guest speaker was Miss Marion Bannach who gave an informal talk on "Hygeia". After the programs the members spend the remainder of the afternoon sewing for the Red Cross.

Rock County

The Rock County Auxiliary held a dinner meeting at the Spanish Tavern, Beloit, on March 28th, with twenty-six members present. The ladies were addressed by Dr. Jessie Allen. Her topic was "Indian Public Health Service in Wisconsin".

The Auxiliary has as its particular philanthropic project,—work for "Pinehurst", the Rock County Sanatorium. They have collected bulbs and shrubs for the grounds, and books and magazines for the patients. It was voted at this meeting to raise funds to buy a portable piano which can be moved from floor to floor and thus furnish music for patients too ill to leave their beds. It was voted also to collect small change to provide postage for patients who need this help.

The Health Essay Contest has one hundred entrants in Rock County, and the final awards will be broadcast over the local radio station WCLO.

The April meeting was held in Janesville.

Sheboygan County

At the April luncheon meeting of the Auxiliary to the Sheboygan County Medical Society, Dr. G. J. Hildebrand gave a very interesting and instructive talk on "Disease Prevention". The Auxiliary was particularly happy to have as their guests thirteen members of the newly organized but already active Auxiliary to the Manitowoc County Medical Society.

WAUKESHA COUNTY AUXILIARY ORGANIZED

In accordance with the wishes of the Waukesha County Medical Society and following an invitation from Dr. J. F. Wilkinson, Secretary of the County Society, a group of ladies met at the Avalon Hotel, Waukesha, on Wednesday, April the fifth, at 3:30 P. M.

The following ladies were present: Mrs. Herbert T. Barnes, Delafield; Mrs. Hans Schneider, Dousman; Mrs. Fred L. Grover, Hartland; Misses Helen Wilkinson, Elizabeth Graham, Oconomowoc; Mesdames James C. Hassall, Henry A. Peters, John D. Wilkinson, Walter S. Wing, Oconomowoc; Mesdames Richard E. Davies, William H. Oatway, George E. Peterson, U. J. Tibbitts, Martin J. Werra, C. A. Wood, Waukesha; Mrs. E. J. Carey, Milwaukee, President-Elect, State Auxiliary; Mrs. James C. Sargent, Milwaukee, Vice-Chairman, National Auxiliary Convention, and Miss Ruth Buellesbach, Madison.

While the members of the Waukesha County Medical Society held their meeting, the ladies discussed the question of organizing an Auxiliary to the County Medical Society, and the ways and means of making it a helpful and functioning organization.

Mrs. E. J. Carey gave a most interesting report of the history of the Woman's Auxiliary, its aims and purposes. Mrs. James C. Sargent and Miss Ruth Buellesbach each presented a short address.

A unanimous ballot was cast for the following officers: Mrs. Henry G. Nixon, Hartland, president; Mrs. James C. Hassall, Oconomowoc, president-elect; and Mrs. John D. Wilkinson, Oconomowoc, secretary-treasurer.

The question of an appropriate time for the next meeting of the Woman's Auxiliary to the Waukesha County Medical Society was discussed. The members were of the opinion that a meeting should be held in the near future. The president-elect extended a cordial invitation to the members to meet at the Oconomowoc Health Resort on Wednesday afternoon, April 19th.

Following the meeting the members of the Auxiliary joined the members of the County Medical Society at a dinner at the Avalon Hotel, Waukesha.

HEALTH ESSAY CONTEST

The Health Essay Contest has drawn to a close and essays are now in the hands of local committees who will send the three best papers to the State Medical Society, 119 E. Washington Avenue, Madison,—to be judged by Dr. Reginald Jackson, President, State Medical Society; Dr. C. A. Harper, State Health Officer, and Mr. George Crownhart, Secretary, State Medical Society. Awards will be made before the close of the school year.

Judging from the papers received, we feel that the essayists have a splendid grasp of the subject matter. Rock County and Milwaukee County auxiliaries report that arrangements have been made to broadcast their first three high essays over Stations WCLO and WTMJ respectively.

Announcement of the winners of each county auxiliary as well as of the State Auxiliary will be made next month.

We thank all who in any way participated.

NEWS ITEMS AND PERSONALS

Dr. C. A. Harper, Madison, on April first started his thirtieth year as State Health Officer.

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The next meeting and examinations by the Wisconsin State Board of Examiners in the Basic Sciences will be held on June 17, 1933, eight until five, at the Hotel Pfister, Milwaukee. Application blanks may be obtained by writing the Secretary, Prof. Robert N. Bauer, 3414 W. Wisconsin Ave., Milwaukee.

The next regular examination and meeting of the State Board of Medical Examiners will be held at the Hotel Schroeder, Milwaukee, on Tuesday, Wednesday, and Thursday, June 27, 28, 29th.

Dr. A. L. Millard, formerly of Appleton, is now associated with the staff of the Marshfield Clinic as a specialist in pediatrics and obstetrics.

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Dr. and Mrs. Reginald Jackson and son, Reginald, Jr., enjoyed a vacation in Bermuda in April.

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Mrs. William Gunther, 67, wife of Dr. William Gunther of Sheboygan died at her home April 5th. She had lived in Sheboygan all her life. Besides her husband, she is survived by two sons and one daughter, Drs. O. T. Gunther and T. J. Gunther and Mrs. Robert Zaegel, all of Sheboygan.

Dr. J. Newton Sisk, Madison, was elected president of the village of Shorewood Hills at the spring election and Dr. William J. Bleckwenn, was elected trustee.

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The State Medical Society broadcasts on Tuesday, Wednesday and Thursday morning at 10:45 over the two state stations WHA Madison, and WLBL, Stevens Point. They are delivered by Miss Ruth Buellesbach, R. N. The subjects for April were as follows:

April 4—Plant A Garden.
April 5—What is Acidosis?
April 6—How Safe is the Home?
April 11—Facial Eruptions.
April 12—Unusual Accidents.
April 13—Feeding and Sleeping Habits of the Infant.
April 18—The Bottle Fed Baby.
April 19—Head Noises.
April 20—The Unseen World.
April 25—Cancer, Its Cure and Prevention.
April 26—Flat Feet.
April 27—Care of the Feet.

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Dr. William M. Sonnenberg of Sheboygan was elected mayor of that city at the spring election, defeating the present incumbent by the narrow margin of 190 votes.

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Dr. Oscar J. Hurth of Cedarburg, Dr. Wm. C. Becker of Watertown, Dr. Gilbert E. Seaman, Milwaukee, and Dr. Arthur W. Rogers, Oconomowoc, visited the offices of the State Medical Society in April.

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Dr. and Mrs. W. S. Middleton of Madison left for San Francisco early in April and from there sailed on the S. S. Marposa for Honolulu for a visit.

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Dr. R. C. Meyer of Plymouth spoke before the meeting of the Twelfth District Nurses' Association held at Rocky Knoll Sanatorium near Plymouth on April first. Dr. Meyer discussed and demonstrated the pneumothorax treatment in tuberculosis.

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Dr. William Snow Miller, emeritus professor of anatomy, University of Wisconsin, was the guest of honor at a banquet in the Memorial Union on April 5th in celebration of his 75th birthday. The dinner was sponsored by Phi Beta Pi, medical fraternity.

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Dr. H. E. Kasten of Beloit was elected president of the Beloit Diamond Ball Association at an organization meeting in April.

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"What Is A Healthy Child?" was the subject of a radio address by Dr. G. S. Metcalf of Janesville over WCLO for the Parent-Teachers' Association.

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An association of eye, ear, nose and throat specialists from Rockford, Beloit and Janesville, was formed at a dinner at the Beloit Municipal Hospital. Dr. H. A. Shearer of Beloit was chosen temporary chairman. It was decided to hold a meeting the third Tuesday of each month.

Dr. E. E. Neff, Madison, addressed the meeting on "Eye Conditions".

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Dr. M. N. Pitz of Neenah spoke on "Good Health" before a meeting of the Neenah Club.

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Dedication of the new St. Mary's Hospital of Racine was held on March 23rd. It was blessed by the Most Rev. Samuel A. Stritch, archbishop of Milwaukee. Open house was held on the following Sunday.

The new hospital contains six floors devoted to hospital use, with an additional attic story for storage purposes. There are 146 patients' rooms. Of these, 30 are private rooms and 109 are two-bed rooms, while the balance are wards.

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Dr. C. B. Richards, Waldo, was re-elected president of the village.

—△—

Dr. J. C. Elsom, Madison, was the speaker before a meeting of the Hi-Y club of the Stoughton High School. Dr. Elsom spoke on the fundamentals for good health.

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The midwestern section of the American Congress of Physical Therapy will meet at the Hotel Jefferson, Peoria, Illinois, for a one-day scientific program on Monday, May 15th. This immediately precedes the annual meeting of the Illinois State Medical Society which commences on May 16th.

Dr. J. C. Elsom, Madison, is one of the ten speakers on the program. The subject of his address will be "Types of Physical Exercise for the Prevention of Hernias in Men, and for Postoperative Treatment."

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The new Langlade County Memorial Hospital at Antigo was opened on April 5th. The building was completed early in 1931 but because of the economic situation, funds were not available to purchase the furniture and equipment, and it was not until early this year that the Sisters of the Religious Hospitallers of St. Joseph were induced to take over the management and operation of the new hospital.

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Dr. H. F. Ohswaldt of Oconto Falls celebrated his seventy-sixth birthday anniversary on April 18th and the completion of fifty-two years of service in that community.

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Dr. Walter Mauthe, a graduate of Marquette University School of Medicine in 1932, has taken over the practice of the late Dr. A. M. Leland of Whitewater.

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Dr. C. D. Boyd of Kaukauna gave an address before the Rotary Club at Hotel Northern on April

18th. Dr. Boyd spoke about the work of Riverview Sanatorium of which he is medical director.

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Dr. F. J. Pfeifer, New London, secretary of the Waupaca County Medical Society, was elected president of the New London Rotary Club.

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Dr. M. N. Pitz of Neenah was named president of Theda Clark hospital staff while Dr. J. P. Canavan, Neenah, was chosen vice-president and Dr. H. F. Beglinger, Oshkosh, secretary and treasurer.

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Dr. G. C. Waufle of Janesville returned home on April 14th from South Bend, Indiana, where he spent a month with his son, Dick, a student at Notre Dame University, who has been ill in a hospital there.

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Dr. Ralph L. Towne, formerly of Kansas City, Mo., and a graduate of Northwestern University Medical School in 1931, has opened an office at Nekoosa.

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"Child Welfare" was the subject of an address by Dr. Charlotte Calvert, Madison, before the League of Women Voters who met at the Hotel Retlaw, Fond du Lac, in April.

—△—

MILWAUKEE

Dr. A. S. Kult has announced the removal of his office to 1309 W. Vliet Street.

—△—

One hundred and twenty-five members of The Medical Society of Milwaukee County enrolled for the Postgraduate Course in Gynecology and Obstetrics, sponsored by the educational committee, which opened on March 20th.

Dr. Arthur Hale Curtis, professor of gynecology and obstetrics at the Northwestern University Medical School, was the guest speaker.

The next course to be sponsored by the educational committee is Newer Methods in Immunization and Vaccination. Clinics are to be held in various Milwaukee hospitals in connection with this course, where persons who are unable to pay for this service may bring their children to be immunized.

This course, which began on May 1st, is arousing much enthusiasm among society members, and will do much, it is felt, to further the work of private practitioners in preventive medicine. Dr. Frank E. Drew has been appointed director of the Course.

—△—

Dr. Herbert W. Powers was the guest speaker at the meeting of the Optimist Club on April third. His subject was "Experience Of Boys In Juvenile Court."

At this meeting, Dr. John O. Dieterle was elected first vice-president of the Optimists.

—△—

"Psychological Advice For The Child" was the topic of an address given by Dr. Samuel Plahner before the Lions Club at their meeting held on April second.

—△—

At the meeting of the Knights of the Round Table, held on April fourth, Dr. Ralph P. Sproule was named a trustee of that organization.

—△—

Dr. and Mrs. Rock Sleyster returned to Milwaukee on April first after several weeks' vacation in Beverly Hills, California.

—△—

Dr. T. L. Harrington addressed the students and faculty members of Marquette University High School on April 3rd on "Some Newer Things In Tuberculosis."

—△—

Millard Tufts, Jr., infant son of Dr. and Mrs. Millard Tufts, died at St. Mary's Hospital on April 7th. He is survived by his parents and a sister, Ellen Shaw Tufts.

—△—

Mrs. Margaret Seaman Levi, sister of Dr. Gilbert E. Seaman, died at the home of Dr. Seaman, 2720 E. Bradford Avenue, on March 27th, after a short illness.

—△—

Mr. Sylvester J. Dearholt, father of Dr. Hoyt E. Dearholt died at his home, 2562 N. Maryland Avenue, April 8th, at the age of eighty-nine years. He is survived by his wife, Mrs. Adelaide Mackey Dearholt, and his son.

—△—

A series of six lectures on the mental hygiene of unemployment were given in the Y. W. C. A. auditorium during the month of April, each lecture followed by discussion.

These lectures were conducted by Dr. George K. Pratt, assistant medical director of the National Committee on Mental Hygiene, of New York.

—△—

Dr. W. W. Bauer, director of the bureau of health and public instruction of the American Medical Association, addressed the Woman's Auxiliary of The Medical Society of Milwaukee County at their meeting held on April 7th, on the subject of "Popular Beliefs That Are Not So."

—△—

"Activities Of The Public Health Department In West Allis" was the subject of Dr. Charles S. Stern's

MARQUETTE BANQUET

Alumni of Marquette will have an alumni dinner in the Fern Room of the Hotel Pfister on Wednesday evening, June 14th, of the A. M. A. meeting week. Dr. Irwin Schulz, 2200 North Third St., Milwaukee, is in charge of the preliminary arrangements. The detailed program will follow in the June issue.

address to the West Allis Rotary Club at their meeting on March 27th.

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Dr. G. L. Bellis, superintendent of Muirdale Sanatorium, spoke on "Adanced Methods In Treatment Of Pulmonary Tuberculosis" at the meeting of the Whitefish Bay Club on March 23rd.

—△—

Miss S. Yoerg, newly appointed superintendent of the Milwaukee Children's Hospital, took up her duties on April 15th.

Miss Yoerg formerly was superintendent of the Children's Hospital of St. Paul, Minnesota.

—△—

The time and day of broadcasting the health talks sponsored by the State Board of Health and delivered by Mr. Theodore Wiprud, executive secretary of The Medical Society of Milwaukee County, have been changed from 4:15 to 4:30 P. M., on Friday afternoons to 5:45 to 5:50 P. M., Wednesday afternoons. This schedule will be in effect during May and part of June, when the broadcasts will be discontinued during the summer months.

—△—

Dr. E. L. Miloslavich, gave an illustrated address on the problems of "Crime And Criminals" before the Kenwood Council, No. 34, R. & S. M., at Kenwood Temple on March 16th.

—△—

Dr. Marcos Fernan-Nunez, director of the department of pathology at Marquette University Medical School, has been elected an honorary Fellow of the Royal Society of Tropical Medicine, London, England, in recognition of his having produced in 1925 the first successful immunization against a metazoan parasite, the Trichocephalus dispar, a nematode worm commonly found parasitic in humans. Dr. Fernan-Nunez introduced a new principle in immunity by injecting the ground-up eggs of the parasite into the experimental animal and producing immune bodies which prevented similar ova from hatching out into infective larvae when later ingested by a host.

Dr. Fernan-Nunez's work which the Royal Society of Tropical Medicine recognized was published in The Journal of the American Medical Association, March 19, 1927, under the title "A Contribution to Helminthic Therapy."

—△—

The Speakers' Bureau, sponsored by the Educational Committee of The Medical Society of Milwaukee County, was represented during the month of April by the following physicians:

Dr. M. G. Peterman addressed the Parent-Teacher Association of the Richards Street School on April 3rd on the subject of "Infantile Paralysis."

"Your Child And The School" was the subject of Dr. Samuel Plahner's talk to the Mothers' Club of the Ludington School on April 4th

At the meeting of the Woman's Club of the Lutheran Church of Wauwatosa on April 5th, Dr. L. M. Warfield was the guest speaker. Dr. Warfield's topic was "What You Should Know About Your Heart." He also addressed the Parent-Teacher Association of the Engleburg School at their meeting held on April 20th, on the same subject.

Dr. D. W. Roberts appeared before the Parent-Teacher Association of the Cumberland School on April 3rd, addressing them on "Keeping Mentally Fit." Dr. Roberts also delivered this address before the 4th and 5th Districts of the Wisconsin State Nurses Association on April 11th.

Dr. R. W. Blumenthal was the principal speaker at the meeting of the Ruth Guild of Nazareth Lutheran Church on April 13. Dr. Blumenthal spoke to this group on "Insuring Your Health."

"Patent Medicines" was the topic of Dr. J. C. Griffith's address to the Parent-Teacher Association of the School of Saints Peter and Paul, on April 18.

At the meeting of the Parent-Teacher Association of St. Roberts School, held on April 21st, the guest speaker was Dr. F. R. Janney, who spoke on "The Health of School Children."

"Mental Hygiene of Adolescence" was the subject of Dr. D. W. Roberts' address to the Parent-Teacher Association of the Trowbridge Street School on April 27th.

—△—

The Mental Hygiene Clinic, a new feature of the out-patient department of the Milwaukee Maternity and General Hospital, opened on April 15th. Dr. Samuel Plahner has been appointed director of the clinic.

On April 4th, Dr. Plahner addressed the staff members, the board of directors, and the nurses' training school of the Milwaukee Maternity and General Hospital on the subject of "Child Guidance."

—△—

Dr. Morris Fishbein, editor of the Journal of the American Medical Association, will be the guest speaker at the meeting of the Woman's Auxiliary to The Medical Society of Milwaukee County, at their meeting to be held on May 12th, at the Y. W. C. A. Dr. Fishbein's subject will be "Changes In The Practice Of Medicine."

—△—

Members of Phi Delta Epsilon will hold a luncheon, in honor of visiting alumni to the meetings of the American Medical Association, in the Gold Room of the Hotel Wisconsin on Wednesday, June 14th. Dr. D. J. Ansfield is chairman of the luncheon committee.

—△—

Mrs. Katherine A. Thompson, widow of the late Dr. Robert E. Thompson, and mother of Dr. Robert E. Thompson, Jr., died on April 10th, at the age of seventy-one years.

—△—

The Committee on Insurance of The Medical Society of Milwaukee County has completed its classified directory of physicians and surgeons of Milwaukee County able and willing to do compensation insurance work. This list has been printed and turned over to insurance companies for distribution among policyholders.

The course on newer methods of immunization and vaccination which opened officially on April 27th had a large enrollment.. Dr. Archibald Hoyne, superintendent of the Municipal Contagious Disease Hospital, Chicago, was the guest speaker at the meeting held in the auditorium of the Marquette University School of Medicine. Dr. Hoyne's subject was "Newer Methods of Immunization".

Dr. Frank E. Drew, Director of the Course, had been at work for several weeks interesting members in this phase of the Society's program,—preventive medicine for the private practitioner.

Clinics have been set up in the following hospitals which are cooperating in the Society's program: Columbia, Deaconess, Misericordia, Milwaukee, Milwaukee Children's Hospital, Milwaukee Maternity and General, Mount Sinai, St. Joseph's, St. Luke's, and St. Mary's.

—△—

The following health talks, sponsored by the State Board of Health and delivered by Mr. Theodore Wiprud, will be broadcast over the Milwaukee Journal Radio Station, WTMJ, during the month of May:

May 3—Diphtheria—A Preventable Disease.
May 10—Sleeplessness In Children.
May 17—Enjoying Poor Health.
May 25—Why Is A Child Always Hungry?
May 31—Vacation Health.

—△—

At the state convention of the Waukesha County Council for Child Welfare, held in Waukesha on April 21st, Dr. James C. Sargent, president of The Medical Society of Milwaukee County, was the guest speaker. He addressed the Council on the subject of "Shall Medicine Be Socialized?"

BIRTHS

A son to Dr. and Mrs. H. G. Schmidt, Milwaukee on March 13th.

A son to Dr. and Mrs. E. A. W. Habeck, Milwaukee on March 20th.

A son to Dr. and Mrs. H. S. Schumacher, Milwaukee, on March 21st.

A son to Dr. and Mrs. John O. Dieterle, Milwaukee, on April 5th.

ENGAGEMENTS

The engagement of Miss Joan Rolfs, daughter of Dr. and Mrs. Theodore H. Rolfs, to Dr. Walter Mauthe, son of Mr. and Mrs. Walter Mauthe, Milwaukee, was announced in April.

Dr. and Mrs. Arthur H. Cohn, Milwaukee, have announced the engagement of their daughter, Janet, to Dr. David H. Lando, Jr., son of Dr. and Mrs. David H. Lando, Milwaukee

DEATHS

Dr. J. G. Kiefer, Milwaukee, died suddenly on April 4th in the pharmacy which he operated at 401 W. Wells Street. He was seventy-one years of age.

Dr. Kiefer was a native Milwaukeean. His preliminary education was obtained in Milwaukee and at the College of Pharmacy of St. Louis. His medical training was received at the University Medical College of Kansas City, Missouri, from which he was graduated in 1889.

Dr. J. W. Buehler, Prairie du Sac, died on April 3rd. He had practiced for forty-five years in Prairie du Sac.

Dr. Buehler was born in the year 1847 and was a graduate of Bennett Medical College, Chicago, in 1886.

He is survived by three sons and one brother.

SOCIETY RECORDS

New Members

John Tasche, Jr., Sheboygan Clinic, Sheboygan.
A. C. Hahn, Watertown.
E. Henry Rettig, 1331 W. Vliet St., Milwaukee.
W. J. Winnemann, 324 E. Wisconsin Ave., Milwaukee.
H. P. Robinson, 4453 N. Oakland Ave., Milwaukee.
Martha Kohl, 508 W. Grand Ave., Eau Claire.
M. L. Whalen, Bruce.
W. E. Bargholtz, Reeseville.
G. F. Burpee, Edgerton.
Charles Bowen, Richland Center.
Norman G. Thomas, 520 So. Park St., Madison.
R. G. Edwards, Kewaskum.
F. R. Winslow, Baraboo.

» » » CORRESPONDENCE « « «

"FRIENDLY RELATIONS"

Wisconsin Pharmaceutical Association
Ralph W. Clark, Secretary
Madison

April 26, 1933.

Mr. J. G. Crownhart, Secretary,
Wisconsin Medical Association,
Madison, Wisconsin.

Dear Mr. Crownhart:

Late in April there appeared in the Milwaukee Sentinel a brief story written by William Brady, M. D., in which the writer said, among other things, that "If the Wisconsin Pharmaceutical Association has some grudge against the physicians . . . etc.". This statement on the part of Dr. Brady arises from the misinterpretation of a propaganda card sent out under the auspices of the Milwaukee Pharmaceutical Association by Herman L. Emmerich.

Mr. Emmerich made use of the historical fact that Dr. William Withering, in the latter part of

(Continued on page 352)

THE JOURNAL BOOK SHELF

BOOKS RECEIVED FOR REVIEW

Clinical Aspects of the Electrocardiogram. By Harold E. B. Pardee, M. D., assistant professor of clinical medicine, Cornell University Medical College; associate attending physician, New York Hospital; consulting cardiologist, Lying-in Hospital and Woman's Hospital, New York City. With 74 illustrations. Third edition revised. Price $5.50. Paul B. Hoeber, Inc., New York.

Practical Hematological Diagnosis. By O. H. Perry Pepper, M. D., professor of clinical medicine, University of Pennsylvania; assistant chief of the medical clinic, Hospital of the University of Pennsylvania and David L. Farley, M. D., physician to the Pennsylvania Hospital, Philadelphia; associate in medicine of the University of Pennsylvania. 562 pages illustrated. Cloth, $6.00 net. W. B. Saunders Company, Philadelphia and London. 1933.

Operative Surgery. Volume VII. By Warren Stone Bickham, M. D. and Phar. M. (Tulane), M. D. (Columbia), F. A. C. S. Former surgeon in charge of general surgery, Manhattan State Hospital, New York; former instructor in operative surgery, College of Physicians and Surgeons (Columbia); and Calvin Mason Smyth, Jr., B. S., M. D., F. A. C. S. Assistant professor of surgery, Graduate School of Medicine, University of Pennsylvania; surgeon-in-chief Methodist Episcopal Hospital. Cloth $10.00. Volume VII, including General Index to complete work, Volumes I—VII. 849 pages with 765 illustrations. W. B. Saunders Company, Philadelphia and London.

Light Therapy. By Frank Hammond Krusen, M. D., director of the Department of Physical Medicine, Temple University School of Medicine, Philadelphia. Price $3.50. Paul B. Hoeber, Inc., New York.

American and Canadian Hospitals. A reference book giving historical, statistical and other information on the hospitals and allied institutions of the United States and Possessions, and the Dominion of Canada. Edited by James Clark Fifield with the cooperation of the American Hospital Association. Price $10.00. Midwest Publishers Company, Minneapolis, Minn.

Clinical Physiology of the Eye. By Francis Heed Adler, M. A., M. D., F. A. C. S., instructor in physiology and ophthalmology, Medical School, University of Pennsylvania; assistant surgeon, Wills Hospital. Price $5.00. The Macmillan Company, 60 Fifth Avenue, New York.

Obstetrics and Gynecology. By John L. Rothrock, A. B., M. D., F. A. C. S., formerly associate professor of obstetrics and gynecology, University of Minnesota; former member of the Miller Clinic and chief of the obstetrical and gynecological services of The Charles T. Miller Hospital and The Amherst H. Wilder Dispensary, St. Paul, Minn. Price $3.00. Paul B. Hoeber, Inc., 76 Fifth Avenue, New York, N. Y.

Annals of Roentgenology. By James T. Case, M. D., professor of roentgenology, Northwestern University Medical School, Chicago. Volume fourteen. Net $10. Paul B. Hoeber, Inc., 76 Fifth Ave., New York, N. Y.

Peripheral Nerve Injuries. By Lewis J. Pollock, M. D., professor of nervous and mental diseases, Northwestern University; attending neurologist, Passavant Memorial, Michael Reese and Wesley Memorial Hospitals, Chicago, and Loyal Davis, M. D., professor of surgery, Northwestern University; attending neurological surgeon, Passavant Memorial, Michael Reese and Wesley Memorial Hospitals, Chicago. With 312 illustrations. Price $10.00. Paul B. Hoeber, Inc., New York.

BOOK REVIEWS

Any scientific publication reviewed in this column may be obtained for inspection. Orders for such inspection should be directed to the Medical Library Service, 424 N. Charter Street, Madison, Wis.

Obstetrics and Gynecology. By John L. Rothrock, A. B., M. D., F. A. C. S., formerly associate professor of obstetrics and gynecology, University of Minnesota; former member of the Miller Clinic and chief of the obstetrical and gynecological services of the Charles T. Miller Hospital and the Amherst H. Wilder Dispensary, St. Paul, Minn. Price $3.00. Paul B. Hoeber, Inc., 76 Fifth Avenue, New York, New York.

This monograph is a presentation of the author's experiences in ten years of the private practice of obstetrics and gynecology and is based upon the personal management of 1750 obstetrical and 1345 gynecological patients.

The book contains no tiresome repetition of case histories and tables, only those cases of unusual interest being reported in detail. The subject matter is considered under a number of logical chapter headings, and each is accompanied by a concise discussion of the modes of treatment and the results obtained.

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General, Intensive or Special Courses Tuberculosis, Fractures and Traumatic Surgery, Roentgenology, Dermatology and Syphilis. Ophthalmology, Ear, Nose and Throat, Anatomy, Pathology, Nervous and Mental Diseases.

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MEETING THE PROBLEM OF

MALNUTRITION

—especially in children who dislike milk

While malnutrition in children may be due to premature birth, to some constitutional debility or the development of some serious disease, the great majority of cases are due to improper or faulty diet.

Insufficient milk is by far the most serious failing in children's diets. This is due, no doubt, to the fact that so many youngsters dislike milk and refuse to drink it. More and more physicians are meeting this problem by prescribing Cocomalt — which is as alluring as chocolate soda to children.

Prepared as directed, Cocomalt adds 110 extra calories to a cup or glass of milk—increasing the protein content 45%, the carbohydrate content 184%, the mineral content (calcium and phosphorus) 48%. It is rich in Vitamin D, containing no less than 30 Steenbock (300 ADMA) units of Vitamin D per ounce—the amount used to make one cup or glass.

This rich Vitamin D content, combined with the *extra* calcium and phosphorus which Cocomalt provides, aids substantially in the development of strong bones and teeth.

Cocomalt comes in powder form only—at grocers and drug stores—in ½-lb. and 1-lb. cans. Also in 5-lb. cans for hospital use, at a special price. R. B. Davis Co., Hoboken, N. J.

ACCEPTED AMERICAN MEDICAL ASSN.

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Send your name and address for a trial-size can of Cocomalt, *free*.

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DELICIOUS HOT OR COLD

Cocomalt is a scientific food concentrate of sucrose, skim milk, selected cocoa, barley malt extract, flavoring and added Sunshine Vitamin D.

ADDS 70% MORE FOOD-ENERGY NOURISHMENT TO MILK

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Address.....

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The author is to be congratulated upon his clinical conservatism, and the wisdom of this is readily seen in his results. The volume is of value especially in that it presents graphically the differences encountered in private practice as compared with practice in public hospitals. Any practitioner of obstetrics and gynecology will be well repaid by reading this book. J. W. H.

Common Skin Diseases. By A. C. Roxburgh, M. D., F. A. C. P., London. Physician in charge of the skin department and lecturer on Diseases of the Skin, St. Bartholomew's Hospital; physician and lecturer, St. John's Hospital for Diseases of the Skin; Editor of the British Journal of Dermatology and Syphilia. 8 plates and 110 illustrations in the text. H. K. Lewis & Co. Ltd., 136 Gower St., W. C. 1, London, England.

This small book is one of a general practice series published by the Lewis Company and is designed to give the general practitioner useful, concise descriptions of the more common of the diseases of the skin from the point of view of diagnosis and treatment. Following a short chapter on general etiology and pathology, there is a chapter on the signs, symptoms and general diagnosis which is refreshingly original and well written. An alphabetically arranged index of preliminary diagnosis in the front of the book is to be used in connection with this chapter and should be of great value. Chapter three on general treatment is concise, quite comprehensive and particularly worthwhile because the author has presented the material in such a matter of fact, common sense fashion. The balance of the book is made up of sixteen chapters on diseases due to physical causes, chemical causes, drugs, animal parasites, vegetable parasites, filterable viruses, syphilis, obstruction of vessels, the neurodermatoses, toxic eruptions, eczema, psoriasis, lichen planus, diseases of the hair and nails, diseases of the sebaceous and sweat glands and tumors. The descriptions are all well written and the material is well arranged as are the 110 illustrations and eight color plates. The volume should appeal to the general practitioner because it gives him only the information he is most likely to need in his routine work and does not take up discussions of those phases of cutaneous medicine which are naturally found in larger text books. R. L. McI.

The New Physiology and Anatomy. By Esther M. Greisheimer, B. S. (in Education), M. A., Ph. D., M. D. Associate Professor of Physiology, University of Minnesota, Minneapolis. 358 illustrations. Price $3.00. J. B. Lippincott Co., Philadelphia.

This book has been prepared for nurses and other non-medical students of anatomy and physiology. The subtitle "The new" is deserved since the book is no mere compilation from books of similar purpose but is original in design and execution and the illustrations in the main are new. Structure and function are considered in alternate chapters in a way to be of value not only to student nurses but to medical students and to practitioners interested in newer ideas of structure relative to function. Some abnormalities of structure and function are described as well as normal conditions. The book is clearly written but contains so much condensed information as to be likely in places to be difficult for the beginner unless in a class in charge of an experienced teacher. In the chapter on the skeleton a good picture is given of a pair of microcephalic twins and another one of a rachitic femur, but no illustration is given of a typical diarthrodial joint in section. There are, however, good x-ray illustrations of the chief joints and muscle action is illustrated by photographs of living models. C. R. B.

Chronic Arthritis and Fibrositis: Diagnosis and Treatment, by Bernard Langdon Wyatt, M. D. William Wood & Co., Baltimore, Maryland.

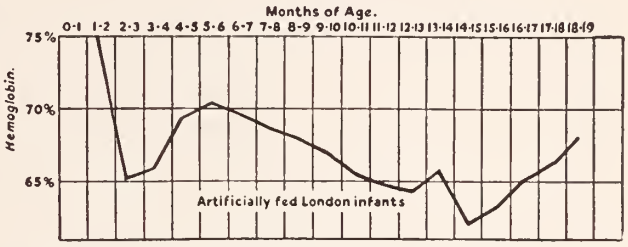
As the title implies attention is directed in this work primarily to diagnosis and treatment of the arthritides. Although the author devotes over half of the book to treatment he has been careful to simplify and clarify the various joint disorders into their pathological and clinical types. He recognizes the fact that no satisfactory classification can be developed until more is known of the etiology of the arthritides. His work should be especially valuable to the general practitioner and to the internist for throughout it reflects the viewpoint of one who is constantly confronted with the problems of the arthritic and the mistakes made from improper classification and inadequate or misdirected treatment. A note of optimism is struck for the patient with chronic joint disease and for the physician who has to handle it. The book is well edited and adequately but not profusely illustrated. K. L. P.

Clinical Diagnosis. By Neuton S. Stern, A. B., M. D. (Harvard) associate professor of medicine, University of Tennessee School of Medicine, Memphis. Price $3.50. The Macmillan Company, 60 Fifth Avenue, New York, New York.

As a result of the practical teaching of diagnosis, the author presents a book of concise form, excellent arrangement and extreme usefulness. The subject material is taken up in a manner somewhat different from the usual text books dealing with diagnosis. The book is divided into four main parts. Part I deals with the art of history taking and the general technique of physical examination. Part II covers the symptoms and signs of tuberculosis and heart diseases—these two being selected as illustrating practically all of the commoner pathological signs in the thorax. Part III deals with the arrangement of data and the method of reasoning used in arriving at a diagnosis. Part IV consists of an alphabetical list of symptoms and signs, together with a classification of the possible causes of them and a short discussion of the mechanism involved in their production. The book is simple and straight forward, yet comprehensive; it is logically arranged and should be of great use to medical students. R. V. V.

Preventing NUTRITIONAL ANEMIA *in Infants through a Normal Dietary Regimen*

NUTRITIONAL anemia was present in 45% of the breast-fed and 51% of the bottle-fed in a group of more than 1,000 infants studied by Mackay.[1] Although this anemia was of mild degree, *it was sufficient approximately to double the morbidity among the artificially fed.*



Hemoglobin level in the blood of infants of various ages. Note fall in hemoglobin, which is closely parallel to that of diminishing iron reserve in liver of average infant. Chart adapted from Mackay.[1]

Anemia Prevalent

Commenting on this work, the British Advisory Committee on Nutrition writes, "This form of anaemia is prevalent among infants, especially those living under conditions of city life, and is attributed to a deficiency of available iron and possibly also of copper. Its most important feature is susceptibility to infection, particularly a liability to colds, otorrhoea, bronchitis, and enteritis, and a tendency for infections to become chronic."[2]

Iron, incorporated in powdered milk, should be given as a routine to bottle-fed infants, according to the recommendations of this committee in a report to the Ministry of Health.

Milk Deficient in Iron

Stored in the liver of the full-term infant is a supply of iron and copper theoretically sufficient for the first six months of life. But actually the reserve is subject to wide variation, probably because of (except in the case of prematures and twins) variations in the iron content of the mother's diet during pregnancy. Hill, for example, says, "If the mother is anemic herself, or if she has eaten little iron-containing food during the last months of pregnancy, her offspring is born with an insufficient iron deposit. . . ."[3]

	IRON	COPPER
Cow's Milk, 14 oz.	1.01 mg.	0.166 mg.
Dextri-Maltose with Vitamin B, 1 oz.	2.40	0.570
	3.41	0.736
Daily Requirement*	3.11	"traces"

It is generally agreed that breast milk and particularly cow's milk are markedly deficient in iron and copper. But when 1 oz. of Dextri-Maltose with Vitamin B is added to 14 oz. cow's milk, properly diluted (as at 1 month), the above increase in iron and copper results.

FOR the same reason that it is desirable to reinforce the milk supply of the infant with iron and copper, the trend is toward the introduction of iron-rich solid foods at an early age. The iron content of many foods is variable, however. Leichsenring and Flor[4] found that children's diets planned to contain 5 and 8.5 mg. iron actually contained only 3.25 and 6.5 mg., respectively. Mead's Cereal, higher than most foods in iron and containing standardized amounts of this mineral together with copper, can be administered as early as the third month, when nutritional anemia begins to appear (see chart above). Clinical studies by Summerfeldt[5] show that Mead's Cereal is capable of increasing the hemoglobin percentage of growing children.

	IRON	COPPER
Cow's Milk, 20 oz.	1.44 mg.	0.24 mg.
Dextri-Maltose with Vitamin B, 1½ oz.	3.60	0.855
Mead's Cereal (dry), ¼ oz.	1.70	0.09
	6.74	1.185
Daily Requirement*	4.18	"traces"

When ¼ oz. of Mead's Cereal is fed to the 3-months-old infant receiving 20 oz. cow's milk and 1½ oz. Dextri-Maltose with Vitamin B, a significant increase in iron and copper takes place.

* The desirable iron intake for children according to Rose *et al*, is 0.76 mg. per 100 calories. Infant of 1 month (8¼ lb.) and infant of 3 months (11¼ lb.), both require 50 calories per lb.[6]

[1-6] *Bibliography on request.*

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The Medical Secretary. By Minnie Genevieve Morse, member of the Board of Registration, Association of Record Libraries of North America; author of "Case Records in Small Hospitals." Price $1.50. The Macmillan Company, New York, 1933.

"The Medical Secretary", written by Minnie Genevieve Morse who has had several years' experience as a medical secretary and as a member of a hospital staff, contains a vast amount of valuable information acquired through her experience in both positions. It is intended for the use of secretaries who have not had medical training and for secretaries who have had medical training and not practical secretarial experience. I believe it would be more valuable to the person who has had secretarial experience and is placed in a position in which she needs to become familiar with medical terminology, case reports, etc. L. L. B.

(See advertisement of this book on page 357)

Practical Hematological Diagnosis. By O. H. Perry Pepper, M. D., professor of clinical medicine, University of Pennsylvania; assistant chief of the medical clinic, Hospital of the University of Pennsylvania and David L. Farley, M. D., physician to the Pennsylvania Hospital, Philadelphia; associate in medicine of the University of Pennsylvania. 562 pages illustrated. Cloth $6.00 net. W. B. Saunders Company, Philadelphia and London. 1933.

The subject matter of this text is conveniently divided into three parts. In part one the authors discuss the components of the blood, methods of their study and the significance of results obtained. Of particular value in this chapter are the unusually clear presentations of the theories of coagulation, the blood groups and the hematological aspects of blood transfusion, though all the subject matters are very well handled. Part two deals with the diagnosis of diseases of the hematopoietic system. The chapter on the anemias is especially excellent for its classifications and it does much to clarify the existing confusion regarding the various types of anemia. In part three there is listed alphabetically a very wide range of diseases, approximately four hundred, other than those of the blood and describes and discusses the hematology of each. This chapter is unique and will prove very valuable for reference. Under the heading "Additional Hematological Terminology," there are defined various terms used in hematology, particularly those that tend to confuse. Finally, a very good bibliographic index is included separate from the complete index of subjects.

The authors state that this book has been written to lessen confusion in hematology by presenting the practical aspects in simple terms. Exactly that has been accomplished exceedingly well in this concise, clearly written book and as a result this work will be a fine addition to the working library of every practitioner and student of medicine. Not only will reading it clear up much about hematology that may be confusing but this book will furthermore be used over and over for ready reference. O. O. M.

Peripheral Nerve Injuries. By Lewis J. Pollock & Loyal Davis, 561 pages with 312 illustrations. Price $10.00. Paul B. Hoeber, Inc. New York.

This book presents the experience of the authors in a very large series of cases of injuries of the peripheral nerves. It consists of thirty-seven chapters. Two chapters are devoted to the cranial nerves. There is appended a bibliography containing nineteen hundred and fifty-eight references. This represents a complete survey of the literature to January 1930.

Chapter one concerns itself with the incidence of peripheral nerve injuries. Nine hundred and eighty-five cases are recorded. In chapters two to ten inclusive methods of examination are considered. This includes history, motion, objective and subjective disturbances of sensation, a very good description of causalgia and nerve overlap, vasomotor, trophic and secretory disturbances, electrical examination and reflexes. The next three chapters are given over to diagnosis, differential, recovery of function and signs of severe nerve injury. Chapter fourteen takes up the development and structure of the peripheral nervous system, then follows the pathology of peripheral nerve lesions and an account of nerve degeneration and regeneration. Chapters seventeen to twenty-one inclusive consider the actual surgical treatment of peripheral nerve injuries.

Each of the proposed methods of surgical repair is discussed and their relative value indicated. End to end suture is the method of choice. Nerve crossing and nerve transplants are the methods by which the next most successful results may be obtained. In regard to the former, it is necessary to evaluate the loss of function produced by the nerve sacrificed against the return of function which one desires to obtain. Nerve flaps, nerve implantation, tubular sutures and suture à distance are discarded. The section devoted to methods of securing end to end suture is worth reading.

The reviewer is pleased with the detailed postoperative treatment, also with chapter XXI on irreparable nerve lesions. These subjects are too often passed over hurriedly. The remainder of the book considers each nerve individually, as well as the brachial and lumbosacral plexuses.

The book is well written, authoritative and complete. It is recommended to those interested in the subject of nerve injuries. R. E. B.

Operative Surgery. Volume VII. By Warren Stone Bichma, M. D. and Pharm. M. (Tulane), M. D. (Columbia), F. A. C. S. Former surgeon in charge of general surgery, Manhattan State Hospital, New York; former instructor in operative surgery, College of Physicians and Surgeons (Columbia); and

PHYSICIANS' EXCHANGE

Advertisements for this column must be received by the 25th of the month preceding month of issue. A charge is made of $2.00 for the first appearance of copy occupying 1 inch or less of space and $1.00 for each succeeding insertion of the same copy. Kindly accompany copy with remittance to cover number of insertions desired. Advertisements from members of the State Medical Society will be accepted without charge. Such copy will be taken out after its second publication unless otherwise requested. Where numbers follow advertisements replies should be addressed care Wisconsin Medical Journal.

WANTED—Locum tenens for four to six weeks with privilege of purchasing at a small figure. A good location. Address No. 913 in care of the Journal. M

LOCUM TENENS AVAILABLE—Wisconsin licentiate now finishing postgraduate work in Chicago available as locum tenens on and after June first. Address No. 912 in care of the Journal. MJ

WANTED—To buy second hand, two arm electrical centrifuge, 110 volt. Address Drs. Jacobson, Crowe and Kenney, Delavan, Wis. MJJ

WANTED—Locum tenens work by capable physician; available for short or long period; Wisconsin license; references; will not compete. Address number 851 in care of the Journal.

FOR SALE—Fischer Diathermy. Address the Medical Society of Milwaukee County, Bankers Building, Milwaukee, or telephone Marquette 4131, Milwaukee.

FOR SALE—Will sell for cash the following: One Hanovia Alpine Sun Lamp, air cooled, ultraviolet, alternating current, cost $375 will sell for $200; One McIntosh Polysine Generator, giving sixteen modalities, $200, cost $475; One Fischer Superior Radiant therapeutic lamp, 1500 watts, $100, cost $150;—on account of owner's poor health these articles have been used very little and are therefore practically new; One Victor vibratory massage, $25, cost $75; One Betz metal electric light bath cabinet, $50, cost $300; one examining and massage table, $15, cost $65; Allison office table $20, cost $75; One Rochester case of electric diagnostic instruments and an Elsner cystoscope made by same firm for $25, cost $123; One Victor high frequency coil, No. 7, $25, cost $200; One Israel Carmody Suction apparatus for tonsil operations, $40, cost $95; One Victor lead x-ray protective screen, $25; Two Green and Bauer 7 in. gas x-ray tubes, $5 each; One Faught sphygmomanometer, $5; One Taylor freezing microtome, $2.50; One Fleischl's haemometer, $2.50, cost $24; one McIntosh No. 6, electric wall plate, style "A" and rectifier both for $20, cost $85; a few surgical instruments and splints at half price. Address No. 907 in care of the Journal. MJJ

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FOR SALE—$10,000 eye, ear, nose and throat practice in Wisconsin, also full equipment. Established twenty-seven years. City nearly 10,000. Excellent surrounding territory. Wonderful opportunity for man able to do all work. Address No. 902 in care of the Journal. FMA

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Calvin Mason Smith, Jr., B. S., M. D., F. A. C. S. Assistant professor of surgery, Graduate School of Medicine, University of Pennsylvania; surgeon-in-chief Methodist Episcopal Hospital. Cloth $10.00 Volume VII, including General Index to complete work, Volumes I–VII. 849 pages with 765 illustrations. W. B. Saunders Company, Philadelphia and London.

This completes the seven volumes of Operative Surgery. It is devoted almost entirely to the newest operations. The operative technique employed to correct a variety of surgical conditions is described in detail. These descriptions are greatly enhanced through excellent illustrations. This volume should serve as a very valuable reference for those who are actively engaged in surgical practice. It, however, is too advanced for the medical student.

The index to the seven volumes are included.

J. W. G.

WISCONSIN REGISTRATION

Registration for the annual meeting of the American Medical Association will open in the Auditorium on Monday, June 12th. Dr. C. C. Schneider, Milwaukee, Chairman of the Committee on Registration, asks the cooperation of all Wisconsin members that they register on Monday and Tuesday of the meeting week.

With such cooperation, the registration facilities will not be overtaxed at the time the majority of the out-of-state guests desire to present their credentials. It will be necessary for Fellows of the American Medical Association to present their Fellowship cards in the A. M. A. at the time of registration. Senior medical students, very recent graduates, and internes may secure guest badges if they will present credentials.

Plans Nearing Completion for Milwaukee Meeting of the American Medical Association

Plans are rapidly nearing completion for the annual meeting of the American Medical Association, which is to be held in Milwaukee in June.

Some of the highlights of the program as developed so far indicate that the meeting should be a most interesting one, and that all those attending will be well repaid.

Monday, June 12th, will be devoted to registration and the Annual Golf Tournament of the American Medical Golfing Association which is to be held at the Blue Mound Country Club. All those desiring to participate in the golf tournament should make arrangements early and communicate with Dr. J. W. Powers, 231 W. Wisconsin Avenue, chairman of the local Golf Committee.

The Registration Committee, of which Dr. Chester C. Schneider is chairman, urges that all Wisconsin men register on Monday, June 12th, if possible, as large numbers will be arriving from all parts of the country and early registration will relieve the congestion which will result if Wisconsin men wait until later to register.

On Monday evening, June 12th, there will be a dinner given by the State and County Medical Societies for the House of Delegates of the American Medical Association. This dinner will be held at the Wisconsin Club.

Scientific sessions open on Tuesday, June 13th. A detailed program of all scientific meetings will appear in the next issue of the Wisconsin Medical Journal.

The opening general session will be held on Tuesday evening in the Plankinton Hall of the Milwaukee Auditorium. At this meeting the President of the American Medical Association will address the meeting which will be open to both the medical profession and the laity.

Following this meeting an informal dance will be given for all visitors at the Wisconsin Club.

On Wednesday, June 14th, besides the scientific meetings, which will continue, alumni luncheons and dinners will be held,—most of them to be held at the Hotel Pfister at 6:30 P. M. The following alumni groups have arranged for dinners:

University of Ohio
University of Michigan
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Marquette University
Harvard–Yale
University of Maryland
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Reservation may be made for these dinners at the desk when registering for the meetings. All who wish to attend are urged to make their reservations early.

Scientific meetings continue on Thursday, and at six o'clock Thursday evening a bring-your-husband dinner will be given by the Woman's Auxiliary. Visiting physicians, regardless of whether they are accompanied by their wives, are urged to attend the bring-your-husband dinner.

On Thursday evening the President's Reception and Ball will be held at the Hotel Schroeder.

On Friday, June 16th, the annual meeting will be concluded with scientific sessions.

On each day during the meeting a session of the House of Delegates will be held, with the possible exception of Friday.

Watch for the detailed announcement of the program in the June issue of the JOURNAL, and plan now to be on hand in Milwaukee from June 12–16.

The Woman's Auxiliary has planned one of the most complete programs it has sponsored so far, and a great number of social activities have been included which will make the stay of physicians' wives attending the meeting of the American Medical Association most enjoyable. No pains have been spared to make this meeting one long to be remembered.

GOLF TOURNAMENT

The 19th tournament of the American Golf Association is to be held at the Blue Mound Country Club on Monday, June 12th, according to Dr. J. W. Powers, Chairman of the local committee. In addition to the program which follows there will be thirty to forty additional events during the course of the Monday play. Fees have been materially lowered to meet present conditions and the local committee is making every effort to arrange an enjoyable day to those attending the tournament. The program follows:

Fixed Competition

Morning and Afternoon

1. Ass'n Championship, 36 Holes gross, The "Will Walter" Trophy (perpetual). Donated and named by the A.M.G.A. in 1922.
2. Ass'n Handicap, 36 Holes net, The "Detroit" Trophy. Donated by the Detroit Hosts of 1916.
3. Choice Score Handicap Championship, 36 Holes net. The "St. Louis" Trophy (perpetual). Donated by the St. Louis Hosts of 1922.

Afternoon or Morning

4. Low Gross, 18 Hole Gross Championship (first 18 holes played), The "Golden State" Trophy (perpetual). Donated by the San Francisco Hosts of 1923.
5. Low Net. 18 Hole Handicap Championship, The "Ben Thomas" Trophy (perpetual). Donated by Philadelphia Hosts of 1931.
6. Maturity Event. Limited to Fellows over sixty years of age, The "Minneapolis" Trophy. Donated by the Minneapolis Hosts of 1928.
7. The "Oldguard" Championship, The "Wendell Phillips" Trophy, 18 Hole Handicap limited to competition of Past Presidents.
8. Other events and prizes to be announced at the first tee.

House of Delegates to Meet on Monday and Tuesday, June 12th and 13th, During A. M. A. Meeting Week

Meetings of the House of Delegates of the State Medical Society will be held in the Elizabethan Room in the Athletic Club, Milwaukee, on Monday and Tuesday afternoon, June 12th and 13th, according to plans just announced. The initial meeting will open at 2:30 o'clock Monday afternoon, June 12th, and at this meeting the House will receive all committee reports, elect a nominating committee, hear the report of the President and proceed to elect Councilors for the following districts in which terms expire this year:

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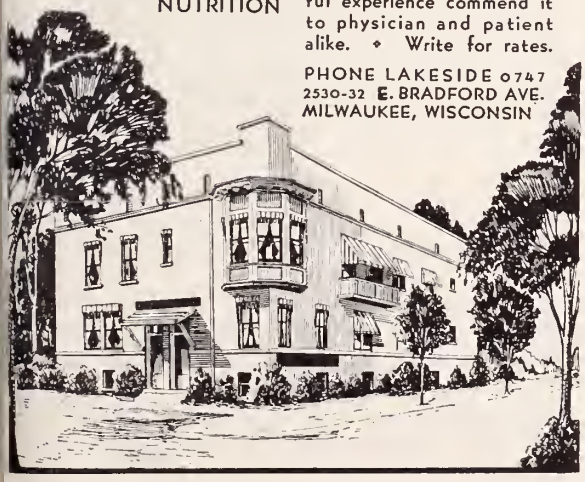

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Second District, Dr. Frank W. Pope, Racine.

Eleventh District, Dr. F. G. Johnson, Iron River.

Twelfth District, Dr. R. W. Blumenthal, Milwaukee.

The first session of the House of Delegates will be preceded by a Council meeting at the University Club at 11:00 Monday morning.

The usual second and third sessions of the House will be combined into a single session to be held in the Elizabethan Room in the Athletic Club opening at 2:00 Tuesday afternoon, June 13th. At this session the House will pass upon reports of all reference committees and conclude its session with the election of officers to include the President-elect, Speaker of the House, Vice-speaker of the House, and will also select a place of meeting for 1934. The House, it is understood, will receive an invitation to hold its 1934 meeting in Green Bay.

TO ATTEND NATIONAL SESSIONS

Delegates of the State Medical Society have been invited to attend sessions of the House of Delegates of the A. M. A. to be held in the Schroeder Hotel on both Monday morning, June 12th, and Tuesday morning, June 13th, and the final session for the election of officers on Thursday, June 15th.

Program Announced for Medical Women's National Association in Connection with A. M. A. in Milwaukee, June 11-16

Women members of the American Medical Association who are also members of the Medical Women's National Association will have a detailed program for their business and entertainment during the June sessions of the American Medical Association in Milwaukee. All women members of the American Medical Association are eligible for membership in the Medical Women's National Association. The program has been arranged under the direction of Dr. Eleänore Cushing, Milwaukee, who as Chairman of the Sub-Committee on Women Physicians of the American Medical Association is also general chairman of the Committee on Arrangements of the Medical Women's National Association, and Dr. Edith McCann, Milwaukee, who is chairman of the Program Committee of the Medical Women's National Association and member of the Sub-Committee on Women Physicians of the American Medical Association. The program follows:

Sunday, June 11th

10:00 A. M.

Breakfast Meeting—Board of Directors, Hotel Astor.

2:00 P. M.

Tour of City and Suburbs.

6:00 P. M.

Buffet Supper at the Wisconsin Club in honor of Dr. Esther Pohl Lovejoy, President of M. W. N. A. 32–33.

(Courtesy of Wisconsin Medical Women)

8:30 P. M.

Informal Reception at Hotel Astor to visiting women physicians in honor of Life Members, M. W. N. A.

(Courtesy of Members Branch No. 10, M. W. N. A.)

Monday, June 12th

8:00 A. M.

Breakfast—Hotel Astor.

"History of Medical Women", Dr. Kate Mead.

9:00 A. M.

Registration—Hotel Astor and Auditorium.

10:00 A. M.

Annual Meeting—Hotel Astor

- Address of Welcome and Response
- Reports of Secretary and Treasurer
- Report of Auditing Committee
- Report of Board of Directors including abstracts of reports of Standing Committees
- Report of President
- Balance of routine business
- Communications
- Unfinished and New Business
- Election of Officers

12:30 P. M.

Luncheon—Hotel Astor, in honor of Past Presidents.

"Century of Progress Exposition", Dr. Lena Sadler.

2:30 P. M.

Annual Meeting Continued

- Introduction of New Officers
- Introduction of Foreign Guests

Discussion of:

- Minority and Majority Reports of Committee on Cost of Medical Care.
- Plans for medical care presented by other groups.

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7:00 P. M.

Banquet—Hotel Astor, Roof Garden

Inaugural Address, Dr. Mary O'Malley, President M. W. N. A. 33–34.

(Names of Toast-Mistress and other speakers will be announced later).

Tuesday, June 13th

8:00 A. M.

Breakfast Meeting—Executive Board, Hotel Astor.

Breakfast Meeting—Members of M. W. N. A. and visiting women physicians.

"Women Physicians of Wisconsin", (Speaker to be announced later).

"The Women's Evening Clinic of Milwaukee", Dr. Eleänore Cushing.

10:00 A. M.

Drive to Oconomowoc—Starting point, Hotel Astor.

Tour of Carnation Milk Plant.

Luncheon—Draper Hall.

2:30 P. M.

Visit to Scientific and Commercial Exhibits, Auditorium.

5:30 P. M.

Picnic Dinner, at Doctor's Park, for all women physicians, in honor of Regional and State Directors, M. W. N. A., arranged by Dr. Marian Lewis and Dr. Bertha Haessler.

(Please wear clothing and shoes suitable for picnicking).

8:00 P. M.

General Meeting—American Medical Association, Auditorium.

Wednesday, June 14th

8:00 A. M.

Breakfast—Hotel Astor.

"Scholarships for Women Medical Students", Dr. Elizabeth Bass.

9:00 A. M.

American Medical Association Sessions, Auditorium.

12:30 P. M.

Luncheons—Alpha Epsilon Iota and Nu Sigma.

2:00 P. M.

American Medical Association Sessions, Auditorium.

P. M.

Alumni Dinners—See A. M. A. program.

Thursday, June 15th

8:00 A. M.

Breakfast for women physicians,

"Opportunities for Medical Women", Dr. Bertha Van Hoosen.

9:00 A. M.

American Medical Association Sessions, Auditorium.

12:30 P. M.

Luncheon for women physicians—Hotel Astor.

"The Woman Physician and Legislation", Dr. Louise Taylor-Jones.

6:30 P. M.

Dinner for Women Physicians—Hotel Astor (Formal)

"Preventive Medicine in the South", Dr. Rosa Gantt.

"The American Women's Hospitals", Dr. Esther Pohl Lovejoy.

"The Story of Pellagra Prevention", Dr. Lillian South.

"The Story Illustrated by Moving Pictures", Dr. Hilla Sheriff.

9:00 P. M.

Reception and Ball in honor of President of the American Medical Association.

Friday, June 16th

8:00 A. M.

Breakfast for Women Physicians—Hotel Astor. Speaker to be announced later.

9:00 A. M.

American Medical Association Sessions, Auditorium.

12:30 P. M.

Luncheon—Hotel Astor, in honor of foreign women physicians.

2:00 P. M.

Closing Sessions, American Medical Association, Auditorium.

N. B.

A cordial invitation has been extended to the visiting women physicians to attend any or all of the social meetings of the Woman's Auxiliary to the A. M. A.

Register for visits to clinic and institutions and for golf privileges. Please buy tickets for Banquet, Dinners, and Luncheons, and sign for trip to Oconomowoc as soon as possible after registering. Tickets may be obtained from the Registrar of the M. W. N. A. at the Hotel Astor, and from women members of the registration committee at the Auditorium. Other entertainments provided by the A. M. A. for guests are also open to visiting women physicians. For a list of these entertainments, please see A. M. A. program and daily bulletins.

Banquet, Monday, two dollars; dinner, Thursday, one dollar and a half; luncheons and picnic dinner seventy-five cents each; breakfasts fifty cents.

This program is subject to necessary changes.

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Section on Radiology to Hold Annual Meeting at Fond du Lac, Friday and Saturday, May 19th and 20th

Members of the State Medical Society are cordially invited to attend the 9th annual meeting of the Section on Radiology to be held at Fond du Lac on May 19th and 20th.

According to an announcement by Dr. Frank W. Mackoy of Milwaukee, Secretary of the Section, the Fond du Lac meeting will be held at the Retlaw Hotel opening at 1:00 P. M., Friday, and including a joint meeting with the Fond du Lac County Medical Society on Friday evening. The session will be concluded by noon Saturday. The detailed program follows:

FRIDAY, MAY 19TH, 1:00 P. M.

Chairman, J. Newton Sisk, M. D.

1. "Dental Radiology"—T. A. Hardgrove, D. D. S., Fond du Lac.
2. "Radiodermatitis"—H. R. Forester, M. D., Milwaukee.
3. "The Value of Roentgen Ray Examination in Diseases of the Heart with a Method of Obtaining the Exact Size"—Russell F. Wilson, M. D., Beloit.
4. "Some Unusual Radiological Findings in the Spine"—S. A. Morton, M. D., Milwaukee.
5. "Chondromatosis of the Knee Joint"—Theo. Sokow, M. D., Kenosha.
6. "Symposium on Gastric Ulcer"
   a. Anatomical and Etiological Consideration —S. M. Welsh, M. D., La Crosse.
   b. Clinical Pathology—J. A. Evans, M. D., La Crosse.
   c. Treatment—J. E. McLoone, M. D., La Crosse.
7. "Pathogenesis of Gastric Ulcer"—H. B. Podlasky, M. D., Milwaukee.
8. "Early Diagnosis of Obstruction of the Ileum" —Barton W. Johnson, M. D., Fond du Lac.
9. "Our Experience with the Protracted Fractional Dose Method (Coutard)—A Preliminary Report—E. A. Pohle, M. D., Madison.
10. "The Action of Roentgen Therapy on Tuberculous Processes"—A. U. Desjardins, M. D., Rochester, Minn.

FRIDAY, MAY 19TH, 6:30 P. M.

Joint Meeting with the Fond du Lac County Medical Society

Dinner—Retlaw Hotel.

Address—"Roentgen Therapy as a Means of Treating a Variety of Tumors"—Arthur U. Desjardins, M. D., Rochester, Minnesota.

SATURDAY, MAY 20TH, 8:30 A. M.

1. Business Meeting.
2. Round Table Discussion
   Chairman—Roy P. Potter, M. D.
   a. "Diverticulitis of Colon—Operation and Autopsy Findings—H. B. Podlasky, M. D., Milwaukee.
   b. "Hodgkin's Disease of Spleen"—R. L. Troup, M. D., Green Bay.
   c. "Tuberulosis of Breast—X-ray Therapy—Cured"—F. C. Christensen, M. D., Racine.
   d. "Two Cases of Massive Atelectasis of Lower Lobe of Right Lung with Lipiodol Filling Demonstrating Obstruction of Bronchus to Lobe"—J. A. Evans, M. D., La Crosse.
   e. "Duodenal Ulcer Healing Demonstrated by Series of Radiographs"—F. W. Mackoy, M. D., Milwaukee.
   f. "Fracture of Femur in Baby One Day Old with End Results"—A. M. Dorr, M. D., Milwaukee.
   g. "Unusual Form of Cystic Dilatation of Lungs Complicated by Eventration of Diaphragm" —J. E. Habbe, M. D., Milwaukee.
   h. "Pulmonary Tuberculosis"—H. M. Coon, M. D. Stevens Point.
   i. "Eosophagostenosis"—F. H. Kuegle, M. D., Janesville.
   j. "Blood Diseases Treated by Radiotherapy"—C. A. H. Fortier, M. D., Milwaukee.
   k. "Kohler's Disease—Report of an Unusual Case"—L. W. Paul, M. D., Madison.
   l. "Unusual Lesion of the Lung in a Diabetic"—Theo. Sokow, M. D., Kenosha.

CORRESPONDENCE

(Continued from page 337)

the 18th century, learned of the value of the use of Digitalis from "an old lady of Shropshire". He used this fact, as did a large manufacturing house, simply to create interest in Digitalis. Mr. Emmerich has no grudge against Wisconsin physicians, neither has the Wisconsin Pharmaceutical Association. The fact of the matter is that the relations between pharmacists and physicians in Wisconsin are particularly friendly. The pharmacists, for instance, worked with the medical men in attempting to secure passage of a very desirable hypnotic bill in the present legislature. Further evidence that Wisconsin pharmacists have no grudge against the Wisconsin physicians is that the pharmacists are the ones who are objecting to Dr. Brady's statements.

Very truly yours,

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Courses in Nursing Courses in nursing are offered in the School of Nursing affiliated with the medical school. A residential course of 32 months is offered in the Wisconsin General Hospital to those who have completed a semester of specified work in the College of Letters and Science. This course leads to a certificate of graduate nurse. A residential course of 27 months is offered to those who have completed three years of college work in specified subjects either in the College of Letters and Science or in the Department of Home Economics. These courses lead to a certificate of graduate nurse and to a B. S. degree.

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Clinical Facilities — Medical and surgical clinics are conducted in Milwaukee County Hospital, and in a number of city hospitals, thereby affording adequate facilities for imparting bedside instruction under scientifically competent and experienced staffs.

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Hotel Reservations for June Meeting of the American Medical Association at Milwaukee

Dr. H. J. Heeb, Chairman of the Committee on Hotels for the next meeting of the American Medical Association, June 12th to 16th, announces that Milwaukee hotels are ready to accept reservations for the meeting week. Reservations may be made direct with the hotels or preferably by advising Dr. Heeb at 740 N. Second Street of the accommodations desired.

Wisconsin members are asked to use hotels other than those in the downtown district that members of the American Medical Association who come from all parts of the United States may have the use of these central accommodations. The hotels suggested for Wisconsin members and rates follow:

		Without Bath	With Bath	Suites
Abbot Crest				
150 rms. and apts.	Sin.	$1.50–2.00	$2.50–3.00	
1226 W. Wis. Ave.	Dbl.	2.50–3.00	3.50–4.00	$7.00–10.00
Ambassador				
160 rms. and apts.	Sin.		2.50–4.00	
2308 W. Wis. Ave.	Dbl.		3.50–6.00	5.00–12.00
Belmont				
116 rms	Sin.	1.50–2.50	2.50	
751 N. Fourth St.	Dbl.	3.00	3.50–4.00	
Blatz				
80 rms.	Sin.	1.50–2.00	2.00–3.00	
145 E. Wells St.	Dbl.	2.00–2.50	3.00–4.00	4.00– 5.00
Carlton				
100 rms.	Sin.	1.00–1.75	2.00–3.50	
1120 N. Milw. St.	Dbl.	2.00–2.50	2.50–5.00	4.00– 7.00
Colonial				
87 rms. and apts.	Sin.		1.50–3.50	
826 N. Cass St.	Dbl.		2.00–3.50	3.50– 6.00
Globe				
56 rms.	Sin.	1.00–2.00	1.75–2.50	
803 E. Wis. Ave.	Dbl.	1.50–3.00	3.50–5.00	
Juneau				
115 rms.	Sin.	1.00–1.50	1.75–2.50	
807-815 E. Wis. Ave.	Dbl.	1.50–2.50	2.75–3.50	
Knickerbocker				
550 rms. and apts.	Sin.		3.00–4.50	
1028 E. Jun'u Ave.	Dbl.		5.00–8.00	8.00–12.00
La Salle				
165 rms. and apts.	Sin.		2.50–3.00	
729 N. Eleventh St.	Dbl.		3.50–5.00	5.00–10.00
Martin				
200 rms.	Sin.	1.00–1.50	1.50–2.75	
707 E. Wis. Ave.	Dbl.	2.00–2.50	2.50–4.25	
Maryland				
125 rms.	Sin.	1.50–2.00	2.50–3.00	
625 N. Fourth St.	Dbl.	2.00–3.00	4.00–5.00	5.00
Plaza				
200 rms. and apts.	Sin.		2.00–3.00	
1007 N. Cass St.	Dbl.		3.00–4.50	5.00– 7.00
Republican				
200 rms.	Sin.	1.50–2.00	2.00–5.00	
907 N. Third St.	Dbl.	2.50–4.00	3.00–6.00	8.00–15.00
Royal				
130 rms.	Sin.	1.75–2.00	2.75–3.00	
435 W. Mich. St.	Dbl.	2.75–3.00	3.75–4.00	5.00– 7.50
Shorecrest				
452 rms. and apts.	Sin.		3.00–4.00	
1962 N. Pros. Ave.	Dbl.		5.00–7.00	8.00–16.00
Tower				
200 rms. and apts.	Sin.		2.50–3.00	
716 N. Eleventh St.	Dbl.		3.50–5.00	
St. Lawrence	Sin.		2.50	
1026 N. Jackson St.	Dbl.		3.50	
Seven-Seventy				
Marshall	Sin.		2.50–3.00	
770 N. Marshall St.	Dbl.		3.50–5.00	

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BECAUSE Fellowship is a prerequisite to attendance at the sessions of the American Medical Association to be held at Milwaukee in June, the following statement has been prepared indicating how our members may become Fellows.

All members in good standing in the State Medical Society of Wisconsin are eligible to become Fellows of the American Medical Association. It is required, however, that they make formal application for that relation, pay fellowship dues and subscribe to the JOURNAL of the American Medical Association. It is to be noted, however, that Fellowship dues and the subscription to the JOURNAL are included in one annual payment of $7. This, with application for fellowship, is to be made direct to the American Medical Association, 535 North Dearborn Street, Chicago.

Any one of the special journals published by the A. M. A. may be substituted for THE JOURNAL. In case the subscription price of the special journal selected is higher than the subscription price of THE JOURNAL, it is required that the regular subscription rate of the Journal selected shall be paid (which will include Fellowship dues) If the subscription price of the special journal selected is less than that of THE JOURNAL, the regular price of $7 must be paid if Fellowship is to be included.

Fellows of the American Medical Association are given a special Fellowship card, presentation of which will admit them to all sessions of the Association at Milwaukee next June.

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American Medical Association, Milwaukee, June 12-16

THE WISCONSIN MEDICAL JOURNAL

STATE MEDICAL SOCIETY OF WISCONSIN — MEDICINA NUSQUAM NON EST

Owned and Published Monthly by the State Medical Society of Wisconsin
J. G. CROWNHART, Secretary-Managing Editor

VOLUME XXXII
NUMBER 6

119 E. Washington Avenue
MADISON, WISCONSIN, JUNE, 1933

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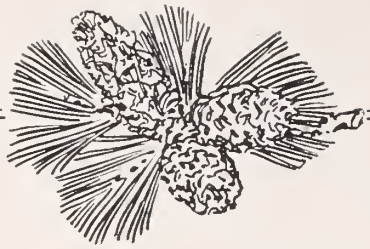

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THE WISCONSIN MEDICAL JOURNAL

VOLUME XXXII
NUMBER 6

MADISON, WIS., JUNE, 1933

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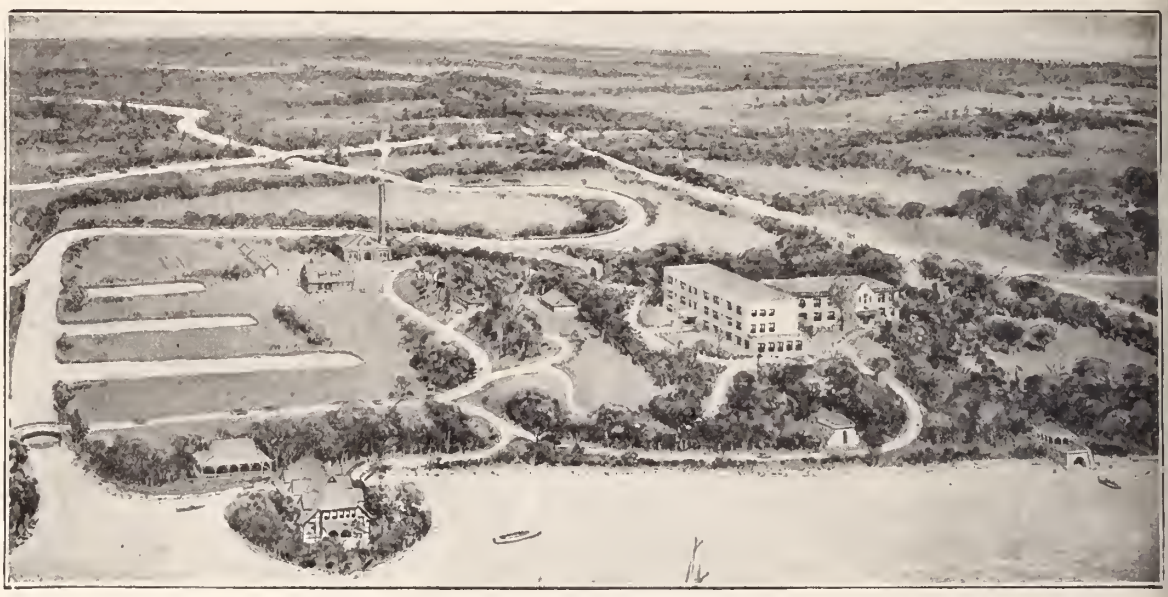

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The Wisconsin Medical Journal

Volume XXXII JUNE, 1933 No. 6

Preliminary Program Announced for Milwaukee Meeting of American Medical Association, June 12-16

The Scientific Assembly of the Association will open with the general meeting to be held at 8 p. m., Tuesday, June 13. The sections will meet Wednesday, Thursday and Friday, June 14, 15 and 16, as follows:

Convening at 9 a. m., the Sections on

Practice of Medicine.
Obstetrics, Gynecology and Abdominal Surgery.
Laryngology, Otology and Rhinology.
Pathology and Physiology.
Preventive and Industrial Medicine and Public Health.
Urology.
Orthopedic Surgery.
Miscellaneous Topics, Sessions on Anesthesia.

Convening at 2 p. m., the Sections on

Surgery, General and Abdominal.
Ophthalmology.
Pediatrics.
Pharmacology and Therapeutics.
Nervous and Mental Diseases.
Dermatology and Syphilology.
Gastro-Enterology and Proctology.
Radiology.

The Registration Department will be open from 8:30 a. m. until 5:30 p. m., Monday, Tuesday, Wednesday and Thursday, June 12, 13, 14 and 15, and from 8:30 a. m. to 12 noon, Friday, June 16.

The Milwaukee Auditorium, where the convention will be held, is located in the heart of the hotel, theater and shopping district. There are seven halls with a seating capacity ranging in size from 300 to 8,240. Each hall is equipped with a stage and committee rooms and all are acoustically perfect. The Auditorium is equipped with a ventilating system which supplies conditioned air at any temperature. A modern public address system is part of the equipment of all these halls.

ENTERTAINMENT

OPENING GENERAL MEETING

The Opening General Meeting will be held on Tuesday evening, June 13, at 8 o'clock in Plankinton Hall, Milwaukee Auditorium. A dance will follow at the Wisconsin Club.

PRESIDENT'S RECEPTION

On Thursday evening, June 15, at 9 o'clock there will be a reception and ball in honor of the President at the Hotel Schroeder.

DINNER FOR GENERAL OFFICERS AND DELEGATES

On Monday evening, June 12, at 7 p. m., at the Wisconsin Club, the State Medical Society of Wisconsin and the Medical Society of Milwaukee County will give a dinner in honor of the general officers and members of the House of Delegates. If weather permits, dinner will be served in the garden surrounding the clubhouse.

BRING-YOUR-HUSBAND DINNER

The Bring-Your-Husband Dinner, sponsored by the Woman's Auxiliary, is to be held at the New Pfister Hotel, Thursday evening, June 15, prior to the President's Reception and Ball. Members not accompanied by their wives are also urged to attend the dinner. Tickets, $1.50.

ALPHA OMEGA ALPHA DINNER

On Thursday, June 15, at 6:30 p. m., at the Hotel Schroeder, the Alpha Omega Alpha Honorary Fraternity will have its annual dinner and meeting. Dr. Charles F. Martin, dean of the Faculty of Medicine of McGill University, will give the William W. Root Alpha Omega Alpha Lecture.

ALUMNI DINNERS

The following alumni groups will hold their dinners at the Hotel Pfister at 6:30 p. m., on Wednesday, June 14: Northwestern University, Rush Medical College, Columbia University, Marquette University, University of Wisconsin, University of Minnesota, University of Maryland, University of Illinois, Harvard-Yale and Johns Hopkins. The alumni group of the University of Pennsylvania

will hold its dinner at the University Club on Wednesday evening, June 14, at 6:30. Alumni of Canadian medical schools are also planning a dinner.

DINNER FOR MEDICAL VETERANS

A dinner for the Medical Veterans of the World War will be given on Wednesday evening. Dr. Gilbert Seaman, who is president of the Medical Veterans of the World War, is arranging for this dinner.

AMERICAN BOARD OF OBSTETRICS AND GYNECOLOGY

There will be a dinner and round table conference of the American Board of Obstetrics and Gynecology at the Hotel Schroeder at 7 p. m., Wednesday, June 14. Subscription for the dinner will be $1.75, and reservations should be made in advance through Dr. Paul Titus, 1015 Highland Building, Pittsburgh, Pa.

RUSH MEDICAL COLLEGE UNIVERSITY OF CHICAGO ALUMNI DINNER

The Rush Medical College University of Chicago will have its alumni dinner at 7 p. m. at the Hotel Schroeder, Wednesday, June 14. Ladies are welcome.

PHI DELTA EPSILON LUNCHEON

Members of Phi Delta Epsilon will have a luncheon in the Gold Room of the Hotel Wisconsin on Wednesday, June 14, at 1 p. m. Dr. D. J. Ansfield is chairman of the luncheon committee.

CLINICAL LECTURES

PLANKINTON HALL, MILWAUKEE AUDITORIUM

MONDAY, JUNE 12—2 P. M.

Nasal Sinusitis. L. W. DEAN, St. Louis

Lymphogranuloma Inguinale. HAROLD N. COLE, Cleveland

Migraine. PETER BASSOE, Chicago

TUESDAY, JUNE 13—9:30 A. M.

Infectious Mononucleosis (Glandular Fever). THOMAS P. SPRUNT, Baltimore

Recent Progress in Thoracic Surgery. CARL A. HEDBLOM, Chicago

Diagnosis and Treatment of Injuries of the Head. WALTER E. DANDY, Baltimore

TUESDAY, JUNE 13—2 P. M.

Clinical Control of Chronic Hemorrhagic States in Childhood. I. NEWTON KUGELMASS, New York

Purpura and Pathologic Hemorrhage. RUSSELL L. HADEN, Cleveland

Clinical Interpretation of the Electrocardiogram. L. M. HURXTHAL, Boston.

Preliminary Program of the Scientific Assembly

PROGRAM OF THE OPENING GENERAL MEETING

Plankinton Hall, Milwaukee Auditorium, Tuesday, June 13, 8 p. m.

Music.

Call to Order by the President, EDWARD H. CARY.

Invocation. THE RIGHT REVEREND BENJAMIN F. P. IVINS, Bishop of Milwaukee.

Address. HON. A. G. SCHMEDEMAN, Governor of Wisconsin.

Address. HON. DANIEL W. HOAN, Mayor of Milwaukee.

Address of Welcome. REGINALD H. JACKSON, President, State Medical Society of Wisconsin.

Address of Welcome. JAMES C. SARGENT, President, Medical Society of Milwaukee County.

Announcements. STANLEY J. SEEGER, Chairman, Local Committee on Arrangements.

Music.

Introduction and Installation of PRESIDENT-ELECT DEAN LEWIS, Baltimore.

Address. DEAN LEWIS.

Presentation of Medal to Retiring President, EDWARD H. CARY. A. R. MITCHELL, Chairman of the Board of Trustees.

Music.

THE PROGRAMS OF THE SECTIONS

Outline of the Scientific Proceedings—The Preliminary Program and the Official Program

The following papers are announced to be read before the various sections. The order here is not necessarily the order that will be followed in the Official Program, nor is the list complete. The Official Program will be similar to the programs issued in previous years and will contain the final program of each section with abstracts of the papers, as well as lists of committees, program of the Opening General Meeting, list of entertainments, map of Milwaukee, and other information. To prevent misunderstandings and protect the interest of advertisers, it is here announced that this Official Program will contain no advertisements. It is copyrighted by the American Medical Association and will not be distributed before the session. A copy will be given to each Fellow on registration.

SECTION ON PRACTICE OF MEDICINE

MEETS IN PLANKINTON HALL, MILWAUKEE AUDITORIUM

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Wednesday, June 14—9 a. m.

Myocardosis: Its Recognition and Therapy (Lantern Demonstration). WALTER L. BIERRING, Des Moines, Iowa.

Discussion to be opened by ALFRED FRIEDLANDER, Cincinnati; R. I. RIZER, Minneapolis, and CADIS PHIPPS, Boston.

Ten Years' Observation of Children with Rheumatic Heart Disease (Lantern Demonstration).
WILLIAM D. STROUD, Philadelphia, MELVILLE A. GOLDSMITH, Jenkintown, Pa.; D. STEWART POLK, Rosemont, Pa., and FRANCIS Q. THORP, Philadelphia.
Discussion to be opened by T. DUCKETT JONES and ALBERT G. YOUNG, Boston.

The Frank Billings Lecture. LEWIS A. CONNER, New York.

The Clinical Value of Studies of the Human Capillaries (Lantern Demonstration). IRVING S. WRIGHT, New York.
Discussion to be opened by SOMA WEISS, Boston.

The Systolic Murmur: Its Clinical Interpretation. SAMUEL A. LEVINE, Boston.
Discussion to be opened by JAMES B. HERRICK, Chicago, and FRED M. SMITH, Iowa City.

Thursday, June 15—9 a. m.

The Treatment of the Anemia Associated with Disorders of the Liver; Its Response to Secondary-Anemia-Liver-Extract and Iron Therapy. GARNETT CHENEY, San Francisco.
Discussion to be opened by WILLIAM P. MURPHY, Boston, and CYRUS C. STURGIS, Ann Arbor, Mich.

Hereditary Gaucher's Splenomegaly (Lantern Demonstration). JOHN P. ANDERSON, Cleveland.
Discussion to be opened by NORBERT ENZER, Milwaukee.

The Treatment of Polycythemia (Lantern Demonstration).
C. T. STONE and MEYER BODANSKY, Galveston, Texas.
Discussion to be opened by MOSES BARRON, Minneapolis, and NATHAN ROSENTHAL, New York.

Experience with Administration of Yellow Bone Marrow in the Treatment of Various Forms of Granulocytopenia (Lantern Demonstration).
CHARLES H. WATKINS and HERBERT Z. GIFFIN, Rochester, Minn.
Discussion to be opened by H. N. HARKINS, Chicago.

Types of Chronic Arthritis (Lantern Demonstration). RALPH A. KINSELLA, St. Louis.
Discussion to be opened by JAMES S. MCLESTER, Birmingham, Ala.; WALTER BAUER, Boston, and ARCHER O'REILLY, St. Louis.

Friday, June 16—9 a. m.

Election of Officers

Late Results of Unoperated Gallbladder Disease (Lantern Demonstration). J. M. BLACKFORD, Seattle.
Discussion to be opened by FRANK SMITHIES, Chicago, and JAMES F. WEIR, Rochester, Minn.

Hypertension, Obesity and Hyperglycemia (Lantern Demonstration).
JOHN H. MUSSER and D. O. WRIGHT, New Orleans.
Discussion to be opened by HENRY J. JOHN, Cleveland; HUGO R. RONY, Chicago; FREDERICK A. WILLIUS, Rochester, Minn; LEA A. RIELY, Oklahoma City; FRANCIS D. MURPHY, Milwaukee; EMMETT F. HORINE, Louisville, Ky., and E. R. NUZUM, Santa Barbara, Calif.

Chairman's Address. REGINALD FITZ, Boston.

Pellagra: Review of Cases, with Special Reference to Gastric Secretions (Lantern Demonstration). H. B. MULHOLLAND, University, Va.
Discussion to be opened by T. D. SPIES, Cleveland; W. H. SEBRELL, JR., Washington, D. C., and JAMES S. MCLESTER, Birmingham, Ala.

Primary Staphylococcus Pneumonia (Lantern Demonstration). H. A. REIMANN, Minneapolis.
Discussion to the opened by RALPH A. KINSELLA, St. Louis; LEO G. RIGLER, Minneapolis, and W. D. SUTLIFF, Boston.

Extrapleural and Intrapleural Pneumolysis in the Treatment of Pulmonary Tuberculosis (Lantern Demonstration). LE ROY S. PETERS, Albuquerque, N. M.
Discussion to be opened by J. A. MYERS, Minneapolis, and P. G. CORNISH, Albuquerque, N. M.

SECTION ON SURGERY, GENERAL AND ABDOMINAL

MEETS IN ENGELMAN HALL, MILWAUKEE AUDITORIUM

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Wednesday, June 14—2 p. m.

The Prevention of Complications in Thyroid Surgery (Lantern Demonstration). ARNOLD S. JACKSON, Madison, Wis.
Discussion to be opened by F. A. COLLER, Ann Arbor, Mich., and ROBERT S. DINSMORE, Cleveland.

Choledochoduodenostomy and Gastro-Enterostomy for Chronic Biliary Stasis (Lantern Demonstration). ALFRED A. STRAUSS, Chicago.
Discussion to be opened by J. TATE MASON, Seattle, and WALTMAN WALTERS, Rochester, Minn.

The Aseptic Tannic Acid Treatment of Diffuse Superficial Burns (Lantern Demonstration). DONALD B. WELLS, Hartford, Conn.

Reconstruction of the Burned Face (Lantern Demonstration). H. L. UPDEGRAFF, Hollywood Calif.
Discussion on papers of DRS. WELLS and UPDEGRAFF to be opened by S. J. SEEGER, Milwaukee, and FERRIS SMITH, Grand Rapids, Mich.

Symptomatology, Surgical Treatment and Results in Sixty Cases of Diaphragmatic Hernia (Lantern Demonstration). STUART W. HARRINGTON, Rochester, Minn.
Discussion to be opened by P. E. TRUESDALE, Fall River, Mass., and C. A. HEDBLOM, Chicago.

The Relative Merits of Spinal and Inhalation Anesthesia (Lantern Demonstration). HAROLD L. FOSS, Danville, Pa.
Discussion to be opened by JOHN S. LUNDY, Rochester, Minn., and GEORGE W. CRILE, Cleveland.

Thursday, June 15—2 p. m.

The Incidence and Prevention of Incisional Hernias (Lantern Demonstration). HENRY W. CAVE, New York.
Discussion to be opened by AMOS R. KOONTZ, Baltimore, and ROBERT L. PAYNE, Norfolk, Va.

Removal of the Right Cerebral Hemisphere; Presentation of a Case (Lantern Demonstration). W. JAMES GARDNER, Cleveland.
Discussion to be opened by WINCHELL MCK. CRAIG, Rochester, Minn., and W. E. DANDY, Baltimore.

Chairman's Address: The Curability of Cancer of the Colon, Rectosigmoid and Rectum (Lantern Demonstration). FRED W. RANKIN, Lexington, Ky.

Esophageal Diverticulum (Lantern Demonstration). FRANK H. LAHEY, Boston.
Discussion to be opened by C. T. STURGEON, Los Angeles, and ROY D. MCCLURE, Detroit.

Surgical Indications in Bronchiectasis (Lantern Demonstration). NORMAN S. SHENSTONE, Toronto, Canada.
Discussion to be opened by C. A. HEDBLOM, Chicago, and JOHN ALEXANDER, Ann Arbor, Mich.

Results of Surgery in Spina Bifida (Lantern Demonstration). ANATOLE KOLODNY, Sioux City, Iowa.
Discussion to be opened by W. JAMES GARDNER, Cleveland, and Harry E. MOCK, Chicago.

Friday, June 16—2 p. m.

Election of Officers

The Diagnosis and Treatment of Postoperative Pulmonary Complications (Lantern Demonstration). GABRIEL TUCKER, Philadelphia,
Discussion to be opened by E. P. PENDERGRASS and E. L. ELIASON, Philadelphia.

Congenital Obstruction of the Small Intestine (Lantern Demonstration). WILLIAM E. LADD, Boston.
Discussion to be opened by ALBERT H. MONTGOMERY, Chicago, and WARREN H. COLE, St. Louis.

The Indications for Enterostomy (Lantern Demonstration). THOMAS G. ORR, Kansas City, Mo.
Discussion to be opened by W. D. GATCH, Indianapolis, and J. SHELDON HORSLEY, Richmond, Va.

The Treatment of Acute Intestinal Obstruction by Suction with the Duodenal Tube (Lantern Demonstration).
O. H. WANGENSTEEN and JOHN R. PAINE, Minneapolis.
Discussion to be opened by ERWIN R. SCHMIDT, Madison, Wis., and KARL A. MEYER, Chicago.

The Surgical Relief of Intractable Pain (Lantern Demonstration). LOYAL DAVIS, Chicago.
Discussion to be opened by MAX M. PEET, Ann Arbor, Mich., and JOHN L. GARVEY, Milwaukee.

Eventual Results of Gastric Surgery (Lantern Demonstration). ERNEST H. GAITHER, Baltimore.
Discussion to be opened by J. SHELTON HORSLEY, Richmond, Va., and FRANK H. LAHEY, Boston.

SECTION ON OBSTETRICS, GYNECOLOGY AND ABDOMINAL SURGERY

MEETS IN ENGELMAN HALL, MILWAUKEE AUDITORIUM

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Wednesday, June 14—9 a. m.

Preconceptional and Prenatal Influences Affecting the New-Born (Lantern Demonstration). LEE BIVINGS, Atlanta, Ga.
Discussion to be opened by FRED L. ADAIR, Chicago.

Carbon Dioxide and Oxygen in Obstetrics.
W. T. MCCONNELL and ROLAND L. MCCORMACK, Louisville, Ky.
Discussion to be opened by WALTER M. BOOTHBY, Rochester, Minn.

Infiltration Versus Spinal Anesthesia in Obstetrics and Gynecology (Lantern Demonstration). J. P. GREENHILL, Chicago.
Discussion to be opened by JOSEPH B. DE LEE, Chicago.

Management of the Third Stage of Labor (Lantern Demonstration). LEROY A. CALKINS, Kansas City, Mo.
Discussion to be opened by JENNINGS C. LITZENBERG, Minneapolis.

Abdominal Pain in Pregnancy (Lantern Demonstration). STUART B. BLAKELY, Binghamton, N. Y.
Discussion to be opened by RAE T. LA VAKE, Minneapolis.

Does Quinine as Used in Induction of Labor Have a Deleterious Effect on the Fetus? EDWARD L. KING, New Orleans.
Discussion to be opened by F. H. FALLS, Chicago.

Thursday, June 15—9 a. m.

Gestational Polyneuritis (Motion Picture Demontration). E. D. PLASS, Iowa City.
Discussion to be opened by RALPH H. LUIKART, Omaha.

Fetal Mortality in the Toxemias of Pregnancy (Lantern Demonstration). C. H. PECKHAM, Baltimore.
Discussion to be opened by JOHN W. HARRIS, Madison, Wis.

Chairman's Address. BARTON COOKE HIRST, Philadelphia.

Fetal Risks in the First Stage of Labor from Umbilical Cord Complications. JOHN P. GARDINER, Toledo, Ohio.
Discussion to be opened by W. W. BRAND, Toledo, Ohio, and WILLIAM J. DIECKMAN, Chicago.

Minimum Theelin Dosage Necessary to Stimulate Endometrial Changes in Castrated Women (Lantern Demonstration). AUGUST A. WERNER, St. Louis.
Discussion to be opened by EMIL NOVAK, Baltimore.

Friday, June 16—9 a. m.

Election of Officers

Crises of the Female Pelvis: Treated by the General Surgeon (Lantern Demonstration). EMERY MOORE FITCH, Claremont, N. H.
Discussion to be opened by JOHN F. GILE, Hanover, N. H.

Cancer-Like Lesions of the Uterine Cervix (Lantern Demonstration). RICHARD W. TELINDE, Baltimore.
Discussion to be opened by GEORGE H. GARDNER, Chicago.

Posture and Dysmenorrhea: Report on a Four Year Study on 302 Young Women (Lantern Demonstration). NORMAN F. MILLER, Ann Arbor, Mich.
Discussion to be opened by CARL HENRY DAVIS, Milwaukee, and JOSEPH L. BAER, Chicago.

Management of Chronic Pelvic Infection (Lantern Demonstration). VIRGIL S. COUNSELLER, Rochester, Minn.
Discussion to be opened by GEORGE GELLHORN, St. Louis, and FRANCIS W. SOVAK, New York.

Relief of Pelvic Pain by Sympathetic Neurectomy (Lantern and Motion Picture Demonstration). FREDERICK S. WETHERELL, Syracuse, N. Y.
Discussion to be opened by WALTER T. DANNREUTHER, New York.

Colpectomy (Lantern Demonstration). HAROLD E. SIMON, Birmingham, Ala.
Discussion to be opened by JAMES C. MASSON, Rochester, Minn.

SECTION ON OPHTHALMOLOGY

MEETS IN KILBOURN HALL, MILWAUKEE AUDITORIUM

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Wednesday, June 14—2 p. m.

Chairman's Address.
FREDERICK H. VERHOEFF, Boston.

The Effect of Tryparsamide on the Eye (Lantern Demonstration). N. K. LAZAR, Chicago.
Discussion to be opened by JOHN H. STOKES, Philadelphia.

The Ciliary Processes and Their Relation to Intra-Ocular Surgery (Lantern Demonstration).
ALGERNON B. REESE, JR., New York.
Discussion to be opened by WILLIAM C. FINNOFF, Denver.

Practical Lenses: A Trial Set.
EDWARD JACKSON, Denver.
Discussion to be opened by WILLIAM E. SHAHAN, St. Louis.

The Clinical Implications of Ocular Disturbances Produced in Experimental Animals by Dietary Changes (Lantern Demonstration).
ARTHUR M. YUDKIN, New Haven, Conn.
Discussion to be opened by C. S. O'BRIEN, Iowa City.

Standards and Licensure in Ophthalmology.
WILLIAM H. CRISP, Denver.
Discussion to be opened by T. B. HOLLOWAY, Philadelphia.

The Function of the Reattached Retina (Lantern Demonstration). PETER C. KRONFELD, Chicago.
Discussion to be opened by HUGH S. MCKEOWN, New York.

Thursday, June 15—2 p. m.

Demonstration Session: Exhibition of New Instruments and Appliances

Critical Analysis and Comparison of Two Hundred Consecutive Cases of Cataract Intracapsular and Extracapsular Extraction (Lantern Demonstration). HARRY S. GRADLE, Chicago.
Discussion to be opened by ARNOLD KNAPP, New York.

Cataract Complications in Relation to Intra-Ocular Tension and Blood Pressure: A Study of 2,200 Cataract Extractions (Lantern Demonstration).
OSCAR B. NUGENT, Chicago.
Discussion to be opened by JOHN GREEN, St. Louis.

A Study of the Possibilities of Orthoptic Training: Preliminary Report (Lantern Demonstration).
GEORGE P. GUIBOR, Chicago.
Discussion to be opened by LUTHER C. PETER, Philadelphia; DAVID W. WELLS, Boston, and SANFORD R. GIFFORD, Chicago.

The Arterioles of the Retina in Toxemia of Pregnancy (Lantern Demonstration).
HENRY P. WAGENER, Rochester, Minn.
Discussion to be opened by ROBERT J. MASTERS, Indianapolis.

Spontaneous Dislocation of the Lacrimal Glands (Lantern Demonstration).
JAMES W. SMITH, New York.
Discussion to be opened by F. HERBERT HAESSLER, Milwaukee.

On Mixed (Teratoid) Tumors of the Lacrimal Caruncle (Lantern Demonstration).
DERRICK T. VAIL, JR., Cincinnati.
Discussion to be opened by THOMAS D. ALLEN, Chicago.

Visual Field Studies in Functional Headaches of Pituitary Origin.
A. BEULAH CUSHMAN, Chicago.
Discussion to be opened by CLIFFORD B. WALKER, Los Angeles.

Friday, June 16—2 p. m.

Executive Session

Election of Officers

The National Society for the Prevention of Blindness—A Lay Movement for the Conservation of Vision.
WILLIAM CAMPBELL POSEY, Radnor, Pa., and LEWIS H. CARRIS, New York.
Discussion to be opened by W. H. WILDER, Chicago and CONRAD BERENS, New York.

A Study of Conjunctival Capillaries (Lantern Demonstration). A. D. RUEDEMANN, Cleveland.
Discussion to be opened by ARTHUR J. BEDELL, Albany, N. Y.

The O'Connor Cinch Shortening Operation for Heterotropia and Heterophoria: A Critical Survey (Lantern Demonstration).
GEORGE N. HOSFORD and AVERY M. HICKS, San Francisco.
Discussion to be opened by WILLIAM F. HARDY, St. Louis.

Pocket-Flap Sclerecto-Iridodialysis in Glaucoma (Lantern Demonstration).
CHARLES N. SPRATT, Minneapolis.
Discussion to be opened by W. B. LANCASTER, Boston.

Ectopia Lentis, with Case Report of Total Dislocation, Directly Downward.
WARREN D. HORNER and SOL MAISLER, San Francisco.
Discussion to be opened by WILLIAM ZENTMAYER, Philadelphia.

SECTION ON LARYNGOLOGY, OTOLOGY AND RHINOLOGY

MEETS IN KILBOURN HALL, MILWAUKEE AUDITORIUM

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Wednesday, June 14—9 a. m.

Chairman's Address (Lantern Demonstration).
HARRIS P. MOSHER, Boston.

The Present Day Surgery of Brain Abscess of Otitic Origin. HARRY P. CAHILL, Boston.
Discussion to be opened by A. W. ADSON, Rochester, Minn.; R. EUSTACE SEMMES, Memphis, Tenn., and W. JAMES GARDNER, Cleveland.

Some of the Fundamental Principles of Functional Hearing Tests and Some Recent Developments in Tuning Forks and Sounding Rods. ROBERT SONNENSCHEIN, Chicago.
Discussion to be opened by WALTER H. THEOBALD, Chicago; HORACE NEWHART, Minneapolis, and EDMUND P. FOWLER, New York.

The Psychology of Progressive Deafness.
GORDON BERRY, Worcester, Mass.
Discussion to be opened by AUSTIN A. HAYDEN and GEORGE E. SHAMBAUGH, JR., Chicago, and JOHN F. CURTIN, Minneapolis.

The Future Market for Medical Service.
C. E. COOPER, Denver.
Discussion to be opened by W. P. WHERRY, Omaha; BURT R. SHURLY, Detroit, and W. W. PEARSON, Des Moines, Iowa.

The Anatomic Contributions of Dr. Mosher.
GEORGE E. HOURN, St. Louis.
Discussion to be opened by GREGOR W. MCGREGOR, Toronto, Canada; WILLIAM V. MULLIN, Cleveland, and THOMAS E. CARMODY, Denver.

Thursday, June 15—9 a. m.

The Surgical Importance of the Laryngeal Nerves in Relation to the Thyroid Arteries, Thyroid Gland and Larynx (Lantern Demonstration).
EDWARD F. ZIEGELMAN, San Francisco.
Discussion to be opened by WILLIAM A. KENNEDY, St. Paul; ROBERT S. DINSMORE, Cleveland; DAVID D. BERLIN, Boston, and JUSTUS MATTHEWS, Minneapolis.

Mediastinitis: A Clinical Study with Practical Anatomic Considerations of the Neck and Mediastinum.
A. C. FURSTENBERG, Ann Arbor, Mich.
Discussion to be opened by GEORGE W. CRILE, Cleveland; STUART W. HARRINGTON, Rochester, Minn., and THOMAS L. TOLAN, Milwaukee.

Pulmonary Complications of Esophageal Disease (Lantern and Motion Picture Demonstration).
CHEVALIER JACKSON and CHEVALIER L. JACKSON, Philadelphia.
Discussion to be opened by GABRIEL TUCKER, Philadelphia; JOHN B. POTTS, Omaha; SAMUEL IGLAUER, Cincinnati, and HERMAN J. MOERSCH, Rochester, Minn.

A Peculiar Form of Hyperplasia of the Mucous Membrane of the Upper Respiratory Tract (Lantern Demonstration).
HENRY B. ORTON, Newark, N. J.
Discussion to be opened by H. M. GOODYEAR, Cincinnati; IRA FRANK, Chicago, and JOHN J. SHEA, Memphis, Tenn.

The Involuntary Nervous System in Relation to Otolaryngology.
GORDON F. HARKNESS, Davenport, Iowa.
Discussion to be opened by DEAN M. LIERLE, Iowa City; JOHN W. CARMACK, Indianapolis; CARL L. LARSEN, St. Paul, and HOWARD C. BALLENGER, Chicago.

Friday, June 16—9 a. m.

Election of Officers

The Otorhinologic Aspects of Scarlet Fever (Lantern Demonstration).
GORDON D. HOOPLE, Syracuse, N. Y.
Discussion to be opened by IRVING I. MUSKAT and HORACE R. LYONS, Chicago; O. JASON DIXON, Kansas City, Mo., and EDWARD D. KING, Cincinnati.

Infection of the Blood Stream Associated with Suppuration in the Temporal Bone: A Clinical Study (Lantern Demonstration).
HAROLD I. LILLIE, Rochester, Minn.
Discussion to be opened by GEORGE M. COATES, Philadelphia; JAMES B. COSTEN, St. Louis, and SAMUEL J. KOPETZKY, New York.

Principles of Sinus Treatment in the Light of Physiologic Facts. ARTHUR W. PROETZ, St. Louis.
Discussion to be opened by RALPH A. FENTON, Portland, Ore.; WALTER E. CAMP, Minneapolis; T. R. GITTINS, Sioux City, Iowa, and ANDERSON C. HILDING, Duluth, Minn.

The Treatment of Hay Fever by Alcohol Injections in the Nose (Lantern Demonstration).
HARRIS H. VAIL, Cincinnati.
Discussion to be opened by FRANK J. NOVAK, Chicago; VIRGIL J. SCHWARTZ, Minneapolis, and M. F. ARBUCKLE, St. Louis.

The Diagnosis and Treatment of Primary Malignant Conditions of the Maxillary Sinuses (Lantern Demonstration).
KARL MUSSER HOUSER and EUGENE P. PENDERGRASS, Philadelphia.
Discussion to be opened by M. R. GUTTMAN, Chicago; F. Z. HAVENS, Rochester, Minn., and EDWARD C. SEWALL, San Francisco.

SECTION ON PEDIATRICS

MEETS IN PLANKINTON HALL, MILWAUKEE AUDITORIUM

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Wednesday, June 14—2 p. m.

Chairman's Address: The First Half-Century of the Section on Pediatrics.
FREDERIC W. SCHLUTZ, Chicago.

Postvaccinal Encephalitis (Lantern Demonstration). E. GORTER, Leyden, Holland.

B C G Investigation in New York City: The Safety and Immunizing Value of the Vaccine (Lantern Demonstration).
WILLIAM H. PARK, CAMILLE KERESZTURI and LUCY MICHELOW, New York.
Discussion to be opened by HORTON R. CASPARIS, Nashville, Tenn., and KARL E. KASSOWITZ, Milwaukee.

Limits of the Anti-Infective Value of Provitamin A (Carotene) (Lantern Demonstration).
S. W. CLAUSEN, Rochester, N. Y.
Discussion to be opened by WILLIAM WESTON, Columbia, S. C.; HENRY J. GERSTENBERGER, Cleveland, and I. NEWTON KUGELMASS, New York.

Acute Leukemia in Children (Lantern Demonstration). JEAN V. COOKE, St. Louis.
Discussion to be opened by F. C. RODDA, Minneapolis.

The Normal Sleep Pattern for Children and the Factors That Can Derange Such Pattern (Lantern Demonstration).
CHARLES GLENVILLE GIDDINGS, JR., Atlanta, Ga.
Discussion to be opened by M. HINES ROBERTS, Atlanta, Ga.

Thursday, June 15—2 p. m.

Serum Phosphatase in Infants and Children as Influenced by Various Diseases and Conditions (Lantern Demonstration).
HENRY J. GERSTENBERGER, ARTHUR J. HORESH, G. RICHARD RUSSELL and EDNA E. CHAPMAN, Cleveland.
Discussion to be opened by J. R. GERSTLEY, Chicago.

Acute Transitory Cerebral Manifestations in Infants and Children (Lantern Demonstration).
ABRAHAM LEVINSON, Chicago.
Discussion to be opened by M. G. PETERMAN, Milwaukee.

Endemic Cerebrospinal Fever in Childhood (Lantern Demonstration).
E. B. SHAW and H. E. THELANDER, San Francisco.
Discussion to be opened by C. A. ALDRICH, Winnetka, Ill., A. B. SCHWARTZ, Milwaukee, and JOSEPHINE B. NEAL, New York.

Lead Poisoning in Infants and Children (Lantern Demonstration).
CHARLES F. MCKHANN and EDWARD C. VOGT, Boston.
Discussion to be opened by R. A. KEHOE, Cincinnati; ROBERT A. STRONG, New Orleans, and KATSUJI KATO, Chicago.

Hypophyseal Infantilism (Lantern Demonstration).
E. KOST SHELTON and LYMAN A. CAVANAUGH, Santa Barbara, Calif., and HERBERT M. EVANS, New York.
Discussion to be opened by J. VICTOR GREENBAUM, Cincinnati, and HERBERT M. EVANS, New York.

Estimation of Cardiac Area in Children (Lantern Demonstration).
PAUL C. HODGES, WRIGHT ADAMS, WAYNE GORDON and BENJAMIN W. ANTHONY, Chicago.
Discussion to be opened by JULIUS H. HESS, Chicago.

Friday, June 16—2 p. m.

Election of Officers

Electrocardiographic Studies During Pneumonia in Infants and Children (Lantern Demonstration).
ARTHUR F. ABT and M. I. VINNECOUR, Chicago.
Discussion to be opened by LOUIS N. KATZ and STANLEY GIBSON, Chicago.

Birth Shock of the New-Born and Its Treatment (Lantern Demonstration).
I. NEWTON KUGELMASS, New York.
Discussion to be opened by L. R. DEBUYS, New Orleans, and RALPH M. TYSON, Philadelphia.

Heterologous Scarlet Fever (Lantern Demonstration).
JAMES D. TRASK and FRANCIS G. BLAKE, New Haven, Conn.
Discussion to be opened by JEAN V. COOKE, St. Louis.

A Clinical Study of Pulmonary Conditions Found in Children in the Chevalier Jackson Bronchoscopic Clinic (Lantern Demonstration).
RALPH M. TYSON, SAMUEL GOLDBERG and NATHANIEL M. LEVIN, Philadelphia.
Discussion to be opened by CHEVALIER JACKSON, Philadelphia, and A. GRAEME MITCHELL, Cincinnati.

Obstructive Laryngeal Dyspnea in Diphtheritic and Acute Infective Laryngitis (Lantern Demonstration). E. S. PLATOU, Minneapolis.
Discussion to be opened by W. AMBROSE MCGEE, Richmond, Va., and KENNETH A. PHELPS, Minneapolis.

SECTION ON PHARMACOLOGY AND THERAPEUTICS

MEETS IN NORTH SECTION, MARKET HALL, MILWAUKEE AUDITORIUM

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Chairman—E. M. K. GEILING, Baltimore.
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Secretary—C. H. GREENE, New York.
Executive Committee—R. M. WILDER, Rochester, Minn.; R. L. LEVY, New York; E. M. K. GEILING, Baltimore.

Wednesday, June 14—2 p. m.

The Dietary Treatment of Diseases of the Liver and Gallbladder (Lantern Demonstration).
J. RUSSELL TWISS and CARL H. GREENE, New York.

Clinical Manifestations of Hypermagnesemia and Hypomagnesemia and the Effects of Renal Insufficiency on the Action of Barbitals.
ARTHUR D. HIRSCHFELDER, Minneapolis.

Study of the Different Types of Edema and the Effect of Diuretics (Lantern Demonstration).
MELVIN W. BINGER and NORMAN M. KEITH, Rochester, Minn.
Discussion to be opened by M. HERBERT BARKER, Chicago.

Recent Studies on Toad Poisons (Lantern Demonstration). K. K. CHEN, Indianapolis.
Discussion to be opened by L. G. ROWNTREE, Philadelphia, and WILLIAM S. MIDDLETON, Madison, Wis.

The Effect of Drugs on the Induced Standstill of the Human Heart (Lantern Demonstration).
M. H. NATHANSON, Minneapolis.

The Treatment of Filariasis.
F. W. O'CONNOR, New York.

Thursday, June 15—2 p. m.

Chairman's Address (Lantern Demonstration).
E. M. K. GEILING, Baltimore.

The Relationship Between Active Principles of the Placenta and Pregnancy Blood and Urine, and Those of the Anterior Lobe of the Pituitary, as Indicated by Numerous Experiments on Hypophysectomized Animals (Lantern Demonstration). J. B. COLLIP, Montreal, Canada.

Experimental Exophthalmos and Hyperthyroidism in Guinea-Pigs: Clinical Course, Pathology and Response to Iodides (Lantern Demonstration).
HARRY B. FRIEDGOOD, Baltimore.
Discussion to be opened by WALTER M. BOOTHBY, Rochester, Minn.

The Effects of Glycocoll in Muscular Dystrophy, with Especial Reference to Changes in Metabolism and in the Composition of Certain Voluntary Muscles.
J. G. REINHOLD, J. H. CLARK, G. R. KINGSLEY, W. A. WOLF and J. W. MCCONNELL, Philadelphia.

The Treatment of Myasthenia Gravis with Glycine and Ephedrine (Lantern and Motion Picture Demonstration).
WALTER M. BOOTHBY, Rochester, Minn.
Discussion on paper of MR. REINHOLD, DR. CLARK, MR. KINGSLEY, DRS. WOLFF and MCCONNELL and of DR. BOOTHBY to be opened by HARRIET EDGEWORTH, Tucson, Ariz.; L. G. ROWNTREE, Philadelphia, and FREDERICK P. MOERSCH, Rochester, Minn.

Insulin in the Treatment of Tuberculosis.
FREDERICK M. ALLEN, Morristown, N. J.

Friday, June 16—2 p. m.

Election of Officers

SYMPOSIUM ON THE TREATMENT OF ACUTE INFECTIOUS DISEASES

Therapeutic Results with Scarlet Fever Antitoxin (Lantern Demonstration).
LUKE W. HUNT, Chicago.

Specific Treatment of Septic Infections, Particularly with Aid of Bacteriophages (Lantern Demonstration). WARD J. MACNEAL, New York.

An Antiserum for the Treatment of Tularemia (Lantern Demonstration).
LEE FOSHAY, Cincinnati.

Immunization with Bacillus Pertussis Vaccine.
LOUIS W. SAUER, Evanston, Ill.
Discussion to be opened by RAYMOND P. SCHOWALTER, Milwaukee.

Problems Connected with the Etiology and Prophylaxis of Disease of Upper Respiratory Tract.
YALE KNEELAND, JR., New York.

SECTION ON PATHOLOGY AND PHYSIOLOGY

MEETS IN NORTH SECTION, MARKET HALL
MILWAUKEE AUDITORIUM

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Wednesday, June 14—9 a. m.

Benign Lesions of the Breast, Simulating Cancer: Diagnosis and Treatment (Lantern Demonstration). MAX CUTLER, Chicago.

The Pathologic Physiology of Teratoma Testis (Lantern Demonstration).
R. S. FERGUSON, New York.

The Present State of Biopsy (Lantern Demonstration).
A. B. MCGRAW and F. W. HARTMAN, Detroit.

Strumi Ovari (Lantern Demonstration).
ALFRED PLAUT, New York.

Ovarian Tumors Producing Secondary Sex Changes (Lantern Demonstration).
EMIL NOVAK, Baltimore.

Leukemic Reticulo-Endotheliosis (Monocytic Leukemia) (Lantern Demonstration).
A. G. FOORD, Pasadena, Calif.
Discussion to be opened by ROY R. KRACKE, Emory University, Ga.

Thursday, June 15—9 a. m.

Chairman's Address: Nonspecific Protein Therapy (Lantern Demonstration).
CLYDE BROOKS, New Orleans.

A Comparison of the Therapeutic Value of Typhoid Protein and Histamine in Urgent Cases of Asthma (Lantern Demonstration).
N. F. THIBERGE, New Orleans.

The Present Status of Nonspecific Protein Therapy in Peptic Ulcer (Lantern Demonstration).
A. L. LEVIN, New Orleans.

The Physiology of Hyperpyrexia (Lantern Demonstration). CLARENCE A. NEYMANN, Chicago.

Studies on Pollen and Pollen Extracts: The Chemical Nature of Pollen Allergens.
LEON UNGER, Chicago.

A Characterization of Pneumonia Due to Type III Pneumococcus and a Biologically Closely Related Strain Type VIII (Cooper) (Lantern Demonstration). MAXWELL FINLAND, Boston.

Growing Tubercle Bacilli (Lantern Demonstration).
H. J. CORPER, Denver.

Friday, June 16—9 a. m.

Election of Officers

The Toxemias of Pregnancy: The Nitrogen Metabolism (Lantern Demonstration).
ALLAN WINTER ROWE, Boston.

Lipoid Nephrosis and Its Relation to Glomerular Nephritis (Lantern Demonstration).
E. G. BANNICK, Rochester, Minn.

Studies on Blood Sugar Values (Lantern Demonstration).
FRED C. KOCH, ELIZABETH M. KOCH and M. L. HATHAWAY, Chicago.

The Significance of the Iodine Content of Human Blood (Lantern Demonstration).
GEORGE M. CURTIS and FRANCIS J. PHILLIPS, Columbus, Ohio.

The Pathology of Medical Shock or Circulatory Collapse (Lantern Demonstration).
V. H. MOON, Philadelphia.

Postmortem Examinations: Method of Obtaining Permission (Lantern Demonstration).
WILLIAM J. HOFFMAN, New York.

SECTION ON NERVOUS AND MENTAL DISEASES

MEETS IN NORTH SECTION, JUNEAU HALL,
MILWAUKEE AUDITORIUM

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Wednesday, June 14—2 p. m.

Various Aspects of Seizure Graphs in Epilepsy (Lantern Demonstration).
THEODORA WHEELER, Chicago.
Discussion to be opened by ROLAND P. MACKAY and RICHARD B. RICHTER, Chicago.

A Critical Analysis of the Symptomatology of a Series of Verified Frontal Lobe Tumors.
CHARLES H. FRAZIER, Philadelphia.
Discussion to be opened by ALFRED W. ADSON, Rochester, Minn., and MAX PEET, Ann Arbor, Mich.

Meningiomas of the Sphenoidal Ridge (Lantern Demonstration). PERCIVAL BAILEY, Chicago.
Discussion to be opened by CHARLES H. FRAZIER, Philadelphia.

The Surgical Treatment of Septic Meningitis (Lantern Demonstration).
ROLAND M. KLEMME, St. Louis.
Discussion to be opened by ALFRED W. ADSON, Rochester, Minn., and CLAUDE C. COLEMAN, Richmond, Va.

Facial Diplegia in Lymphatic Leukemia (Lantern Demonstration).
PAUL H. GARVEY and JOHN S. LAWRENCE, Rochester, N. Y.
Discussion to be opened by GEORGE B. HASSIN, Chicago.

Leukemic Changes in the Brain (Lantern Demonstration). I. B. DIAMOND, Chicago.
Discussion to be opened by PAUL H. GARVEY, Rochester, N. Y., and RICHARD H. JAFFE, Chicago.

Lying Considered as a Problem That Concerns Physicians. THEODORE DILLER, Pittsburgh.
Discussion to be opened by A. I. ROSENBERGER, Milwaukee, and LLOYD H. ZIEGLER, Albany, N. Y.

Thursday, June 15—2 p. m.

Chairman's Address: On So-Called Circulation of the Spinal Fluid (Lantern Demonstration).
GEORGE B. HASSIN, Chicago.

Hysterical Fugues: Report of Cases (Lantern Demonstration).
LLOYD H. ZIEGLER, Albany, N. Y.
Discussion to be opened by FREDERICH P. MOERSCH, Rochester, Minn.

Address. S. A. K. WILSON, London, England.

Metabolic and Therapeutic Studies in the Myopathies with Special Reference to Glycine Administration (Lantern Demonstration).
MEYER M. HARRIS and ERWIN BRAND, New York.
Discussion to be opened by EDWIN G. ZABRISKIE, New York.

Results of Malaria Therapy in Neurosyphilis (Lantern Demonstration).
PAUL A. O'LEARY and ASHTON L. WELSH, Rochester, Minn.
Discussion to be opened by WALTER FREEMAN, Washington, D. C., and UDO J. WILE, Ann Arbor, Mich.

The Results of Treatment of the Neurologic Complications of Pernicious Anemia (Lantern Demonstration. ROY R. GRINKER, Chicago.
Discussion to be opened by WALTER F. SCHALLER, San Francisco, and JOHN L. GARVEY, Milwaukee.

Acute Disseminated Encephalomyelitis: Its Clinical Manifestations and Sequelae (Lantern Demonstration).
RICHARD E. STOUT and LOUIS J. KARNOSH, Cleveland.
Discussion to be opened by HOWARD D. MCINTYRE, Cincinnati, and THEODORE T. STONE, Chicago.

Friday, June 16—2 p. m.

Election of Officers

The Pharmacologic Action of the Barbiturates and Their Value in Neuropsychiatric Conditions.
CARL P. WAGNER, Hartford, Conn.
Discussion to be opened by W. J. BLECKWENN, Madison, Wis.

The Mechanism of the Anxiety States: Its Importance in General Medicine.
TITUS H. HARRIS and ABE HAUSER, Galveston, Texas.
Discussion to be opened by WALTER C. ALVAREZ, Rochester, Minn., and FRANKLIN G. EBAUGH, Denver.

Generalized Edema Occurring Only at Menstrual Period (Lantern Demonstration).
WILLIAM A. THOMAS, Chicago.
Discussion to be opened by EMIL NOVAK, Baltimore, and GEORGE W. HALL and EDWARD ALLEN, Chicago.

Neurosurgical Considerations of Malignant Metastases (Lantern Demonstration).
ERIC OLDBERG, Chicago.
Discussion to be opened by GEORGE W. HALL, Chicago, and MAX M. PEET, Ann Arbor, Mich.

Cerebral Cysts (Lantern Demonstration).
WINCHELL MCK. CRAIG, Rochester, Minn.
Discussion to be opened by JAMES W. KERNOHAN, Rochester, Minn., and HANS H. REESE, Madison, Wis.

Sequelae and Complications of Craniocerebral Injuries (Lantern Demonstration).
ALBERT S. CRAWFORD, Detroit.
Discussion to be opened by THOMAS J. HELDT, Detroit, and LOYAL DAVIS, Chicago.

SECTION ON DERMATOLOGY AND SYPHILOLOGY

MEETS IN SOUTH SECTION, JUNEAU HALL, MILWAUKEE AUDITORIUM

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Wednesday, June 14—2 p. m.

Chairman's Address: Dermatitis Due to Woods.
FRANCIS EUGENE SENEAR, Chicago.

Cutaneous Ulcers Treated by the Sulphydryl Containing Amino Acid Cysteine (Lantern Demonstration).
LOUIS A. BRUNSTING and DAISY G. SIMONSEN, Rochester, Minn.
Discussion to be opened by JOSEPH V. KLAUDER, Philadelphia.

Experimental Aspects of Fixed Allonal Eruption (Lantern Demonstration).
ADOLPH B. LOVEMAN, Ann Arbor, Mich.
Discussion to be opened by SAMUEL M. PECK, New York.

Recalcitrant Pustular Eruptions of the Palms and Soles (Lantern Demonstration).
GEORGE C. ANDREWS, FREDERICH W. BIRKMAN and RICHARD J. KELLY, New York.
Discussion to be opened by JAMES HERBERT MITCHELL, Chicago.

The Blood Lipoids in Xanthoma (Lantern Demonstration).
JEFFREY C. MICHAEL and HENRY O. NICHOLAS, Houston, Texas.
Discussion to be opened by UDO J. WILE, Ann Arbor, Mich.

Traumatic Epidermic Cysts (Lantern Demonstration).
MAX S. WIEN and MARCUS R. CARO, Chicago.
Discussion to be opened by WALTER J. HIGHMAN, New York.

Recent Immunologic Studies in Tobacco Hypersensitivity (Lantern Demonstration).
MARIAN B. SULZBERGER, New York.
Discussion to be opened by GEORGE MILLER MAC KEE, New York.

Thursday, June 15—2 p. m.

The Lipid Partition and the Albumin-Globulin Ratio in Syphilis (Lantern Demonstration).
ISADORE ROSEN, FRANCES KRASNOW and MORRIS A. LYONS, New York.
Discussion to be opened by ARTHUR W. STILLIANS, Chicago.

Clinical Observations on a New Arsenical Synthetic in the Treatment of Syphilis (Lantern Demonstration).
S. WILLIAM BECKER and M. E. OBERMAYER, Chicago.
Discussion to be opened by JOHN H. STOKES, Philadelphia.

Treatment of Neurosyphilis with Acetarsone Given Intravenously (Lantern Demonstration).
LEO SPIEGEL, New York.
Discussion to be opened by CARROLL S. WRIGHT, Philadelphia.

Experimental Inguinal Gland Transference in Cases of Early and Late Syphilis (Lantern Demonstration).
C. J. LUNSFORD, Oakland, Calif., and P. W. DAY, Reprisa, Calif.

Discussion to be opened by MARTIN F. ENGMAN, JR., St. Louis.

Divided Doses of Typhoid Vaccine in the Fever Therapy of Neurosyphilis.
J. R. DRIVER and HENRY C. SHAW, Cleveland.
Discussion to be opened by PAUL A. O'LEARY, Rochester, Minn.

The Value of Silver Arsphenamine in the Treatment of Early Syphilis: Conclusions Based on a Study of One Hundred Cases (Lantern Demonstration).
A. BENSON CANNON, New York.
Discussion to be opened by EARL D. OSBORNE, Buffalo.

Tracing the Transmission of Syphilis: An Epidemiologic Study (Lantern Demonstration).
DUDLEY C. SMITH and WILLIAM A. BRUMFIELD, JR., University, Va.
Discussion to be opened by THOMAS PARRAN, JR., Albany, N. Y.

Friday, June 16—2 p. m.

Election of Officers

Granuloma Coccidioides—Further Observation on the Use of Antimony and Potassium Tartrate and Roentgen Therapy in Treatment: Report of an Additional Case (Lantern Demonstration).
CHARLES C. TOMLINSON and PAUL M. BANCROFT, Omaha.
Discussion to be opened by FRED D. WEIDMAN, Philadelphia.

Generalized Angiomatosis with Particular Reference to Hereditary Hemorrhagic Telangiectasis (Lantern Demonstration).
JOHN F. MADDEN, St. Paul.
Discussion to be opened by MICHAEL H. EBERT, Chicago.

The Dextrose and Water Content of Normal and Inflammatory Skin (Lantern Demonstration).
DONALD M. PILLSBURY and GEORGE V. KULCHAR, Philadelphia.
Discussion to be opened by S. WILLIAM BECKER, Chicago.

A Fatal Case of Monilial Infection of the Skin (Lantern Demonstration).
ETHEL M. ROCKWOOD and ARTHUR M. GREENWOOD, Boston.
Discussion to be opened by CLEVELAND J. WHITE, Chicago.

Food Eczema (Lantern Demonstration).
J. GARDNER HOPKINS and BEATRICE M. KESTEN, New York.
Discussion to be opened by ALBERT H. ROW, Oakland, Calif.

Tuberculosis of the Face (Lantern Demonstration).
HENRY E. MICHELSON and L. H. WINER, Minneapolis.
Discussion to be opened by MARION B. SULZBERGER, New York.

Excessive Solar and Phototherapeutic Radiation as a Causative Factor in Certain Diseases of the Skin. PAUL E. BECHET, New York.
Discussion to be opened by ELMORE B. TAUBER, Cincinnati.

SECTION ON PREVENTIVE AND INDUSTRIAL MEDICINE AND PUBLIC HEALTH

MEETS ON STAGE OF MAIN ARENA, MILWAUKEE AUDITORIUM

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Executive Committee—A. J. LANZA, New York; J. E. GORDON, Detroit; J. N. BAKER, Montgomery, Ala.

Wednesday, June 14—9 a. m.

SYMPOSIUM ON SILICOSIS

The Epidemiology of Silicosis.
A. J. LANZA, New York.
Discussion to be opened by EMERY R. HAYHURST, Columbus, Ohio.

The Clinical Manifestations of Silicosis (Lantern Demonstration).
R. R. SAYERS, Washington, D. C.
Discussion to be opened by BENJAMIN GOLDBERG, Chicago.

The Roentgenologic Aspects of Pneumonoconiosis (Lantern Demonstration).
HENRY K. PANCOAST, Philadelphia.
Discussion to be opened by E. P. PENDERGRASS, Philadelphia.

The Pathologic Aspects of Silicosis (Lantern Demonstration).
LEROY U. GARDNER, Saranac Lake, N. Y.

The Silicon Dioxide Content of Lungs in Health and in Disease. WILLIAM D. MCNALLY, Chicago.
Discussion on papers of DRS. GARDNER and MCNALLY to be opened by RICHARD H. JAFFE and C. O. SAPPINGTON, Chicago.

The Medicolegal Aspects of Silicosis.
ARTHUR DOE, Milwaukee.
Discussion to be opened by J. J. MOORE, Chicago.

Thursday, June 15—9 a. m.

Chairman's Address.
J. N. BAKER, Montgomery, Ala.

Putting the Preventive Idea into Private Practice: The Need for an Intensive Campaign Among Undergraduate and Graduate Medical Students.
W. H. PERKINS, New Orleans.
Discussion to be opened by M. E. BARNES, Iowa City.

Public Care of the Sick in New York State.
THOMAS PARRAN, JR., Albany, N. Y.
Discussion to be opened by W. H. ROSS, Brentwood, N. Y.

The Relation of Diphyllobothrium Latum Infestation to the Public Health (Lantern Demonstration).
T. B. MAGATH, Rochester, Minn.
Discussion to be opened by MOSES BARRON, Minneapolis, and M. W. LYON, South Bend, Ind.

Spray Residue Poisoning.
W. V. EVANS, Evanston, Ill.
Discussion to be opened by H. D. GARRETT, Chicago, and J. C. GEIGER, San Francisco.

Dermatitis in the Rubber Industry (Lantern Demonstration). LOUIS SCHWARTZ, New York.
Discussion to be opened by P. A. DAVIS, and D. M. MCDONALD, Akron, Ohio.

Friday, June 16—9 a. m.

Election of Officers

Two Years of the Massachusetts Pneumonia Program (Lantern Demonstration).
GAYLORD W. ANDERSON and RODERICK HEFFRON, Boston.

The Epidemiology of Lobar Pneumonia (Lantern Demonstration). WILSON G. SMILLIE, Boston.

The Distribution of the Newly Classified Serologic Types of Pneumococci in Disease (Lantern Demonstration). W. D. SUTLIFF, Boston.
Discussion on papers of DRS. ANDERSON and HEFFRON, DR. SMILLIE and DR. SUTLIFF to be opened by H. A. REIMANN, Minneapolis; WILLIAM H. PARK, New York, and MAXWELL FINLAND, Boston.

Tuberculosis Studies in Tennessee: A study of Tuberculosis in the Negro as Related to Certain Conditions of Environment (Lantern Demonstration).
JAMES A. CRABTREE, Nashville, Tenn.

Tuberculosis Among Negroes: A Discussion of the Major Problems That Complicate Its Control.
C. ST. C. GUILD, New York.
Discussion on papers of DRS. CRABTREE and GUILD to be opened by HORTON R. CASPARIS and E. L. BISHOP, Nashville, Tenn.

Food Poisoning in Cities: A report of Three Outbreaks. J. C. GEIGER, San Francisco.
Discussion to be opened by E. O. JORDAN, Chicago.

SECTION ON UROLOGY

MEETS IN SOUTH SECTION, JUNEAU HALL, MILWAUKEE AUDITORIUM

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Executive Committee—A. I. FOLSOM, Dallas, Texas; J. D. BARNEY, Boston; N. G. ALCOCK, Iowa City.

Wednesday, June 14—9 a. m.

The Practical Application of Intravenous Urography (Lantern Demonstration).
W. F. BRAASCH, Rochester, Minn.

Some Principles of Excretion Urography with a Report of Experimental Work on New Compounds, Particularly Sodium Iodohippurate for Oral and Intravenous Urography.
MOSES SWICK, New York.
Discussion to be opened by IRA R. SISK, Madison, Wis., and L. T. LEWALD, New York.

Urography as a Guide in Diverticula of the Urinary Bladder—Indication, Treatment: Report of Cases (Lantern Demonstration).
R. H. HERBST, Chicago.

A Study of the Relative Clinical Value of Intravenous Urography and Pyelography Based on Diagnostic Results: Report of Traumatic Injuries Following Pyelography (Lantern Demonstration). R. B. HENLINE, New York.
Discussion to be opened by R. E. CUMMING, Detroit, and T. D. MOORE, Memphis, Tenn.

The Routine Use of Neoiopax in Suspected Injuries to the Kidney, Bladder and Other Urinary Organs (Lantern Demonstration).
C. M. MCKENNA, Chicago.
Discussion to be opened by G. H. EWELL, Madison, Wis., and M. W. SHERWOOD, Milwaukee.

Urethrocystography, (Lantern Demonstration).
J. A. HYAMS, New York; HERBERT R. KENYON, Cedarhurst, N. Y., and SAMUEL E. KRAMER, Perth Amboy, N. J.
Discussion to be opened by M. A. NICHOLSON, Duluth, Minn., and ROBERT GUTIERREZ, New York.

Thursday, June 15—9 a. m.

SYMPOSIUM ON TRANSURETHRAL RESECTION AND PROSTATIC SURGERY

Chairman's Address: A comparison of Immediate Results in Two Equal Consecutive Series of Cases of Prostatic Resection and Surgical Prostatectomy (Lantern Demonstration).
N. G. ALCOCK, Iowa City.

A Clinical Consideration of Transurethral Resection with Analyses and Studies of Results.
LEON HERMAN and LLOYD B. GREENE, Philadelphia.

Individualizing the Prostatic Patient in the Selection of Treatment (Lantern Demonstration).
W. E. LOWER and W. J. ENGEL, Cleveland.
Discussion on papers of DR. ALCOCK, DRS. HERMAN and GREENE and DRS. LOWER and ENGEL to be opened by E. L. KEYES, New York; H. C. BUMPUS, Rochester, Minn, and J. D. BARNEY, Boston.

A Review of the Prostatic Problem Based on Developments of the Past Three Years in This Field of Surgery (Lantern Demonstration).
O. S. LOWSLEY, New York.
Discussion to be opened by A. R. STEVENS, New York; OMAR F. ELDER, Atlanta, Ga., and J. R. DILLON, San Francisco.

Prostatic Resorption: A New Treatment for Early Prostatism, with Presentation of New Instruments and New Currents.
MAXIMILIAN STERN, De Land, Fla.

The Relief of Prostatic Obstruction (Lantern Demonstration). C. W. COLLINGS, New York.
Discussion on papers of DRS. STERN and COLLINGS to be opened by F. E. B. FOLEY, St. Paul; T. J. KIRWIN, New York, and C. H. DET. SHIVERS, Atlantic City, N. J.

A Presentation of a Method for Local Infiltration Anesthesia of the Prostate Preliminary to Prostatic Resection (Lantern Demonstration).
W. N. WISHARD, H. G. HAMER and H. O. MERTZ, Indianapolis.
Discussion to be opened by G. J. THOMPSON, Rochester, Minn., and H. M. STANG, Eau Claire, Wis.

Friday, June 16—9 a. m.

Election of Officers

SYMPOSIUM ON THE PYELITIS OF PREGNANCY

Kidney Changes in Pregnancy (Lantern Demonstration).
H. L. KRETSCHMER and N. S. HEANEY, Chicago.

The Postpartum Bladder (Lantern Demonstration).
L. M. RANDALL, Rochester, Minn.
Discussion on papers of DRS. KRETSCHMER and HEANEY and DR. RANDALL to be opened by VINCENT G. O'CONOR, Chicago, and W. E. SEVENS, San Francisco.

The Relation of Pregnancy Changes and Infections to the Recurrence of Infections in Subsequent Pregnancies (Lantern Demonstration).
E. G. CRABTREE, Boston.

The Postpartum Kidney.
H. W. E. WALTHER and R. M. WILLOUGHBY, New Orleans.
Discussion on papers of DR. CRABTREE and DRS. WALTHER and WILLOUGHBY to be opened by G. C. PRATHER, Boston; A. I. FOLSOM, Dallas, Texas, and ANSON L. CLARK, Rochester, Minn.

Pyelitis and Pyelonephritis in Pregnancy—Studies with Reference to the Persistence of Symptoms Following Delivery; Treatment: Indications and Results (Lantern Demonstration).
H. D. FURNISS, New York.

The Treatment of Certain Cases of Pyelitis of Pregnancy Without the Use of the Ureteral Catheter: An Explanation Based on the Physiology of the Bladder.
D. K. ROSE, St. Louis.
Discussion on papers of DRS. FURNISS and ROSE to be opened by R. M. NESBIT, Ann Arbor, Mich., and J. K. ORMOND, Detroit.

The Effect of Pregnancy on the Urinary Tract (Lantern Demonstration).
HARRY P. LEE, Iowa City.
Discussion to be opened by W. M. KEARNS, Milwaukee.

SECTION ON ORTHOPEDIC SURGERY

MEETS IN NORTH SECTION, JUNEAU HALL, MILWAUKEE AUDITORIUM

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Executive Committee—HENRY W. MEYERDING, Rochester, Minn.; J. W. SEVER, Boston; W. BARNETT OWEN, Louisville, Ky.

Wednesday, June 14—9 a. m.

Intracapsular Fractures of the Hip: A New Device for Lateral Osteosynthesis (Lantern Demonstration). MYRON O. HENRY, Minneapolis.
Discussion to be opened by E. L. ELIASON, Philadelphia; W. E. WOLCOTT, Des Moines, Iowa; CHESTER C. SCHNEIDER and JOHN W. POWERS, Milwaukee, and E. T. EVANS, Minneapolis.

Epinephrine and Pilocarpine in the Treatment of Progressive Pseudohypertrophic Muscular Dystrophy (Lantern Demonstration).
GARRY DE N. HOUGH, JR., Springfield, Mass.
Discussion to be opened by ARTHUR STEINDLER, Iowa City, and H. B. THOMAS and PHILIP LEWIN, Chicago.

Tuberculosis of the Greater Trochanter (Lantern Demonstration).
HENRY W. MEYERDING, Rochester, Minn., and R. J. MROZ, Rockford, Ill.
Discussion to be opened by CARL E. BADGLEY and PAUL C. WILLIAMS, Ann Arbor, Mich., and FEDERICK C. KIDNER, Detroit.

Knee Joint Arthroplasty (Motion Picture Demonstration). W. R. MACAUSLAND, Boston.

Original Arthroplastic Operations for the Hip and Knee (Lantern Demonstration).
FRED H. ALBEE, New York.
Discussion on papers of DRS. MACAUSLAND and ALBEE to be opened by W. B. OWEN, Louisville, Ky., and W. C. CAMPBELL, Memphis, Tenn.

Relaxed or Resistant Congenital Clubfoot of Early Childhood (Lantern Demonstration).
BURT G. CHOLLET, Toledo, Ohio.
Discussion to be opened by ROBERT CAROTHERS, Cincinnati, and HAROLD A. SOFIELD, Chicago.

Recurrent Dislocation of the Patella (Lantern Demonstration).
GEORGE A. WILLIAMSON and WALLACE H. COLE, St. Paul.
Discussion to be opened by HERMAN C. SCHUMM, Milwaukee; PAUL W. GIESSLER, Minneapolis, and JAMES A. DICKSON, Cleveland.

Thursday, June 15—9 a. m.

Use of Autogenous Bone Pin Through Acromion into Humeral Head in Shoulder Arthrodeses (Lantern Demonstration).
J. WARREN WHITE, Greenville, S. C.
Discussion to be opened by ROBERT E. BURNS, Madison, Wis., and EMIL D. W. HAUSER, Chicago.

Traumatic Backache (Lantern Demonstration).
PAUL N. JEPSON, Philadelphia.

Low Back Pain with Especial Reference to the Importance of the Articular Facets (Lantern Demonstration).
RALPH K. GHORMLEY, Rochester, Minn.
Discussion on papers of DRS. JEPSON and GHORMLEY to be opened by HENRY W. MEYERDING, Rochester, Minn.; ROBERT B. OSGOOD, Boston, and LEWIS CLARK WAGNER and SAMUEL KLEINBERG, New York.

Chairman's Address: Ununited Fractures of the Humerus (Lantern Demonstration).
W. BARNETT OWEN, Louisville, Ky.

Aberrant Ossification in the Foot (Lantern Demonstration). MARION N. GIBBONS, Cleveland.
Discussion to be opened by ARTHUR STEINDLER, Iowa City; R. PLATO SCHWARTZ, Rochester, N. Y., and MARCUS H. HOBART, Evanston, Ill.

Prehallux as a Cause of Flatfoot: Operative Correction (Lantern Demonstration).
FREDERICK C. KIDNER, Detroit.
Discussion to be opened by EMIL S. GEIST, Minneapolis, and CHARLES W. PEABODY, Detroit.

Early Diagnosis and Treatment of Congenital Dislocation of Hip (Lantern Demonstration).
JOSEPH A. FREIBERG, Cincinnati.
Discussion to be opened by JOHN L. PORTER, Evanston, Ill.: RALPH K. GHORMLEY, Rochester, Minn., and W. P. BLOUNT, Milwaukee.

Friday, June 16—9 a. m.

Election of Officers

The Treatment of Severe Fracture of the Shaft of the Tibia by Skeletal Traction (Lantern Demonstration). W. K. WEST, Oklahoma City.
Discussion to be opened by F. J. GAENSLEN, Milwaukee; W. B. CARRELL, Dallas, Texas, and D. H. LEVINTHAL, Chicago.

Osteotomy for Flexion Deformity at the Hip Due to Anterior Poliomyelitis (Lantern Demonstration). EDWIN W. RYERSON, Chicago.
Discussion to be opened by J. S. SPEED, Memphis, Tenn.; JOHN O. DIETERLE, Milwaukee, and E. H. WILSON, Columbus, Ohio.

Fracture Healing: Its Influence on Choice of Treatment Methods (Lantern Demonstration).
CLAY RAY MURRAY, New York.

The Effect of a Local Calcium Depot on Osteogenesis and Healing of Fractures (Lantern Demonstration). J. ALBERT KEY, St. Louis.
Discussion on papers of DRS. MURRAY and KEY to be opened by ANDREW C. IVY, Chicago; F. J. GAENSLEN, Milwaukee; E. L. COMPERE, Chicago, and R. D. SCHROCK, Omaha.

The Albee Bone Graft and the Orr Method of Dressing as a Method of Treatment in Recent Compound Fracture (Lantern Demonstration).
H. WINNETT ORR, Lincoln, Neb.
Discussion to be opened by FRED H. ALBEE, New York; E. B. MUMFORD, Indianapolis, and E. D. MCBRIDE, Oklahoma City.

Subperiosteal Resection of the Tibial Shaft in Osteomyelitis (Lantern Demonstration).
D. M. BOSWORTH, New York.
Discussion to be opened by D. B. PHEMISTER, Chicago; J. E. M. THOMSON, Lincoln, Neb., and WALLACE H. COLE, St. Paul.

Old, Stiff Painful Shoulders, Exclusive of Tuberculosis and Purulent Infections (Motion Picture Demonstration). EDSON B. FOWLER, Chicago.
Discussion to be opened by WALLACE S. DUNCAN, Cleveland; E. B. MUMFORD, Indianapolis; EDWIN W. RYERSON, Chicago; F. J. GAENSLEN, Milwaukee, and S. H. EASTON, Peoria, Ill.

SECTION ON GASTRO-ENTEROLOGY AND PROCTOLOGY

MEETS ON STAGE OF MAIN ARENA, MILWAUKEE AUDITORIUM

OFFICERS OF SECTION

Chairman—CURTICE ROSSER, Dallas, Texas.
Vice Chairman—ALBERT F. R. ANDRESEN, Brooklyn.
Secretary—H. L. BOCKUS, Philadelphia.

Executive Committee—DUDLEY A. SMITH, San Francisco; GEORGE B. EUSTERMAN, Rochester, Minn.; CURTICE ROSSER, Dallas, Texas.

Wednesday, June 14—2 p. m.

Stricture of the Rectum: Some of Its Problems. COLLIER F. MARTIN, Philadelphia.
Discussion to be opened by CLYDE W. MORTER, Milwaukee, and HERBERT T. HAYES, Houston, Texas.

Management of Advanced Carcinoma of the Gastro-Intestinal Tract (Lantern Demonstration). FRANK G. YEOMANS, New York.
Discussion to be opened by GEORGE E. BINKLEY, New York, and HARRY H. BOWING, Rochester, Minn.

A Plastic Operation for Certain Types of Hemorrhoids (Lantern Demonstration).
W. A. FANSLER and JAMES KERR ANDERSON, Minneapolis.
Discussion to be opened by DUDLEY A. SMITH, San Francisco, and CLEMENT L. MARTIN, Chicago.

Preoperative and Postoperative Management of Diseases of the Upper Part of the Digestive Tract. JAMES F. WEIR and WALTMAN WALTER, Rochester, Minn.
Discussion to be opened by WALTER L. PALMER, Chicago, and RUSSELL L. HADEN, Cleveland.

The Present Status of Chronic Ulcerative Colitis, with Special Reference to Etiology (Lantern Demonstration). MOSES PAULSON, Baltimore.
Discussion to be opened by SARA M. JORDAN, Boston, and FRANK SMITHIES, Chicago.

Chronic Ulcerative Colitis: Additional Proof of Its Systemic Origin (Lantern Demonstration).
L. A. BUIE and J. A. BARGEN, Rochester, Minn.
Discussion to be opened by HORACE W. SOPER, St. Louis, and FRANKLIN W. WHITE, Boston.

Thursday, June 15—2 p. m.

Chairman's Address: Current Questions in Proctology. CURTICE ROSSER, Dallas, Texas.

Migraine—An Allergic Phenomenon (Lantern Demonstration). ALBERT F. R. ANDERSEN, Brooklyn.
Discussion to be opened by ALBERT H. ROWE, Oakland, Calif., and HARRY B. WILMER, Philadelphia.

Fundamental Difficulties in the Treatment of Gastric and Duodenal Ulcer (Lantern Demonstration). WALTER L. PALMER, Chicago.
Discussion to be opened by BRUCE C. LOCKWOOD, Detroit, and SIDNEY A. PORTIS, Chicago.

Gastric Acidity in Thyroid Dysfunction (Lantern Demonstration). S. ALLEN WILKINSON, JR., Boston.
Discussion to be opened by RALPH C. BROWN, Chicago, and ASHER WINKELSTEIN, New York.

Hyperinsulinism—A Disease Entity: A Résumé of the Etiology, Pathology, Symptoms, Diagnosis, Prognosis and Treatment of Spontaneous Insulogenic Hypoglycemia (Lantern Demonstration). SEALE HARRIS, BIRMINGHAM, Ala.
Discussion to be opened by RUSSELL M. WILDER, Rochester, Minn., and HENRY J. JOHN, Cleveland.

The Digestive Tract and Diet in Anemia (Lantern Demonstration). MAURICE B. STRAUSS, Boston.
Discussion to be opened by CYRUS C. STURGIS, Ann Arbor, Mich., and LAY MARTIN, Baltimore.

Vitamin B Deficiency and the Atrophic Tongue.
ADOLPH M. HUTTER and WILLIAM S. MIDDLETON, with the Collaboration of HARRY STEENBOCK, Madison, Wis.
Discussion to be opened by ADOLPH SACHS, Omaha, and FRANK D. GORHAM, St. Louis.

Friday, June 16—2 p. m.

Election of Officers

SYMPOSIUM ON ABDOMINAL PAIN

Sensitivity of the Individual to Pain with Special Reference to Abdominal Pain. EMANUEL LIBMAN, New York.
Discussion to be opened by RUSSELL S. BOLES, Philadelphia, and BURRILL B. CROHN, New York.

Mechanism of Abdominal Pain of Visceral Origin. WALTER C. ALVAREZ, Rochester, Minn.
Discussion to be opened by JOSEPH A. CAPPS, Chicago, and SOMA WEISS, Boston.

Clinical Aspects of Abdominal Pain of Visceral Origin. F. M. POTTENGER, Monrovia, Calif.
Discussion to be opened by FRED M. SMITH, Iowa City, and ELMER L. EGGLESTON, Battle Creek, Mich.

Pain and Tenderness of the Abdominal Wall (Lantern Demonstration.) JOHN BERTON CARNETT, Philadelphia.
Discussion to be opened by WILLIAM J. KERR, San Francisco, and JOHN G. MATEER, Detroit.

Anorectal Pain and Its Clinical Significance. LOUIS J. HIRSCHMAN, Detroit.
Discussion to be opened by JEROME M. LYNCH, New York, and DESCUM C. MCKENNY, Buffalo.

SECTION ON RADIOLOGY

MEETS IN WALKER HALL, MILWAUKEE AUDITORIUM

OFFICERS OF SECTION

Chairman—George W. GRIER, Pittsburgh.
Vice Chairman—W. WALTER WASSON, Denver.
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Executive Committee—ARTHUR W. ERSKINE, Cedar Rapids, Iowa; HENRY K. PANCOAST, Philadelphia; GEORGE W. GRIER, Pittsburgh.

Wednesday, June 14—2 p. m.

Chairman's Address: The Rôle of the Radiologist in the Treatment of Cancer. GEORGE W. GRIER, Pittsburgh.

Skeletal Pathology of Endocrine and Metabolic Origin (Lantern Demonstration).
MAX BALLIN, PLINN F. MORSE and WILLIAM A. EVANS, Detroit.

The Latent Period in the Roentgen Diagnosis of Pulmonary Tuberculosis (Lantern Demonstration).
LEO G. RIGLER and FREDERICK B. EXNER, Minneapolis.

Tuberculosis: Its Diagnosis and Check of Treatment by X-Rays. H. K. DUNHAM, Cincinnati.

The Roentgen Diagnosis of Cardiac Aneurysms (Lantern Demonstration). DAVID STEEL, Cleveland.

Diseases of the Pleura (Lantern Demonstration). SAMUEL BROWN, Cincinnati.

Thursday, June 15—2 p. m.

Cholecystographic Study of the Bile Ducts (Lantern Demonstration). HAROLD SWANBERG, Quincy, Ill.

Roentgenologic Observations in Certain Chronic Gastric Conditions Which Are Completely Relieved by a Special Diet (Lantern Demonstration). BYRON H. JACKSON, Scranton, Pa.

The Importance of the Size of the Stomach When Performing a Gastro-Enterostomy: Its Bearing on the Size of the Stoma and the Ultimate Drainage of the Stomach (Lantern Demonstration). E. L. JENKINSON, Chicago.

Persisting Errors in the Technic of Oral Cholecystography: A Procedure Designed to Avoid Them (Lantern Demonstration).
B. R. KIRKLIN, Rochester, Minn.

Comments on the Roentgen Diagnosis of Carcinoma at the Cardia (Lantern Demonstration).
WILLIAM H. STEWART and H. E. ILLICK, New York.

Roentgen Evidence of Healing in Duodenal Ulcer (Lantern Demonstration).
DANIEL M. CLARK and MILTON JOHN GEYMAN, Santa Barbara, Calif.

Friday, June 16—2 p. m.

Election of Officers

Fractures of the Wrist in Children (Lantern Demonstration).
CARL L. GILLIES, Cedar Rapids, Iowa.

Undergraduate Education of Roentgenology (Lantern Demonstration).
F. J. HODGES, Ann Arbor, Mich.

Radiation in Primary Operable Breast Cancer.
DOUGLAS QUICK, New York.

Radiotherapy as a Method of Examining and Identifying Tumors.
A. U. DESJARDINS, Rochester, Minn.

Comments on the Higher X-Ray Voltages (Lantern Demonstration). ALBERT SOILAND, Los Angeles.

The Procedures for Treatment of Myelogenous Leukemia (Lantern Demonstration).
U. V. PORTMANN, Cleveland.

SECTION ON MISCELLANEOUS TOPICS

Sessions on Anesthesia

MEETS IN WALKER HALL, MILWAUKEE AUDITORIUM

OFFICERS OF SECTION

Chairman—ALBERT H. MILLER, Providence, R. I.
Secretary—JOHN S. LUNDY, Rochester, Minn.

Wednesday, June 14—9 a. m.

Quantitative Effects of Subarachnoid Injection of Procaine on the Sympathetic, Sensory and Motor Nerves (Lantern Demonstration).
JOHN L. EMMETT, Rochester, Minn.
Discussion to be opened by NELSON W. BARKER, Rochester, Minn.

The Present Status of Various Spinal Anesthetics and Their Clinical Usefulness (Lantern Demonstration). FRANK W. MARVIN, Boston.
Discussion to be opened by FLOYD T. ROMBERGER, La Fayette, Ind.

Experiments with Anesthetics: IV. Lesions of the Spinal Cord (Lantern Demonstration).
JOHN S. LUNDY, HIRAM E. ESSEX and JAMES W. KERNOHAN, Rochester, Minn.
Discussion to be opened by HALE HAVEN, Chicago.

Diagnostic, Prognostic and Therapeutic Injections (Lantern Demonstration).
HENRY S. RUTH, Philadelphia.
Discussion to be opened by ERWIN R. SCHMIDT, Madison, Wis., and PAUL G. FLOTHOW, Seattle.

Tribrom-Ethanol, Intratracheal and Regional Anesthesia in Abdominal Operations.
LINCOLN F. SISE, Boston.
Discussion to be opened by FRANK H. LAHEY, Boston.

The Present Status of Preliminary Medication.
PAUL M. WOOD, New York.
Discussion to be opened by WILLARD BARTLETT, JR., St. Louis.

Thursday, June 15—9 a. m.

Chairman's Address: Organization of the Anesthesia Service of the General Hospital.
ALBERT H. MILLER, Providence, R. I.

Divinyl Oxide: Experimental and Clinical Studies (Lantern Demonstration).
S. GOLDSCHMIDT, ISIDOR S. RAVDIN, BALDWIN LUCKE, G. P. MULLER and C. G. JOHNSTON, Philadelphia.
Discussion to be opened by RALPH M. WATERS, Madison, Wis.

The Rôle of Pharmacology in the Development of Ideal Anesthesia (Lantern Demonstration).
CHAUNCEY D. LEAKE, San Francisco.
Discussion to be opened by FRED W. RANKIN, Lexington, Ky., and BARTON COOKE HIRST, Philadelphia.

The Present Status of Ethylene.
ISABELLA C. HERB, Hubbard Woods, Ill.
Discussion to be opened by ARTHUR DEAN BEVAN, Chicago.

The Present Status of Nitrous Oxide Anesthesia, Especially Its Use in Connection with Intratracheal Anesthesia.
FRANK J. MURPHY, Detroit.
Discussion to be opened by CARL HENRY DAVIS, Milwaukee.

The Use of Carbon Dioxide in Anesthesia (Lantern Demonstration). JAMES G. POE, Dallas, Texas.
Discussion to be opened by EDWARD H. CARY, Dallas, Texas.

The Parathyroid Glands and Their Relation to Calcium Metabolism*

By DAVID PRESWICK BARR, M. D.
Department of Medicine, Washington University and the Barnes Hospital, St. Louis, Mo.

In the year 1880 Sandstrom,[29] a Swedish observer, described the external parathyroid glands and differentiated their structure from the neighboring thyroid tissue. At almost the same time Weiss,[32] in Billroth's clinic, found that thyroidectomy might be followed by serious and often fatal symptoms that could not be distinguished from tetany, a syndrome which had been known since Clarke's[4] description in 1815 and which because of a recent outbreak was then attracting much attention in Vienna. At first the symptoms were attributed to the removal of thyroid tissue. The significance of Sandstrom's observation was not appreciated and the discovery was forgotten for eleven years

* Presented before 91st Anniversary Meeting, State Medical Society, Milwaukee, September, 1932.

until Gley[9] of Paris rediscovered the glands and attributed to them an important relation to the symptoms of tetany. It was left for Vassale and Generali[31] to demonstrate that removal of all parathyroid tissue, even when the thyroid was preserved, caused death from tetany, while removal of the thyroid was not necessarily fatal if only one parathyroid gland was left intact.

The question of why parathyroidectomy produced tetany was not immediately answered. Theories concerning the detoxifying functions of the parathyroid glands and their relation to guanidine metabolism led to no definite conclusions. In the meantime it had been shown by Sabbatini[28] that injections of sodium citrate or sodium oxalate, salts which precipitate calcium, led to excitability of nerve tissue which could be allayed by administration of calcium. Jacques Loeb[20] observed also that injection of any salt which precipitated calcium and diminished its amount in the circulating blood caused muscular twitching. These observations suggested that lack of calcium might be an important cause of symptoms following parathyroidectomy. The theory was successfully established by the brilliant experiments of McCallum and his associates, who demonstrated that removal of the parathyroid glands caused reduction in the calcium content of the blood, sometimes amounting to 50 percent of the total,[23] and that excitability of nerves, similar to that seen after parathyroidectomy, could be produced locally by using Abel's dialysis apparatus to remove calcium from the blood circulating through an isolated extremity.[22]

Efforts to treat tetany of parathyroid origin met with considerable difficulty. Although large doses of calcium tended to restore calcium values to their normal level, the treatment had to be constantly repeated if normal values were to be maintained. Closer study of tetany revealed the apparent paradox of a diminished excretion of calcium even during large calcium intake and at the same time a constant tendency to hypocalcemia. It appeared that lack of parathyroid secretion prevented calcium from being held by serum in the usual amounts, a conclusion amply confirmed when Collip's active parathormone became available. Injection of parathormone in appropriate doses was sufficient to establish normal calcium values and to maintain them for some time without excessive intake of calcium.

The rôle of parathormone in the maintenance of normal calcium values is not yet entirely understood but is partially explained by recent studies of the state of calcium in serum and in salt solutions.

In normal serum from adult individuals calcium exists in concentrations of about 10 mgs. per 100 cc. This amount is much greater than can be held by a salt solution of a phosphate and carbonate content similar to that of serum. Solubility experiments[12] [30], as well as somewhat unsatisfactory attempts at direct measurement of calcium ion concentration,[6] indicate that not more than 2.0 mgs. of calcium exist in serum as a simple solution of phosphates and carbonates. The presence of the remaining 8.0 mgs. must be otherwise explained. It can be demonstrated that a considerable portion is dependent upon the protein content of serum. Spinal fluid and protein free edema fluid contain only about 5.0 mgs. of calcium per 100 cc., while joint fluid, which may have amounts of protein almost as great as serum, hold as much as 10.9 mgs. of calcium.[26] The influence of protein on calcium has been shown by in vitro experiments and has been carefully studied by Peters and Eiserson,[25] who have devised a formula to express the relationship. Calculating with their formula in a normal serum containing about 7 percent of protein, approximately 4.0 mgs. per 100 cc. could be accounted for by protein combination. The remainder of approximately 4.0 mgs. per 100 cc. must be attributed to the presence of parathormone for the reason that parathyroidectomy reduces the serum values by that amount or more and because normal values can be restored by means of the injection of parathormone. Greenwald[10] has suggested that the parathyroid secretion is necessary for the preparation of an organic component of calcium, which seems to have some resemblance to calcium citrate. The exact na-

ture of the combination and its relations to calcium in other forms remain entirely unknown.

CLINICAL CONSIDERATION

For the clinical consideration of parathyroid disease it is of importance to realize that both the calcium in simple solution, i.e., the ionized calcium, and that which is so mysteriously combined through the influence of parathormone, are physiologically active. Reduction in the amount of either results in increased irritability of nerve and muscle and the tendency to tetany. On the other hand the physiological activity of the fraction of calcium bound to protein has not been demonstrated, and clinical conditions, such as nephrosis, in which protein values are low are unaccompanied by tetany. It is also important to remember that since the amount of calcium present in the serum is dependent upon the content of protein and of phosphate, the physiological significance of any particular calcium value cannot be positively stated unless the levels of protein and phosphate are simultaneously determined.

It would at first seem that an ideal sufficient treatment of parathyroid tetany would be the administration of parathormone, since this presumably represents a direct replacement of the function which has been removed by operation. The hormone can be sufficiently standardized by its demonstrable effect on serum calcium. In cases of fully developed parathyroid tetany 20 to 100 units will often control the attack and cause elevation of serum calcium. Daily administration of 10 to 15 units may be sufficient to prevent recurrent attacks. Continuous administration, however, leaves much to be desired. Tolerance may be acquired and the dosage must in some cases be increased to levels which offer great difficulties in administration and constitute an unbearable expense to the patient. In Lisser's case[19] with complete parathyroidectomy enormous doses were finally ineffective in controlling symptoms or preventing death. A further though less serious disadvantage is the occasional occurrence of painful local reactions which appear at the site of injection several hours after parathormone has been given.

Vigorous administration of calcium may by itself be sufficient to control tetany, although in patients treated by this method alone calcium values in the serum tend to remain more or less constantly below the normal level. Large doses are indicated. Calcium lactate, which is easily administered by mouth and is nonirritating to the stomach, may be given in doses of 4.0 gms. every two hours. Calcium gluconate has the advantage of being nonirritating when given subcutaneously or intramuscularly. In acute tetany it may occasionally be necessary to give calcium chloride intravenously. An injection of 1.0 to 3.0 gms. in 5 percent solution has in numerous instances accomplished dramatic results when much larger doses of lactate by mouth have failed to produce demonstrable benefit. The difference in effect is not due to lack of absorption of calcium lactate[3] and indeed cannot at present be explained with complete satisfaction.

It has been demonstrated by Peters and Eiserson[25] and by others that calcium and phosphate values in the serum bear a reciprocal relation to each other. An increase in serum phosphate thus accomplishes a reduction in serum calcium and for this reason the administration of phosphate is strictly contraindicated in parathyroid tetany.

Numerous observations have demonstrated that tetany may be induced by clinical conditions which increase the alkalinity of the blood. This may be demonstrated by overventilation of the lungs in which carbonic acid is rapidly eliminated, in pyloric stenosis in which large amounts of hydrochrolic acid are lost, and by administration of excessive amounts of aikalis. Although a changed acid base equilibrium is not a primary factor in parathyroid tetany, it is nevertheless true that any influence which increases alkalinity may precipitate an attack and that measures undertaken to diminish alkalinity may act as helpful therapeutic procedures. One of the most effective means of controlling the minor symptoms of tetany is the inhalation of carbon dioxide administered either as a carbon dioxide oxygen

mixture or by breathing into a long tube or bag. The tendency to attacks in latent tetany may be diminished by administration of ammonium chloride in doses of 0.5 to 2.0 gms. four to five times a day. Alkalis should be avoided and calcium carbonate, which otherwise might be utilizable as a source of calcium intake, is contraindicated.

ACTION OF VITAMIN D

One other expedient may be helpful in the control of parathyroid tetany. The action of vitamin D resembles parathyroid hormone at least in the one respect that it tends to raise and to maintain the level of serum calcium. This property should theoretically be of great value in the control of tetany dependent upon low calcium values. It has been suggested, however, that vitamin D exerts its effect through a stimulating action on the parathyroid glands and that if these organs are completely removed no effect can be expected. Experimental evidence upon this point has been somewhat conflicting. In dogs the tetany following parathyroidectomy as ordinarily performed can be controlled by the calcium raising effect of vitamin D. On the other hand complete dissection of the tissues of the neck in an effort to obtain all accessory parathyroid tissue has rendered dogs exceedingly refractory to treatment with irradiated ergosterol. It is unlikely that parathyroid tetany in humans often represents absolutely complete loss of parathyroid tissue, and some clinical experience has indicated that the administration of vitamin D, either as such or as cod liver oil, is helpful in controlling symptoms[2]. In Findley's[8] recently reported case, however, its effect was insufficient to control tetany and its influence was not easily demonstrable even when combined with calcium therapy[5].

HYPERPARATHYROIDISM

Collip's discovery of parathormone made it possible not only to relieve the symptoms of tetany but also to study the influence of the parathyroid secretion on calcium metabolism and its toxic action when given in excessive amounts. It was soon found that extremely large doses of the hormone cause in normal animals hypercalcemia, hypophosphatemia followed later by increased phosphate content, hypotonicity of the muscles, a great increase in the excretion of calcium in the urine, deposit of calcium in soft tissues, and decalcification of the bony skeleton. These changes occur in variable degree in different animals. Although several species are quite resistant, the effect in man is well defined. Hypercalcemia may be produced by large doses in normal individuals. A patient of Hunter,[14] a house painter, took doses of 30 to 60 units for 11 days as a therapeutic measure in lead poisoning, with the result that serum calcium rose to 19.8 mgs. per 100 cc., a content nearly twice the normal. Aub[1] was able to demonstrate the source of calcium loss which occurs when large doses of parathormone are given. A patient with otosclerosis was treated with parathormone for 42 days, during which time he lost 1.5 kg. in weight, a change which would have accounted for a loss of 75 mgs. of calcium if the calcium had been derived from serum and the soft tissues. Actually he lost during the experiment 17.0 gms. of calcium, an amount which could have been derived only from the skeleton.

It was not long after Collip's work was published that cases of clinical hyperparathyroidism were discovered. The first of these was reported by Mandl,[21] the German surgeon who removed a parathyroid tumor from a case of ostitis fibrosa cystica. This rare bone disease, first described by von Recklinghausen,[27] is characterized by multiple cysts and giant cell tumors of the bone, with softening and decalcification of the entire bony skeleton, resulting in frequent pathological fractures, bowing of long bones and extreme deformity and disability. For many years it has been known that cases of ostitis fibrosa have been accompanied with unusual frequency by tumors or hyperplasia of the parathyroid glands. The association has been so obvious indeed that it was suggested many years ago that the abnormal parathyroids might have an etiological significance in the skeletal pathology.

OSTITIS FIBROSA CYSTICA

More detailed study during the past five years has shown that cases of ostitis fibrosa

are associated with hypercalcemia, hypophosphatemia with an increased excretion of calcium in the urine, a negative calcium balance, and at times with an abnormal deposition of calcium in the soft tissues. In short the disturbances are exactly those which can be caused in normal individuals by the administration of excessive amounts of parathormone. An added and striking feature of recently described cases has been the occurrence of urinary calculi. In Hunter's[15] 32 patients with proven hyperparathyroidism 10 had unilateral or bilateral urolithiasis. Recently Jaffe and Bodansky[16] have produced bone cysts and Johnson and Wilder[17] have reproduced the complete skeletal picture of ostitis fibrosa cystica by means of repeated injections of parathormone.

As a result of these studies there can be little doubt at present that ostitis fibrosa cystica is clinical hyperparathyroidism in the same sense that Grave's disease is clinical hyperthyroidism. In further support of this belief are the results which have been obtained from removal of parathyroid tumors in von Recklinghausen's disease. Following operation a reduction of calcium in the serum has been constantly observed. In individual cases, there has been return of calcium excretion to normal and recalcification of bones. Several cases have shown remarkable clinical improvement. It should be emphasized, however, that the operations have not been uniformly curative. One case of fatal tetany followed removal of two large parathyroid tumors. Another patient had extremely severe tetany for several days and troublesome latent tetany for many months following operation. The tendency to clinical improvement after operation has sometimes been obscured by complications dependent upon renal calculi and infection of the urinary tract.

Although ostitis fibrosa cystica is perhaps the only clinical condition which can with any probability be called primary hyperparathyroidism, there are other bone diseases which may at times present comparable disturbances. The tumor process of multiple myeloma is accompanied by a high degree of destruction of bone. Roentgenologically it may be shown that decalcification and rarefaction occurred in those portions of the skeleton which are not actually involved in the tumor process. Pathologically there may be metastatic calcification with a deposit of calcium in the lungs, in the gastric mucosa and kidneys. Hypercalcemia has been frequently observed and in at least one case a negative calcium balance and generalized hyperplasia of the parathyroid glands was demonstrated. Apparently a similar condition may also occur in metastatic tumors of bone. Klemperer[18] reported a case in which a tumor of the parathyroid gland was found associated with carcinoma of the breast and osseous metastases. We have observed hypercalcemia and hypophosphatemia with hypernephroma metastatic to bone. The evidence, while not complete or entirely convincing, indicates that destructive bone lesions, such as myeloma and malignant metastases, may be accompanied by a secondary hyperplasia of the parathyroid glands and that hyperparathyroidism becomes a complicating and somtimes a disabling feature.

RICKETS

The role of the parathyroids in the metabolic disturbances of rickets is somewhat more mysterious. Hyperplasia of the glands has been demonstrated by Erdheim[7] in spontaneous and experimental rickets in animals, and by Pappenheimer and Minor[24] in the rickets of children. The symptoms and calcium disturbances of rickets are, however, far from indicative of hyperparathyroidism. Clinically the calcium values tend to be diminished and in many instances have become so low as to permit severe tetany. The urinary excretion of calcium is not increased. Although hyperplasia of the parathyroid glands does not prove the existence of increased parathyroid function, recent experiments of Bengt Hamilton[11] indicate that hyperparathyroidism may actually be an important factor and that the blood of rachitic animals may be rich in parathormone or some other substance with an identical effect on serum calcium. It may be demonstrated in animals that doses of calcium which ordinarily cause no disturb-

ance of serum calcium values produce striking hypercalcemia when given after an injection of parathormone. Administration of calcium salts to rachitic rabbits usually results in death from hypercalcemia. Hamilton has shown that the injection of blood from a rachitic animal into a normal one causes a response to calcium administration which is identical with that occurring after the administration of parathormone. Although the full significance of these striking observations is not yet apparent, it seems possible that while the lack of vitamin D is the primary factor in rickets, it may not be the only one, and that the variable metabolic disturbances of the disease may depend in each individual case upon the relative influence of a lack of vitamin D on the one hand and functional hyperparathyroidism on the other.

DIAGNOSIS

From a diagnostic point of view, disturbances in calcium metabolism offer the best evidence of abnormal parathyroid function. Signs of such disturbances are: change in the level of serum calcium, increased excretion of calcium, decalcification of the skeleton, and deposit of calcium in tissues. Metastatic calcification can be discovered only at autopsy; determination of calcium balance is too time-consuming and difficult for ordinary clinical usage; changes in the density of the skeleton may be extremely difficult to interpret. Clinical reliance must, therefore, be placed chiefly upon the level of serum calcium.

It is important to emphasize the remarkable constancy of serum calcium values in health. Variations in the amount of calcium intake exert almost no perceptible effect. The hypercalcemia which may be induced by the administration of large amounts of calcium salts intravenously is followed by a prompt return to normal. Factors other than the parathyroids may, however, influence the values of serum calcium. The lack of vitamin D produces hypocalcemia and an excess of it causes high calcium values. Factors increasing serum phosphate, such as the retention of phosphate in terminal nephritis, may cause considerable reduction in calcium content. The important influence of the protein content of serum has already been emphasized. It has been observed also that low serum calcium and even severe tetany may be associated with chronic diarrhea, particularly with that of sprue.

It appears at present, however, that hypercalcemia of 12.0 mgs. per 100 cc. or more may be regarded as indicating increased parathyroid function. Although high serum calcium values have been recorded both in chronic arthritis and in polycythemia, more recent observations have failed to confirm the early reports. Hess and Lewis[13] noted high calcium in children who were receiving large amounts of irradiated ergosterol, but it seems unlikely that spontaneous hypervitaminosis would be encountered clinically or that the results of excessive administration of vitamin D could be confused with increased parathyroid function. Hyperproteinemia of a degree sufficient to produce hypercalcemia has, so far as we know, not been demonstrated.

While high serum calcium is a most valuable sign of hyperparathyroidism, increased activity of the parathyroid glands may exist without demonstrable change in serum calcium. Aub[1] noted that the administration of 50 units of parathormone may double the calcium excretion without producing perceptible hypercalcemia. If Hamilton's observations are correctly interpreted, hyperparathyroidism may exist in rickets with normal or low calcium in the serum. Furthermore, retention of phosphate occurring late in parathormone poisoning may tend to reduce calcium values to normal.

CONCLUSION

In conclusion it may be emphasized that our knowledge of the significance and function of the parathyroid glands is inextricably interwoven with that of calcium metabolism. The true significance of the parathyroids in tetany was not appreciated until McCallum demonstrated hypocalcemia. The study of calcium relationships has been our chief guide in the understanding of the toxic manifestations of parathormone and in identifying the clinical syndrome of hyperparathy-

droidism. It has made possible the elucidation of a whole series of phenomena associated with several bone diseases. In some respects the determination of serum calcium in parathyroid disturbances is comparable to the use of basal metabolic rate in the study of thyroid conditions, and even more to the use of sugar determinations in the study of diabetes and hyperinsulinism. Tests for serum calcium and serum phosphate are relatively simple and should be applied in all cases with general bone disease, not only because they may be of importance in dictating the treatment of the patient but also because our knowledge is still incomplete. It is probable that during the next few years interesting and important facts will continue to emerge from a close study of calcium relationships in bone disease and parathyroid disturbances.

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Clinical Study of Vitamin D Milk

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"Rickets is the most common nutritional disease of children occurring in the temperate zone. Fully three-fourths of the infants in the great cities, such as New York, show rachitic signs of some degree." (Hess)[1]

If the medical profession does not wake up to the prevalence of this disease, it will be embarrassed by our public health officials stealing more of our thunder. The medical profession is slow in its recognition of the changing attitude of the public toward health and disease. No longer are intelligent people content with life, liberty, and the pursuit of happiness; today they insist that health is also a part of every man's birthright. They insist on the knowledge that will prevent disease, and the medical profession should lead the way in the search for that knowledge.

This study of vitamin D milk is a search for some preventive of rickets. The obstetrical field owes no apology to the other branches of medicine, as prenatal work now occupies a larger proportion of the obstetrician's time than similar prophylactic work does in any other branch of medicine. While rickets is a disease of infancy, the prevention should start during pregnancy and therefore deserves the joint study of pediatrician and obstetrician.

Rickets was first described by Soranus who practiced medicine in Rome, in the second century, but more has been accomplished in the study of rickets in the last fifteen years than in the previous eighteen centuries.

The first step in the modern study of rickets was the experimental production of it in dogs by Mellanby, the English physiologist, in 1919. The same year Huldechinsky in Germany demonstrated the cure of rickets with ultraviolet rays. In 1922 McCullom isolated vitamin D from the fat soluble vitamins. In 1924 Hess and Steenbock independently demonstrated that antirachitic potency could be developed in a number of different biological materials, by exposing them to ultraviolet rays. Next came the search for the particular element that absorbed the antirachitic property, and it was found to be a sterol called ergosterol. Then came the discovery that skin contained ergosterol and the last step in the mystery of rickets was solved.

The role that vitamin D plays in the metabolism of calcium and phosphorus is very unusual. Most cases of rickets have a low blood phosphorus, the calcium being about normal. Other cases of rickets associated with tetany, however, have a low blood calcium, with phosphorus about normal. A sufficient supply of vitamin D corrects the concentration of either the blood calcium or the blood phosphorus.

In just what manner vitamin D affects calcium and phophorus metabolism is not known. It may increase absorption of these inorganic elements or may decrease excretion of the same. Since both are absorbed from the intestines and excreted through the lower intestine, as well as the kidneys, it is impossible to determine where the action of vitamin D takes place. Some authorities claim the action of vitamin D is exerted in the intermediary metabolism of calcium and phosphorus in the bone epiphysis, but since the normal ossification of bone is not understood, the pathogenesis of rickets cannot be explained in that manner. We do know that in rickets there is an unusual loss of calcium and phosphorus from the body and that this loss is corrected by the proper amount of the antirachitic element or vitamin D.

Studies of the mineral metabolism during pregnancy have shown that there is a retention of calcium and phosphorus by the maternal organism during this period. This storage is particularly marked during the latter part of pregnancy. During lactation, the calcium and phosphorus metabolism undergoes a marked change and a negative balance is soon established. This loss of the

minerals is not only through the milk, as the calcium excreted in the feces often exceeds the total calcium intake.

THE NEW-BORN

Rickets in the new-born, premature or full term, is of very rare occurrence, that is, rickets as judged by the accepted criteria of chemical blood analysis, roentgen ray, or histological examination of the bones. As Hess suggests, this is probably due to the superior efficiency of placental nutrition to that carried out by way of the alimentary tract. That there is a congenital factor in the etiology of rickets is indicated by the well established fact that rickets develops more frequently and in more exaggerated degree in premature infants.

Bills[2] and his associates found such a difference in rats used for quantitative assay, depending on the vitamin D the mother rats were given during pregnancy and lactation, that it became necessary to breed on a uniform stock diet, before using the young for vitamin D assay.

The Toveruds[3] of the University of Norway found that if a mother dog was fed on a diet lacking in minerals and fat soluble vitamins during pregnancy and lactation, their puppies were very susceptible to rickets which developed within three weeks after they were placed on the same deficient diet on which their mothers had been fed. Other puppies whose mothers had been fed the deficient diet only during lactation, required six weeks for the development of rickets, while in puppies whose mothers were fed a normal diet throughout pregnancy and lactation, rickets did not develop until the puppies had been fed the deficient diet for thirteen weeks.

The increased incidence of rickets in twins is another argument in favor of a congenital factor in rickets.

While at present it is not possible to diagnose rickets in the new-born infant, it is conceivable that our methods of diagnosis will be improved or that our conception of rickets will be broadened to include osteoporosis and other calcium and phosphorus deficiency metabolic diseases. Nature does her utmost to prevent rickets in the foetus, even at the expense of the mother, and the logical time to begin the prophylactic treatment seems to be during foetal life, by building up the calcium and phosphorus reserve of the mother.

The treatment of rickets by sunshine, ultraviolet radiation, cod liver oil, and viosterol is too well known to warrant any discussion. The theory that ordinary cow's milk is a curative for rickets is still very prevalent among the laity. This theory is not true from either a qualitative or quantitative standpoint, as butter fat cannot be ingested in sufficient quantity to be antirachitic and an excess of calcium and phosphorus intake, whether in the form of milk or otherwise, has been proven actually to intensify the rachitic process.

That there are periods in the life of every organism when calcium and phosphorus are particularly needed is very apparent. These periods are first, the active growing period from foetal life to maturity, and second, the period of pregnancy and lactation when the maternal organism must furnish the calcium and phosphorus for the rapidly growing young.

The tremendous number of individuals involved in these two groups make treatment an impossibility and routine prophylaxis a necessity. The employment of the usual therapeutic measures as preventives is impracticable. The situation demands the incorporation of some antirachitic element in some one of the more common food substances, so that the prophylaxis becomes nearly automatic. Because cow's milk contains the necessary calcium and phosphorus in sufficient concentration, it would seem that the addition of the proper amount of the antirachitic element to cow's milk would fulfill all the requirements of the ideal prophylactic.

VITAMIN D MILK

The production of vitamin D milk in the United States is under license from the University of Wisconsin Research Foundation, which controls the Steenbock patents on all radiated food products. This foundation

has seen fit to limit production at present to certified milk producers, because they are the only ones supervised by Medical Milk Commissions. The Research Foundation assays samples of the milk at regular intervals for antirachitic potency, and this potency has been found to be so constant in proportion to the amount of radiated yeast fed to each cow that the Milk Commission of the Milwaukee Academy of Medicine requires duplicates of the monthly purchases of radiated yeast, and statements of the number of cows fed by each producer to check the antirachitic potency of the vitamin D milk.

The potency of vitamin D milk, 160 rat units per quart, has not only been tested by animal experiments, but has been used in the cure of rickets in infants, and found to be effective in advanced active rickets. Theoretically, vitamin D milk fed to the pregnant or nursing mother should convey the antirachitic element to the foetus or nursing infant the same as the radiated yeast fed the cow is synthetized in the cow's milk, but it has been found that the cow's metabolism does not synthetize all antirachitic food substances in the same proportion. At present 60,000 rat units of radiated yeast are fed each cow daily to produce 160 rat units per quart of milk. If radiated ergosterol is fed the cows, 180,000 rat units or three times the potency of the yeast is necessary to produce 160 rat units per quart.

When we attempt to evaluate the metabolic ability of the mother to synthetize the antirachitic properties of a certain food, plus the ability of the infant's metabolism to utilize the resultant antirachitic element, it must be confessed that clinical methods of determination are the only methods of any value at present.

OUTLINE OF STUDY

Twenty-five mothers were selected from the prenatal clinic at the Milwaukee County Dispensary, at about the sixth month of pregnancy. One quart of vitamin D milk was furnished daily to each mother with the instructions that this milk was to be used only for herself, other milk being furnished for the rest of the family. At two months of age, and each month thereafter the baby was to be returned to the pediatric clinic for thorough physical examination and x-ray.

The control babies were selected from the pediatric clinic at two months of age and given the same examination once a month. The diets of the mothers in the two groups varied only in the vitamin D milk, the control mothers having a quart of ordinary milk daily. The study was to continue until the babies were six months old. Those who have seen these babies have been especially impressed with their quite different appearance compared with the average rather well fed child. The children in this group have a clear-eyed tonic look. They give an impression of a sense of comfort and well-being, and while it is somewhat difficult to express the word picture, they do look better and healthier than any normal infants.

Table 1. Incidence of rickets in infants on Vitamin D Milk

Case No.	Clinical Symptoms	X-Ray Findings	Age observed in months	Other antirachitic treatment
1	—	—	7	None
2	—	—	8	None
3	—	—	7	None
4	+	+	7	None
5	—	—	4	None
6	—	—	8	None
7	—	—	9	None
8	—	—	9	None
9	+	+	7	None
10	—	—	7	None
11	+	+	7	None
12	+++	+++	8	None
13	+	+	8	None
14	—	—	8	None
15	—	—	7	None
16	++++	++++		

Table 1 shows graphically the results obtained in the study of the incidence of rickets in this series.

Table 2. Incidence of rickets in control infants

Case No.	Clinical Symptoms	X-Ray Findings	Age observed in months	Antirachitic treatment at
1	++	++++	7	5 months
2	—	—	7	None
3	++	++++	7	6 months
4	+	+	7	6 months
5	++++	++++	5	5 months
6	++++	++++	9	5 months
7	++++	++++	8	7 months
8	++	++	8	6 months
9	+++	+++	8	8 months
10	++++	++++	10	8 months
11	—	++++	5	4 months
12	—	++++	5	None
13	+++	+++	8	None
14	—	++++	6	5 months
15	—	+++	8	None
16	—	—	6	3 months
17	+++	++++	6	6 months
18	++++	++++	8	7 months
19	++++	++++	9	8 months
20	++++	++++	6	2 months
21	+	+	8	None
22	++++	++++	7	None
23	++++	++++	7	None
24	++++	++++	9	3 months
25	++++	++++	6	None
26	—	—	8	8 months

Table 2 shows graphically the incidence of rickets in control cases that were not fed vitamin D milk, but were nearly all given antirachitic treatment in the form of cod liver oil at various periods—beginning at 2 months.

Though we began this study of 25 babies on vitamin D milk, we were able to complete the study of only 16 infants. In the other 9 cases the investigation was discontinued because of the lack of cooperation on the part of the mothers for regular examinations, and also because in some families the milk was diverted to other purposes than the feeding of the babies.

After completing the study of these 16 babies fed over a period of more than 6 months on vitamin D milk, it will be seen by comparing charts 1 and 2 that the incidence of rickets in babies fed on vitamin D milk was decidedly less than in the control babies. Another noticeable fact shown by these charts is that none of the babies on vitamin D milk received any other antirachitic treatment; while practically all of the control cases received cod liver oil from the age of 2 months.

In table 1, six of the 16 cases showed some evidence of rickets, but, as explained below, cases 11 and 16 received no vitamin D milk for a period of 2 months, and both showed healed rickets when the treatment had been re-established for a period of 2 months giving us in reality an incidence of 25% rickets in these cases.

In table 2, or the control cases, 23 of the 26 cases showed evidence of rickets giving an incidence of rickets in these control cases of 88%.

In table number 1, case number 11 received no vitamin D milk from the age of 3 to 5 months, and at 5 months showed clinical and x-ray evidence of rickets. At 5 months vitamin D milk was again prescribed and at 7 months the x-ray showed decided healing of the rachitic condition. In table 1, case number 16 at 6 months shows + + + + rickets —the infant having had no vitamin D milk for a period of 2 months; at this time vitamin D milk feeding was re-established and at 8 months the case showed healed rickets.

Table 2 shows tremendous incidence of rickets in the control infants—with the age in months at which antirachitic treatment was instituted. Also in the same group it is to be observed that upper respiratory infection occurred in 8 cases, chicken pox in 1 case, and stomatitis in 3 cases. It is interesting to note that no infection of any kind attacked the babies fed on vitamin D milk in this series.

Of the control babies those who were

breast fed through the entire observation, 7 developed florid rickets and 4 developed rickets of a somewhat milder degree. In the same type of baby in the vitamin D series 4 developed extremely mild cases of rickets.

SUMMARY

We feel we have shown a definite protection against rickets in the young by the use of vitamin D milk during pregnancy, lactation, and as a complemental feeding. The severity and overwhelming incidence of rickets in the control cases compared to a milder type and fewer cases in the vitamin D group can be interpreted in no other way.

We wish to acknowledge gratefully the untiring efforts of Miss Mabel Uhlman, R. N., in her field work and assistance in the Dispensary; also the cooperation and aid of the Milwaukee County General Hospital which provided the x-ray work for this study, and to Brook Hill Farms, Genesee Depot, Wisconsin, for supplying the vitamin D milk used.

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Will Cretinism Become Endemic in Wisconsin?*

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In asking the question given as the title of this paper, I am quite aware that the evidence which I am able to present is not entirely sufficient for a definite reply at this time. In presenting to you 68 cases of cretinism, however, I am suggesting in this preliminary study a wider investigation than has hitherto been undertaken, not only here but in other states. With the exception of a few cases observed for six or eight years, my cases have been gathered within a few weeks, mostly from the records of institutions in southern Wisconsin. Sixty-eight cases, many of which are from parentage of recent immigration, by no means prove that cretinism is endemic here. Much more careful study is needed. I do believe, however, that some of my cases may be accepted as of the endemic type and at any rate, by their very number the cases presented, apparently large in proportion to the population, are sufficient to direct attention to a subject until now never considered and which may become one of future problems of public health in this region.

The first case of cretinism in America was reported by Jacobi in 1879, but the first attempt to collect all the available data on the subject was made by William Osler[1] in 1893, covering eleven cases in all. This was followed by a more extensive investigation[2] in 1897, in which he presented 60 cases.

In 1898[3] McPhedron reported 17 cases which had occurred in Ontario alone, and in 1901 John McCrae[4] added 23 cases found in Canada. These writers were of the opinion, however, that the number of cases in existence was far in excess of those reported.

Murdock,[5] in 1900, as a result of a questionnaire sent to institutions for feeble-minded throughout the country, was able to obtain information on sixteen cases.

The next investigation was by Anders[6] in 1918 on myxoedema and cretinism covering the period from 1905 to 1918. He found 28 cases in the literature and added 43 unpublished cases obtained from institutions and other sources.

M. B. Gordon[7] supplemented the literature by 21 cases in 1918, and later in 1922[8] was able to tabulate a total of 340 cases of cretinism, including the 60 of Osler. This constitutes to the present time the entire number of cretins assembled from the literature in the United States.

Cretinism is a chronic deficiency disease of unknown origin occurring endemically and sporadically and associated with a high degree of thyroid insufficiency. It is characterized by a greatly reduced metabolism resulting in stunted mental and physical development of varying degrees.

* Presented before 91st Anniversary Meeting, State Medical Society, Milwaukee, September, 1932.

In the present paper, in adding to this list 68 cases which I have been able to collect in this state, a number which seemed to be a bit out of proportion to the tabulated list as given by Gordon, I wish to attempt an explanation of this large incidence of cretinism here by bringing out certain pertinent facts.

In all of the older countries of the world which have been known to be the seat of goiter for many hundreds of years, the endemic type of cretinism has been found to be prevalent, and in such countries as Switzerland, some of the former Austrian provinces, in the Himalayas and other regions, particularly those of southern Europe, where goiter prevails, an observant person will see everywhere in the hospitals and other institutions as patients, and on the streets as mendicants, a very large number of cretins. With these facts in mind, and with the figures which are given as to the very high incidence of cretinism in goiter regions, such as in the parish of Bozel in the Tarentaise (Savoy) where in 1848 the Sardinian Commission found among 1,472 inhabitants 900 goiters and 109 cretins, and in Carinthia the incidence of 293 goiters per 100,000 and in Salzburg of 276 goiters per 100,000 were found, with a corresponding number of cretins, the natural inference is that similarly afflicted regions in America should also produce their proportion of these feeble-minded dwarfs.

The first authentic account of the incidence of endemic goiter in the Great Lakes Basin and in the valley of the St. Lawrence was a "Memoir Concerning the Disease of Goiter as it Prevails in Different Parts of North America" by B. S. Barton, Philadelphia,[9] 1800.

In 1830 an article entitled "On the Bronchocele of Lower Canada",[10] mentioned the Great Lakes region of Ontario as a goiter-producing terrain.

A general summary of the distribution of endemic goiter in North America up to about 1870 may be found in "Hirsch's Hand Book of Geographical and Historical Pathology",[11] volume 2, page 149, New Sydenham Society Translations.

J. G. Adami[12] also reviewed the incidence of endemic goiter in eastern Canada.

George Dock[13] published a paper in the Medical News on goiter in Michigan. This article was probably prompted by Osler's paper of 1893 before the Association of American Physicians, on "Sporadic Cretinism in America". It is interesting in this connection that in 1893 Osler was apparently unaware that these states about the Lakes had an especially large number of goiters.

Munson,[14] in an article on "Goiter Among the Indians of the United States", also referred to the occurrence of goiter among the Indians of eastern Wisconsin. Prior to the latter date no general recognition was given to the fact that in Wisconsin and neighboring states goiter was more prevalent than in other states of the Union, but since then increasing evidence has occurred, showing that without doubt the states in this region, with the exception of the Pacific Northwest, have a much higher incidence of goiter than do those of the rest of the country.

ENDEMIC GOITER

In the United States it has long been recognized that endemic goiter occurs extensively in the Pacific Northwest and also in the Great Lakes Basin.

The statistics of Love and Davenport[15] compiled from the records of the War Department during the World War confirm the idea of the prevalence of goiter in these districts. The records of examinations naturally being for men, the ratio for women would be about five times as great. Of the four northwestern states—Idaho is highest with 27 per 1,000; Oregon has 26; Washington 23 and Montana 21, had a ratio exceeding 20 per 1,000. Utah with 16; Wyoming 15, Alaska 13, Wisconsin 14, and Michigan 11, had a ratio between 10 and 20 per 1,000 men. North Dakota 9, Minnesota 8, Iowa 7, Illinois 8, Indiana 6, Ohio 6, West Virginia 8, comprise the area west and south of Lake Michigan, with a ratio between 5 and 10 per 1,000 men; in addition, Nevada with 6 and Colorado with 5 extend southward the northwestern area of high incidence. South

Dakota has 4, Nebraska 2 and Kansas 1. California 4, Missouri 4, Virginia 4 and Pennsylvania 4 extend the areas with ratio below 5, but above 3 per 1,000. Throughout the remainder of the country the incidence does not exceed 2 per 1,000.

Here in Wisconsin the number of goiters to be seen on any crowded city street is very great. In a walk of a dozen blocks one might count thirty or forty goiters in women, a number somewhat lessened in the past few years by the very wide use of iodine, now so extensively prescribed. At the Asylum for Chronic Insane at Wauwatosa, Dr. Storchheim tells me that sixty percent of the women patients in that institution are goitrous. If the figures for recruits in 1918 of 14 per thousand men be multiplied by 5 to cover both men and women of Wisconsin, have we not the necessary factor for the later production of an appreciable hypothyroid incidence?

Reasoning *a priori* we infer that if cretinism always follows the laws laid down by European writers, then the Pacific Northwest should have nearly twice the number of cretins to be found in Wisconsin, and that, unless prophylactic measures for the prevention of goiter be widely adopted, we shall here have an increasingly large number of cretins in the years to come.

In 1865[16] Morel published a monograph entitled "Du Goitre et du Cretinisme, Etiologie, Prophylaxis, Traitement", (Paris 1864), where he made the statement that "Goitre is the first step on the road to cretinism". Also, Hector MacKenzie[17] made the statement in an article on Cretinism, (Allbut's Practice of Medicine), that when a family moves into a goiter region, the first generation may become goitrous and the second and succeeding generations will develop cretins. MacKenzie also states that wherever goiter is prevalent, there also cretinism will be found.

Granting the truth of the conclusion arrived at over many scores of years in such countries as Lombardy, Switzerland, Sardinia and Styria, the natural inference would be that this region surrounding the Great Lakes has no especial claim to immunity but that some other factor must be present which has at least until now been operating to prevent its appearance.

It shall be my purpose to discuss the question "Will Cretinism Become Endemic in Wisconsin?" in the light of the following postulates: (1) that since the recognition of the presence here of goiter in an endemic form, even though the influence of the goiter-producing factors has been operating for a number of years prior to that recognition, our population until the 80's or 90's of the last century was comparatively small, but in the past 50 years has grown tremendously, and especially so within the past generation. Immigration from Europe and from the non-goiter states of America produced the first population. This was followed by succeeding waves which, added to the native born, have amounted to about 300,000 for each decade. Such cases as we now have may, to be sure, be accounted for by this immigration and not necessarily by indigenous factors.

(2) Those families whose residence has permitted more than two or three generations to be born in this environment have been few in comparison with the entire population now dwelling here, and I assume that by far the majority of goitrous individuals whom we encounter have been born with this goiter-forming influence at work during only a generation or two.

I present here by decades the increase in population in Wisconsin:

1930	2,939,006
1920	2,632,067
1910	2,333,860
1900	2,069,042
1890	1,693,330
1880	1,315,497
1870	1,054,670
1860	775,881
1850	305,391
1840	30,945

It will be noted that only since 1870 or 1880 has the population been of sufficient size to have transmitted dominant characteristics and if we reckon a period of thirty years for a generation, we shall at best be able to account for two generations as be-

ing sufficient in numbers to form a basis for the cretin influence to have prevailed. The increase in population, which is now just short of 3,000,000 has come only partially by natural increase. Immigration has been the larger factor.

We have, therefore, apparently one condition necessary for the production in certain states of the union, of endemic cretinism, viz., goiter. Other factors are in the process of development.

COMPILATION OF DATA

Gordon's compilation of cretins by states before mentioned is as follows:

Canada	52
New York	120
Pennsylvania	25
Indiana	12
Ohio	10
Massachusetts	6
Minnesota	6
Virginia	6
Kentucky	5
Iowa	5
California	4
Maryland	3
Illinois	3
Wisconsin	3
Oregon	3
Rhode Island	3
Maine	2
Missouri	2
Nebraska	2
Arkansas	1
Montana	1
North Dakota	1
Washington	1
Kansas	1
Colorado	1
Louisiana	1
District of Columbia	1

It will be noted that New York has by far the greater number of cases, but these figures seem to have been taken solely from those actually reported in the literature, e.g., the three cases from Wisconsin evidently being those reported by Beier in 1914, and it is noteworthy that no cases are reported from Michigan, a state notable for its high incidence of goiter.

Until now very few cases of the disease have been reported, it is true, but that cases have been here, is without question.

In 1893 Dr. Samuel H. Friend of Milwaukee[18] published a case in the Medical News, Philadelphia, and gave an autopsy report. This would be classified as a marked case of so-called sporadic cretinism, and in 1914 Dr. A. L. Beier,[19] superintendent of the Northern Wisconsin Colony & Training School at Chippewa Falls, published an article in the Wisconsin Medical Journal, detailing three cases of sporadic cretinism found in that institution. Other than these no report of cases from Wisconsin appears in medical literature.

In order to show that the necessary environmental factors for the production of cretinism and myxoedema, as well as goiter, exist here, I wish to invite your attention to evidence that such an influence is here operative among animals as well as humans.

Marine[20] has many times referred to the great frequency of congenital myxoedema in sheep in Michigan. "Before the Civil War and until salt was discovered underlying the Great Lakes Basin, goiter was extremely common in sheep, and for a time the sheep raising industry in Michigan appeared doomed, but the gradual increase of the use of salt reduced this incidence and since 1910 it has practically disappeared". Marine made a trip from Ann Arbor to Port Huron in March, 1907, and obtained 12 myxoedematous lambs.

Prof. George C. Humphrey,[21] animal husbandsman of the College of Agriculture of the University of Wisconsin, makes the following statements regarding what is commonly termed throughout the state by sheep men "Goiter in Sheep": "This difficulty is experienced on the part of sheep raisers to the extent that the best raisers make a practice of guarding against it by feeding some form of potassium iodide. The difficulty is also experienced by our dairymen, many young calves having goiter at time of birth. A year ago in buying twenty-four calves ten to fourteen days old for experimental purposes without specifying freedom from goiter, we were quite surprised to find six of them with goiters developed to the extent that we could not use them on the particular experiment we had in mind. We also get a

hairless condition of pigs, which has been successfully prevented by the use of iodine."

At the Milwaukee Zoo several interesting illustrations of goiter in animals, notably camels, have occurred. It is also a well known fact that in this region puppies are very subject to goiter and much of the difficulty in raising them may be also due to a condition of myxoedema.

In addition to these facts, and conceding the high incidence of goiter in Wisconsin, it it becoming increasingly manifest, since the use of basal metabolic readings, as carried on in the course of clinical diagnostic procedure, has become general, that in this locality a very large number of cases of myxoedema and hypothyroidism in adults is being daily encountered, and that numerous instances of ill health, previously attributed to various causes, notably neurasthenia, obesity, anemia, listlessness, menstrual disturbances, etc., are now found to have a condition of athyreosis as their cause. Warfield[22-23] has reported about 150 cases of a mild form of hypothyroidism as well as cases of myxoedema. Reicker[24] of Ann Arbor has also published an article on the same subject. With these facts in mind then, the statistics of Gordon, in which he makes the statement that "Even though goiter is endemic in Canada, along the St. Lawrence; along the Allegheny Valley of Pennsylvania; and along the Great Lakes, not a single case of endemic cretinism was found, and the incidence of so-called sporadic cretinism was no greater than in other regions", seem to be based upon evidence which is insufficient.

J. C. Moore[25] of Seattle, in a paper on "Goiter and Endemic Cretinism", read at the annual meeting of the American Association for the Study of Goiter, (Denver, June, 1928), commenting on Gordon's statement says "Dr. Gordon's findings have been similar to my own experience. I have been practicing for 27 years in a distinctly goitrous belt and I have seen but one case of true cretinism in my own practice during that time. Complying with the request from Professor deQuervain of Berne, Switzerland, to secure for him a motion picture film of cretinism in the United States, I had great difficulty in finding any cases of true cretinism". In a personal communication Dr. Moore states that "not more than three cases have been reported. The number of cases will undoubtedly increase with succeeding generations."

Blumer[26] in his recent work "Bedside Diagnosis", published last year, mentioned that "McCarrison states that cretinism does not make its appearance in a goitrous family until the second and even the third generation. Granting this, it must be admitted that ample time has elapsed in the region of the Great Lakes, and even in the northwestern states of the United States for cretinism to have appeared in the second and third generations, and yet Osler, Gordon, Barker, Janney and others who have studied this situation in America have found no substantiated cases of cretinism in these regions."

WISCONSIN STUDY

For a number of years, reasoning upon the fact that the population of Wisconsin was being subjected to the influences which are causing a very high incidence of goiter, I have felt that there must be some reason which would offer an explanation of the absence of reports of either sporadic or endemic cretinism. Having had several years of experience with patients at the Milwaukee County Dispensary and the Milwaukee Children's Hospital, and having there encountered several cases of the distinctly sporadic type, I have been thoroughly impressed with the dictum of Morel and that of MacKenzie. I have felt that in the relatively short space of time since the State was settled, lay the explanation of our immunity in previous years.

Before 1870 in which year Wisconsin attained its first million people, the population was too small to form a basis for the study, and figures for a succession of generations should probably relate only to the two or three generations born since that date. There are no data available to show just how many people of an ancestry of even this length have resided here. Much migration westward would still further confuse the figures. Suffice it to say that were long settled states, for in-

stance those of the Atlantic seaboard deficient in the element protective against goiter, there is but little question that cretinism would by 1932 be a problem for them. When these younger states of the west shall have produced a few more generations of population, then we have a right to expect some approach to the number of cretins to be found in Switzerland.

STATE OF BIRTH OF NATIVE POPULATION OF WISCONSIN 1930. (27)

Total population	2,939,006
Foreign born	386,213
Native born	2,552,793
Native born of foreign or mixed parentage	1,091,154
Native born of more than one generation in U. S.	1,461,639
Native born from non-goiter states	122,054
Born under "goitrigenous" influence	1,399,485

A large proportion of the cases presented was born of foreign parentage. The true influence of environmental factors in the United States can only be appraised after another generation or so. Many of my 68 cases, perhaps a majority, come from distinctly foreign ancestry. A much more careful survey should be made before definite conclusions can be arrived at, and such study may require many years, even another generation for its solution. Of the sixty-four cases in my list there are six adults, two of them being over fifty years of age.

All cases are of subnormal mentality ranging from high grade moronism to complete imbecility. Six children have been at school, and, with one exception, have been unable to keep up with children of their age. One little girl, in whom the condition was recognized at the age of three, and kept under thyroid medication is now twelve years old and is doing fair work in the fifth grade. There are four cases which may possibly be accepted as true cretins of the endemic type, three having goiters and closed fontanelles and the fourth, a man aged twenty-two, an idiot with no goiter, has all the symptoms of the most marked endemic type of case.

In addition to the sixty-eight cretins, I have also a list of readings from the laboratory of the Milwaukee Children's Hospital of low basal metabolic rates, there being eighteen more patients with rates of minus fourteen or less. All of these tests have been repeated once or more times to obviate error, and doubtless from among them will develop cases of childhood myxoedema.

SUMMARY

(1) Evidence is here given to show that cretinism is occurring in Wisconsin in increasing numbers.

(2) Even though these cases may all be classed as of the childhood myxoedema type, their very numbers suggest that the disease is truly endemic.

(3) The hope is expressed that a systematic survey may be undertaken to determine the correctness of this view, and that surveys may be made in other states similarly located and also in non-goiter states for comparison and control.

(4) That if the views here expressed be proven, a new problem in public health is presented in this state, and efforts for its prevention are indicated.

LIST OF CASES

1—S.A	Age 12; B.M.R.—21.6; under treatment since age 5—childhood myxoedema.
2—H.A.	Age 10; Congenital heart. B.M.R.—25.9 X-ray findings.
3—J.B.	Age 22; large goiter; operation with recurrence; myxoedema.
4—G.B.	Age 11; mother born Conn.; father Wisconsin; childhood myxoedema.
5—K.B.	Dwarf; Little's disease; goiter present; typical cretin with idiocy, probably endemic type.
6—B.C.	I.Q 40; mental age 3. Infantile myxoedema. Born Hammond, Ind.
7—C.DeB.	Age 13; born New Mexico; feeble-minded; typical cretin.
8—M.E.	B.M.R.—7.8.
9—E.F.	Age 13 months; cretinism and rickets. Died.

10—M.G. } Age 56; 4′ tall; typical cretin; feeble-minded. Sisters.
11—M.G. } Also a cretin.

12—C.H. } Age 15; feeble-minded. Typical case. Brother and sister.
13—D.H. } Age 11; Mother has goiter; grandmother had toxic goiter; both typical cretins.

14—E.H. Age 22; one brother has goiter. Typical case of cretinism.

15—L.H. Age 10 months; skin and hair dry. Pot belly. Delayed ossification.

16—I.I. Age 22; Height 3′ 8½″. Undoubtedly a typical endemic cretin.

17—E.K. } 4 sisters in family of nine Others normal. L.K. (No. 19) is feeble-minded. These four stunted in growth compared to rest of family. All four with minus basal metabolism.
18—I.K.
19—L.K.
20—L.K.

21—V.L. Age 8; Only says "mama". Symptoms typical.

22—L.L. Age 15; B.M.R. — 15%; childhood myxoedema. Growth of 5″ and complete set of teeth under medication. Dr. F. J. Stirn.

23—A.M. Age 4; Typical cretin. Patient of Dr. J. E. Gonce, Wisconsin General Hospital, Madison.

24—E.P. Age 12; Infantile hypothyroidism. Subnormal mentally. Not a marked case.

25—M.P. Denmark, Brown County, Wis. No details given. Dr. A. A. Pleyte.

26—J.P. Age 10; B.M.R.—33.3%. Froehlich's Syndrome with hypothyroidism.

27—R.R. Age 8; Manitowoc, Wis. Typical cretin.

28—R.R. Age 59; Dwarf. Feeble-minded. Probably Froehlich's Syndrome. Diagnosis not positive.

29—B.R. Age 26; Born Whiting, Ind. Mental age 2 years and 8 months. Typical sporadic type.

30—H.S. Age 54; Born Alsace. Height 3′ 10″. Possible cretin or achondroplasia. No B. M. R. taken.

31—E.S. Age 9; Goiter; idiot; cannot walk; features coarse; nose flat; fontanelle closed. Undoubted endemic case.

32—C.S. Age 48; Born Russia. Dwarf. B.M.R. —50.08. Died of anemia.

33—A.S. Age 11; Imbecile. Height 36″. Only utters cries. Unable to walk or stand. Probable endemic case without goiter.

34—J.S. Born Chicago. Mentally deficient. Under thyroid medication.

35—A.W. } Age 32; Brother and sister. Both stunted in growth and both with subnormal B. M. R. Both childhood myxoedema.
36—J.W. } Age 22.

37—L.W. Age 15; Typical symptoms of cretinism.

38—H.W. Age 14; B. M. R.—11.6% Mitral insufficiency—unable to talk and walk.

39—E.Y. Age 6: Typical cretin in appearance. Improvement under thyroid medication.

40— } Two cases of cretinism under treatment at State School, Sparta, Wis. Details not given.
41— }

42— Age 2½; Jackson Clinic, Madison, Wis. Subnormal mentally. This and the following 14 cases were diagnosed as cretins and the list kindly furnished by Dr. Arnold Jackson.

43— Age 7; Mentally subnormal. Teeth not normally developed.

44— Age 13: 4th grade in school. Gained 17 lbs. last year under treatment.

45— Age 16 months; protruding tongue. Saddle nose. Doesn't walk.

46— Age 6; Unable to talk. Mental development lacking. Mouth gaping. Wide set eyes.

47— Age 4; Speaks only 2 words. Fontanelle open. Very restless.

48— Age 25 months; can speak only one word "Mama". Little's disease also.

49— Age 3; Low mentality. Some drooling.

50— Age 6; Marked mental and physical retardation.

51— Age 2 yrs. 9 months; mentality blank. Falls down easily.

52— Age 5; Mentally backward. Drooling. Twitches and rolls.

53— Age 10; Unable to form sentences. Didn't walk until 3 years of age. Teeth poor. Enlarged thyroid (!) Severe cretin.

54— Age 12; In 4th grade at age 12. B. M. R.—13%. Began to talk at age 2½.

55— Age 23; Very dull; sat up at 3 years; walked at 5 years. No teeth until 5 years. B.M.R. —22%.

56— Age 22; Low mentality; teeth very bad. Had 1 year of thyroid medication before consulting Dr. Jackson.

57—W.J.P. Age 34; Racine, Wis.; reported by Dr. R. M. Kurten. Typical cretin.

58—J.B. Age 4; Racine, Wis. Reported by Dr. R. M. Kurten. Typical cretin.

59—B.P. Age 16; Born in Chippewa County, Wis. Committed 11-16-27; is a typical cretin; ranks as an idiot; Wassermann negative; can walk, but speech undeveloped; unable to take care of self. No ancestral history. Male. (This and the following 5 cases at Northern Wisconsin Colony & Training School, Chippewa Falls, Wis. Data furnished by Dr. A. L. Beier, Supt.)

60—J.A. Age 11; Born at Racine, Wis. Committed 6-25-25. Father born in Westfield, Wis.; mother in Berlin, Wis. Typical cretin; ranks as an idiot; peculiarity noticed prior to 1 year of age. Speech limited to a few words; does not walk. Mother died of tuberculosis; no other ancestral history. Wassermann negative. Male.

61—T.J.M. Age 18; Born at Maple, Douglas County, Wis. Committed 1-11-27. Father born in Finland; mother at Maple, Wis. Typical cretins; speech limited to a few words; walks stiffly; no ancestral data. Male.

62—C.F.
63—R.F. } Brothers.

C.F. Age 32; Born in Sobieski, Wis., Oconto County. Father born at Pebblo, Wis.; mother in Canada. History of epilepsy and feeble-mindedness in family; data indefinite. Cretin; ranks as a high grade idiot. Wassermann negative.

R.F. Age 37; Born in Oconto County. Committed with brother 11-23-27. Ancestral history as described under C. F. Wassermann negative. Defective speech; shuffling walk; ranks as a low grade imbecile.

64—M.S. Age 17; Born in Milwaukee; committed 10-6-21; female. No ancestral data, but insanity, feeble-mindedness and epilepsy denied. Father and mother born in Austria. Typical cretin; idiot grade.

65— 1 case (possibly 3). Dr. Woodruff Smith, Ladysmith, Wis.

66— Godfrey child, Hartland, Wis. Mother and grandmother goitrous. (Dr. C. F. Hardy).

67—K.D. Age 2; Born in La Crosse. Ichthyosis; mild hypothyroidism.

68—A.W. Age 7; Born in Chippewa Falls. I. Q. 79. Dry skin; coarse hair. Height 47"; weight 48 lbs. Mentally dull. These last two cases at State School, Sparta, Wis.

Space will not permit detailed description of so large a number of cases, the complete records of which are in part in my possession or in the files of the various institutions mentioned. Those cases not so recorded should be given further study. Doubtless many more may be found now that attention is called to the subject.

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Recent Licentiates Announced by State Board of Medical Examiners

BY RECIPROCITY

Name	School of Graduation	Year	Present Address
Burns, Edgar M.	Oregon Medical Univ.	1932	Wis. Gen. Hosp. Madison
DuFour, Emery H.	Illinois Medical Univ.	1914	Hayward, Wis.
Ellis, Ralph V.	Nat'l. U. Arts & Sci.	1916	Springfield, Mo.
Fuson, Horace S.	Colorado Medical Univ.	1928	Lutheran Hosp., Eau Claire, Wis.
Grand, Clifford A.	Minnesota Medical Univ.	1931	204 8th St. E., Ashland, Wis.
Harris, Arthur J.	Northwestern Med. Univ.	1931	Superior, Wis.
Jefferson, Rolland A.	Nebraska Medical Univ.	1926	110 E. Wis. Ave., Milwaukee
McNair, Edw. R.	Rush Medical Univ.	1929	Brodhead, Wis.
Morneau, LeRoy F.	Loyola Medical Univ.	1931	609 So. State St., Appleton
Sarginson, Rollo B.	Loyola Medical Univ.	1916	Readstown, Wis.
Schott, Otto J.	Loyola Medical Univ.	1913	938 Newport Ave., Chicago, Ill.
Sieb, Louis H.	Northwestern Med. Univ.	1932	Seymour, Wis.
Towne, Ralph L.	Kansas Medical Univ.	1923	929 E. Alton, Appleton, Wis.
Addington, Ercell A.	Minnesota Medical	1932	St. Croix Falls, Wis.
Baynton, Howard A.	Northwestern Medical	1931	Sussex, Wis.
Crum, Horatio V.	Nebraska Medical	1931	Sheb. Mem. Hosp., Sheboygan, Wis.
Diamond, Carl Oliver	Western Reserve	1928	Veteran's Administration, Wis.
Eisele, David C.	Michigan Medical	1917	Zuelke Bldg., Appleton, Wis.
Epstein, Ely	Northwestern Medical	1931	2847 N. 49th St., Milwaukee, Wis.
Ford, Wm. Wallace	Iowa Medical	1928	Barnes Hospital, St. Louis, Mo.
Pope, Charles Evans	Northwestern Medical	1924	723 Judson Ave., Evanston, Ill.
Postle, James Martin	Michigan Medical	1885	Mellen, Wis.
Rouse, John Joseph	Iowa Medical	1930	Neshkoro, Wis.
Schacht, Frederick Wm.	Johns Hopkins Medical	1926	914 Judson Ave., Evanston, Ill.

BY EXAMINATION

Benson, Geo. B.	Rush Medical Univ.	1931	Richland Center, Wis.
Finner, Lucy L.	Rush Medical Univ.	1930	Arcadia, Wisconsin
Hartman, Alex S.	Loyola Med. Univ.	1931	632 W. Mitchell St., Milw., Wis.
McCord, Theo. B.	Northwestern Med.	1931	Mil. Co. Hosp., Wauwatosa, Wis.
Ochsner, Clarence G.	Washington Med. Univ.	1931	411 Garfield Ave.. Chicago, Ill.
Rice, Carol Marg.	Wisconsin Med. Univ.	1931	Wis. Gen. Hosp., Madison, Wis.
Schmiedicke, Paul H.	Wisconsin Med. Univ.	1931	Wis. Gen. Hosp., Madison, Wis.
Seevers, Maurice H.	Rush. Med. Univ.	1932	514 Service Mem., Bldg., Madison
Stowe, Harwood L.	Wisconsin Med. Univ.	1931	Wis. Gen. Hosp., Madison, Wis.
Szymarek, Joseph E.	Colorado Med. Univ.	1931	2029 W. Mitchell, Milw., Wis.

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EDITORIALS

AN OPPORTUNITY

JUST as one must be familiar with the normal, before one may intelligently study abnormalities in structures and function of the human body, so must one have knowledge as to the natural course of untreated disease before one may recognize spontaneous recoveries, remissions or recurrences and correctly interpret the results of treatment.

In the experimental laboratory with lower animals it is possible to make observations in pairs using one as a control and so allowing justifiable conclusions relative to the special subject under investigation. But under conditions prevailing in treating human beings, most of us are not in the happy situation of the professor of physiology who was father of twins and could use one for a "control".

Our knowledge concerning the natural unmodified course of disease is but fragmentary and incomplete, because of the almost universal spontaneous efforts at treatment of symptoms as they arise. Many treatments of human sickness are, of necessity, experimental, but deliberate refusal to treat sick persons in an attempt to secure a control must be very rare as we are not familiar with such an instance. In fiction the possibilities of such a procedure are depicted with much romance, drama and catastrophy in "Arrowsmith".

The simple expedience of silence, coupled with the harmless injection of normal saline solution, would have secured the purpose and prevented the melodrama; but likewise would have prevented the book, the movies, the royalties and perhaps the Nobel Prize.

At times there is presented to the physician an opportunity to ethically utilize certain human cases as controls and such observations should be given due record, study and discussion.

For example: A patient presents him or herself to the doctor, who, after careful study, makes a diagnosis and advises certain remediable measures, but because of various reasons, economic, sociologic or religious, the patient refuses to accept the physician's recommendations and decides to do nothing about the matter. Such cases have been always with us, notably in the group addicted to manipulative or mental therapy, but the opportunity to follow up such cases has been usually neglected. Because of the present general financial difficulties the number of individuals deciding to "Let Nature Take its Course", has increased decidedly.

A proper analysis of this group with the subsequent histories is both a duty and an opportunity of the physician of to-day and should prove of value to the profession, and consequently to humanity, comparable with the value of post mortem examinations.

Such a utilization of one's leisure (forced

or otherwise) might profitably and pleasantly be substituted for some of the prevailing pastimes of our profession. F. G. C.

CHRONIC ALVEOLAR INFECTION

DIAGNOSIS is the big job in the practice of medicine. It is comparatively easy to train men to do the work of surgery quite well, when the facilities and material are at hand. The same is true of treatment in other fields of medicine, once the diagnosis is made; but to make a high grade diagnostician is a much more difficult task. In the routine daily work of practice many cases go through with inaccurate or incorrect diagnoses. The average doctor's sins of omission, I fear, are much greater than his sins of commission. There is one condition that is frequently overlooked in diagnosis, that of chronic alveolar infection, usually due to devitalized or neglected teeth. There is no condition except syphilis which will give rise to such a variety of symptoms, many of which are in a location far removed from the real pathology. The patient may complain of pain in the chest, backache, weakness, dizziness, gastrointestinal symptoms, or a hundred others.

The teeth should always be examined carefully, using the x-ray if necessary, in every general examination. By so doing one is often surprised at the amount of pathology uncovered, which is directly related to the symptomatology.

When focal infection as a cause of disease was first brought to the attention of physicians, most of them were very keen in searching for it. It was no doubt often unduly emphasized. As the pendulum swings back, let us hope that the rank and file of the profession will not forget to give proper consideration to this very common cause of those troublesome confusing symptoms that make diagnosis difficult. G. R. D.

PSITTACOSIS

IN the first edition of Osler's Practice of Medicine there are nine diseases which are now known to be related in their etiology to insects or animals as carriers or hosts. In the last edition the number has jumped to eighteen. Among these is psittacosis, the first Wisconsin epidemic of which is reported in this issue.

First described as pneumo-typhus in 1872 it is now a world wide disease as are almost all other "tropical" diseases.

Since the advent of flying and other means of rapid transportation, distance has been annihilated. The jungles of South America and Africa are nearer today than many points in our own country were forty years ago. All diseases would be rapidly disseminated throughout the globe if the conditions were right for their propagation. In the case of psittacosis the aviaries of California are ideal tropical breeding grounds and with lax regulation and quarantine of sick birds at ports of entry and shipping points epidemics may arise anywhere, at any time in America.

Madison was fortunate in the limited character of its epidemic and the comparative mildness of its cases. There were no deaths. There was a mild hysteria owing to newspaper headlines, enough to banish "love birds" from local stores. The contagiousness of psittacosis between patients is almost nil, but one needs but to walk through a store or room where there is a sick bird to catch the disease.

Since the early symptoms and signs or blood picture furnish no pathognomonic signs, we must, in all atypical fevers accompanied by headache and cough, question our patients about contact with parakeets, or "love birds," or talking parrots.

Since there is no known way of protecting man against this contagion, (rubber gloves, gowns, rubber boots, face masks all being unavailing) we are bound to have sporadic epidemics as long as there are people silly enough to make the importation of these pets profitable. Caveat emptor. H.P.G.

REGISTRATION AT A. M. A.

Offices of the State Medical Society will remain open until 3:00 P. M., Saturday, June 10th, to receive reports of payment of dues for members who are planning to attend the A. M. A. Fellowship may be completed at the registration desk but state dues must be paid before fellowship can be completed.

THE PRESIDENT'S PAGE

Reginald H. Jackson

WITH the publication of this editorial page, my term as President of your Society draws to its close. Under the admirable system in effect the President-elect is placed for one year, before assuming the duties of office, in intimate contact with the intricate problems which involve the welfare of organized medicine in the state. My experience during both these periods has been such as to imbue me with an ardent zeal for and admiration of our organization. The direct presentation of relevant matters requiring definite unescapable decisions as to policies and action has been a veritable revelation to me.

Determinations are arrived at only after calm deliberate discussions participated in by all at fully attended meetings of the council and at meetings of special committees, the members of which come from all sections of the state at their own expense. Attendance at such meetings necessitates for some members an absence from home and professional activities of two to three days, not merely once a year, but, for some committee members, many times a year. I doubt whether the membership at large has an appreciative comprehension of the devotion and zeal for the common interest of all exerted by those selected to fill these positions.

My most abiding impression of the actual working mechanism of the Society is the uniform celerity and dispatch with which all activities potentially detrimental to the public or the medical profession are detected and analyzed immediately they appear on the horizon, and are then brought to the attention of the proper Society officials by your Secretary.

It may be that in the future some superman serving as your President will differ with me, but it is my firm conviction that as things are and as they are apt to develop in the future, the most vitally important office in the Society is and will continue to be that of the Secretary, provided always that it is occupied by one with the attainments, personality, pretinacity, and zealous interest in the ideals and objectives of organized medicine exhibited by the present incumbent, Mr. George Crownhart. No doubt, many of you are already fully cognizant of this fact, but, inasmuch as I, myself, did not fully appreciate it until placed in direct contact with his work, I feel free to call your attention to it.

Possibly I have an erroneous and exaggerated impression of the activities and accomplishments of the Society. After all is said, has anything worthwhile ever been achieved?

The correct answer can only be ascertained by the spontaneity and unanimity of the cooperative support of the membership at large to the calls made upon them by future officials and committees. Rest assured that many such occasions will arise and that a continuing well supported protective policy of unanimity of effort will be imperative if organized medicine in this state is to hold its ground and advance into a better position.

Probably the most important problem facing the medical profession today is the one of so regulating the number of practising physicians that the ratio of them to the population will be such as to permit more than a mere pitiable existence for the majority. When states like Iowa and Wisconsin have reached the point, as they have, where the ratio of new graduates to the increase in population in these states is one doctor for every 200 to 330 respectively, obviously something should be done to control the situation. If a state medical organization is weak, nothing can be done to correct maladjustments; when it is strong, a great deal is possible of accomplishment. The encroachment on our professional prerogatives by organized minorities, no matter under what banners they parade, can be successfully opposed only by our own organized counter activities. We of today owe a deep debt of gratitude to the past officials of our Society who couragcously set aside each year when it was possible certain sums which built up an appreciable surplus. Otherwise the activities of our society during the past year would have been greatly hampered.

Lest in the pressure of work I have failed to acknowledge by letter some of the innumerable messages of advice and support sent me during my incumbency of the Presidential office, wish at this time to express my great appreciation to all members with the assurance that their general cooperation was of material aid in fulfilling the duties of the office. On behalf of my successor, I beseech the same cooperation.

THE STATE MEDICAL SOCIETY OF WISCONSIN

ORGANIZED 1841

REGINALD H. JACKSON, Madison, President
STANLEY J. SEEGER, Milwaukee, Pres.-Elect
R. M. CARTER, Green Bay, Speaker

W. G. SEXTON, Marshfield, Vice-Speaker
ROCK SLEYSTER, Wauwatosa, Treasurer
Mr. J. G. CROWNHART, Secretary, Madison

Councilors

TERM EXPIRES 1933
1st Dist., A. W. Rogers ..Oconomowoc
2nd Dist., Frank W. Pope .....Racine

TERM EXPIRES 1934
3rd Dist., C. A. Harper .....Madison
4th Dist., W. Cunningham .Platteville

TERM EXPIRES 1934
5th Dist., A. H. Heidner ...West Bend
6th Dist., S. E. Gavin ....Fond du Lac

TERM EXPIRES 1935
7th Dist., S. D. Beebe .....Sparta
8th Dist., G. R. Duer .....Marinette

TERM EXPIRES 1935
13th Dist., I. E. Schiek ...Rhinelander

TERM EXPIRES 1935
9th Dist., Joseph F. Smith ..Wausau
10th Dist., H. M. Stang ..Eau Claire

TERM EXPIRES 1933
11th Dist., F. G. Johnson ..Iron River
12th Dist., R. W. Blumenthal, Milwaukee

Delegates to American Medical Association

J. GURNEY TAYLOR, Milwaukee — W. E. BANNEN, La Crosse — JOSEPH F. SMITH, Wausau

Alternates

F. G. CONNELL, Oshkosh — T. W. NUZUM, Janesville — M. D. BIRD, Marinette

Committee on Public Policy

OTHO FIEDLER, Sheboygan, Chairman — S. E. GAVIN, Fond du Lac — REGINALD JACKSON, Madison

Committee on Medical Defense

A. J. PATEK, Milwaukee, Chairman — R. M. CARTER, Green Bay — A. G. SULLIVAN, Madison

Committee on Health and Public Instruction

W. D. STOVALL, Madison — C. M. GLEASON, Manitowoc — W. G. SEXTON, Marshfield

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LIST OF EXECUTIVE OFFICERS OF COUNTY MEDICAL SOCIETIES

County	President	Secretary
Ashland-Bayfield-Iron	J. W. Prentice, Ashland	R. O. Grigsby, Ashland.
Barron-Washburn-Sawyer-Burnett	H. H. Schlomovitz, Barron	W. Rydell, Rice Lake
Brown-Kewaunee	E. G. Nadeau, Green Bay	O. A. Stiennon, Green Bay.
Calumet	J. J. Minahan, Chilton	J. W. Goggins, Chilton.
Chippewa	J. A. Kelly, Chippewa Falls	Merton Field, Chippewa Falls.
Clark	R. R. Rath, Granton	A. L. Schemmer, Colby.
Columbia	K. A. Snyder, Portage	H. Y. Fredrick, Westfield.
Crawford	J. J. Kane, Prairie du Chien	C. A. Armstrong, Prairie du Chien.
Dane	A. R. Tormey, Madison	L. V. Sprague, Madison.
Dodge	E. P. Webb, Beaver Dam	A. W. Hammond, Beaver Dam.
Door	E. J. Konop, Sawyer	J. W. Bird, Sturgeon Bay
Douglas	C. H. Christiansen, Superior	G. J. Hathaway, Superior.
Eau Claire and Associated Counties	E. E. Tupper, Eau Claire	P. G. Spelbring, Eau Claire.
Fond du Lac	D. V. Meiklejohn, Fond du Lac	J. C. Devine, Fond du Lac.
Forest	E. G. Ovitz, Laona	O. S. Tenley, Wabeno.
Grant	C. M. Schuldt, Platteville	M. B. Glasier, Bloomington.
Green	L. A. Moore, Monroe	J. F. Mauermann, Monroe.
Green Lake-Waushara-Adams	G. E. Baldwin, Green Lake	A. J. Wiesender, Berlin.
Iowa	S. R. Ridley, Mineral Point	H. M. Walker, Dodgeville.
Jefferson	A. C. Nickels, Watertown	A. A. Busse, Jefferson.
Juneau	C. A. Vogel, Elroy	A. T. Gregory, Mauston.
Kenosha	W. C. Stewart, Kenosha	W. H. Lipman, Kenosha.
La Crosse	M. A. McGarty, La Crosse	Alf Gundersen, La Crosse.
Lafayette	R. B. Quinn, Darlington	W. B. Williams, Argyle.
Langlade	L. A. Steffen, Antigo	J. C. Wright, Antigo.
Lincoln	F. L. Kelley, Merrill	W. H. Bayer, Merrill.
Manitowoc	C. L. R. Mac Collum, Manitowoc	E. C. Cary, Reedsville.
Marathon	W. A. Green, Wausau	Verne E. Eastman, Wausau.
Marinette-Florence	T. J. Redelings, Marinette	C. H. Boren, Marinette.
Milwaukee	J. C. Sargent, Milwaukee	Theodore Wiprud, Ex. Sec'y, Milw.
Monroe	A. E. Winter, Tomah	H. H. Williams, Sparta.
Oconto	J. S. Dougherty, Oconto	G. W. Krahn, Oconto Falls.
Oneida-Vilas	C. D. Packard, Rhinelander	I. E. Schiek, Rhinelander.
Outagamie	G. T. Hegner, Appleton	R. V. Landis, Appleton.
Pierce-St. Croix	Julius Blom, Woodville	A. E. McMahon, Glenwood City.
Polk	G. B. Noyes, Centuria	Geo. B. Larson, Frederic.
Portage	H. M. Coon, Stevens Point	E. E. Kidder, Stevens Point.
Price-Taylor	E. A. Riley, Park Falls	E. B. Elvis, Medford.
Racine	W. C. Roth, Racine	Susan Jones, Racine.
Richland	B. L. Pippin, Richland Center	G. Benson, Richland Center.
Rock	F. E. Brinckerhoff, Beloit	E. C. Hartman, Janesville.
Rusk	L. M. Lundmark, Ladysmith	M. L. Whalen, Bruce.
Sauk	Roger Cahoon, Baraboo	A. C. Edwards, Baraboo.
Shawano	O. F. Partridge, Mattoon	A. A. Cantwell, Shawano.
Sheboygan	A. W. Sieker, Plymouth	A. C. Radloff, Plymouth.
Trempealeau-Jackson-Buffalo	R. R. Richards, Blair	R. L. MacCornack, Whitehall.
Vernon	C. E. Lander, Viroqua	P. H. Hansberry, Hillsboro.
Walworth	S. G. Meany, East Troy	H. J. Kenney, Delavan.
Washington-Ozaukee	O. J. Hurth, Cedarburg	P. M. Kauth, West Bend
Waukesha	Margaret Caldwell, Waukesha	J. F. Wilkinson, Oconomowoc
Waupaca	R. K. Irvine, Manawa	F. J. Pfeifer, New London.
Winnebago	D. G. Hugo, Oshkosh	M. C. Haines, Oshkosh.
Wood	F. X. Pomainville, Wisconsin Rapids	W. G. Sexton, Marshfield.

SOCIETY PROCEEDINGS

BROWN-KEWAUNEE

The meeting of the Brown-Kewaunee County Medical Society was held at the Northern Hotel, April 19th, and was well attended. A resolution was adopted to appoint a committee to meet with the Brown County Board to pass on all bills rendered to the County Board for medical services to county indigent sick and to deduct therefrom a maximum of 25%. The following members of the Door County Society were duly voted into the Society: Drs. G. R. Egeland, Charles Leasum, Dan Dorchester and F. C. Huff, all of Sturgeon Bay.

The guest speaker of the evening was Dr. Arthur W. Rogers, Oconomowoc, Chairman of the Council of the State Society, who gave a very excellent and instructive address on the subject of "Mental Disease." Dr. Rogers was followed by Dr. Ralph Carter of Green Bay who delighted his audience with a short paper in which he discussed "The Last Illness of George Washington." O. A. S.

DOUGLAS

At the April meeting of the Douglas County Medical Society, Judge Wm. E. Hailey of the Douglas County Court was speaker of the evening and discussed legislative problems concerning social medicine, particularly as applied to his work in probate court. He pointed out certain faults in the present statute and outlined a program of future legislation. He promised whole-hearted support to the Society in its present program. G. J. H.

EAU CLAIRE AND ASSOCIATED

A meeting of the Eau Claire and Associated Counties Medical Society was held at the Hotel Eau Claire on Monday evening, April 24th. The following papers were presented following the dinner:

"Appendicitis in Childhood" by Dr. Oswald S. Wyatt, Minneapolis.

"Diverticulitis of the Colon" by Dr. James B. Carey, Minneapolis.

"Cardiac Neurosis" by Dr. Harold E. Richardson, St. Paul.

GREEN

Dr. L. A. Moore, Monroe, was elected president of the Green County Medical Society at a meeting of the Society on May 2nd. Dr. G. S. Darby of Brodhead was elected vice-president and Dr. J. F. Mauermann of Monroe was re-elected secretary and treasurer, as well as delegate to the annual meeting of the State Medical Society. Dr. W. G. Bear of Monroe was chosen alternate delegate.

The Censor Committee appointed is composed of Dr. S. J. Francois, New Glarus; Dr. M. P. Ohlsen, Monticello, and Dr. E. J. Mitchell of Brodhead.

LA CROSSE

A four months review of medical and hospital expense for La Crosse county relief system shows a general reduction of 52 per cent over a corresponding period last year, according to records of the La Crosse County Medical society.

The society which entered into a contract with La Crosse county to furnish medical and surgical services for one year to all families on the poor relief roll, old age pensions, mothers' pension, transient's home and county home, has already effected a saving of almost $4,000.

The county relief figures show a total cost of hospitalization this year of $3,545.68 as against $7,419.33 for 1932, when the county was operating under the single county physician plan.

The cost of medical care for county home inmates now numbering 94 reveals a cost of $97 for the first four months of the year as against $1,177.50 for a corresponding period last year or a saving of $1,080.

A further marked saving has been accomplished in the fact that no patients have been transported to the Wisconsin General hospital or the State Orthopedic hospital at Madison this year, whereas in former years many patients were transferred to Madison where the expense of hospitalization plus transportation was double the cost they are now receiving at home, it is pointed out.

These savings in medical care appear more striking considering that the relief list has increased over ten per cent and the amount of medical service likewise increased over 40 per cent. There are at present 48 physicians rendering county service which is 95 per cent of the practitioners in the county.

Every patient is given an opportunity to select his own family physician and hospital and can likewise select such consultation, specialist or clinic service as he chooses. It has been this privilege that has not only increased the volume of medical service but has occasioned a greater field of surgical study.

Dr. Robert E. Flynn is the director in charge of the work and there is an economic committee consisting of Dr. E. H. Townsend, Dr. Gunnar Gundersen, Dr. George R. Reay, Dr. R. L. Eagan, and Dr. L. E. Hanson of Holmen, Wisconsin, who represent the various hospitals and assist in supervising the work.

MANITOWOC

Dr. Wm. A. Wagner of Oshkosh was the guest speaker at the April meeting of the Manitowoc County Medical Society. The subject of his address was "Some Complications of Pregnancy — Their Treatment and Prevention."

Following the meeting, the Woman's Auxiliary joined the physicians at a luncheon held at the K. C. Center. E. C. C.

PIERCE–ST. CROIX

This Society met in Hudson on May 11th following dinner at the Hotel Hudson. We were addressed by Judge O. Warnquist, county judge of St. Croix County. He spoke on the present methods of administering the law relating to the treatment of the indigent sick. The Judge gave an interesting discussion and we were very glad to have him with us.

Dr. H. M. Stang of Eau Claire then gave a very interesting address on "Genito-Urinary Problems of Interest to the General Practitioner." This was well illustrated by x-ray plates.

Fifteen members were present. A. E. McM.

POLK

At the April 20th meeting of the Polk County Medical Society, Dr. John A. Urner of Minneapolis spoke on "Contraception and the Recent Developments." The meeting was held at the home of Dr. W. B. Cornwall of Amery.

RACINE

The regular April meeting of the Racine County Medical Society was held on the 20th in the evening at the Racine Elks Club.

"Injuries of the Nerves and Tendons of the Hand" was discussed by Dr. Sumner L. Koch of Chicago. The address was illustrated with lantern slides.

An address on "The Status and Qualifications of an Industrial Physician" was given by Dr. C. F. N. Schram of Beloit.

Luncheon was served following the meeting. S.J.

SHEBOYGAN

The Sheboygan County Medical Society had a dinner meeting at the Hotel Foeste, Sheboygan, on April 25th. Dr. Herman L. Kretschmer of Rush Medical College was the speaker and had as his subject "Transurethral Postatectomy." Forty physicians attended the meeting.

Will the doctor who by mistake exchanged overcoats with Dr. J. C. Devine of Fond du Lac, please communicate with the Doctor? A. C. R.

VERNON–MONROE–JUNEAU

On May 11th, thirty-five members of the medical profession met at Sparta, and organized a tri-county medical society including Vernon, Monroe and Juneau Counties.

There was plenty of enthusiasm from the very kick-off and after a 12:30 luncheon the switch was turned on the organizing power of those thirty-five members of our profession. Dr. Spencer Beebe Sparta. councilor for the 7th district, acting as temporary chairman lost no time in calling the meeting to order and election of officers followed: Dr. A. E. Winter of Tomah was elected president; Dr. C. H. Cremer of Cashton, vice-president; Dr. P. H. Hansberry, of Hillsboro, secretary and treasurer.

Dr. Gunnar Gunderson, La Crosse, gave the society a very fine talk on "Pyloric Obstruction", and a discussion followed by Dr. Chauncey Beebe of Sparta.

The Society will hold monthly meetings during 1933. The next meeting will be held some time in June at Elroy, Wisconsin, and will be arranged by the secretary and his committee from Juneau County.

We extend a standing invitation to all members of our profession to attend our meetings at any time.

P. H.

WAUPACA

The regular meeting of the Waupaca County Medical Society was held on May 5th.

It was decided at this meet to accept the invitation of the Outagamie County Medical Society to affiliate with them. A committee was appointed to confer with the Outagamie County committee. F. J. P.

NINTH COUNCILOR DISTRICT

The annual meeting of the Ninth Councilor District Medical Society was held in Stevens Point on the afternoon and evening of April 27th.

At four o'clock a clinic on cardiorenal diseases and bad risk surgical cases was conducted by Dr. E. G. Bannick of the Department of Medicine, The Mayo Clinic. Following the dinner served at the Hotel Whiting at six-thirty o'clock, the following program was presented:

"Spontaneous Pneumothorax" by Dr. H. P. Benn of Stevens Point.

A discussion of the following subjects: (a) "Sedimentation Rate of the Blood; Its Practical Application in Clinical Medicine"; (b) "The Management of Acute Burns" by Dr. E. G. Bannick, Rochester.

Dr. Reginald H. Jackson, Madison, showed movies on the treatment of sciatic nerve disease.

The following officers were elected for the coming year: Dr. W. E. Zilisch of Wausau, president, and Dr. Joseph F. Smith, Wausau, was re-elected secretary.

The next three meetings of the Society will be held at Marshfield, Wausau and Wisconsin Rapids.

Members of the Woman's Auxiliary to the Portage County Medical Society were hostesses to the wives of the physicians at a bridge party following the dinner at the Hotel Whiting.

CENTRAL WISCONSIN SOCIETY OF OPHTHALMOLOGY AND OTO-LARYNGOLOGY

The spring meeting of the Society was held on the afternoon and evening of Monday, May 15th, at Wisconsin Rapids.

The afternoon speakers were the following:

"Syphilis of the Ear, Nose and Throat" by Erling W. Hansen, Minneapolis.

"Lateral Sinus Thrombophlebitis" by Fred S. Cook, M. D., Eau Claire.

"The Outagamie County Plan" by Dr. A. E. Rector of Appleton.

"In Memoriam, William Melvin Ruckle, M. D." by Dr. Will G. Merrill, Wisconsin Rapids.

Following dinner in the Hotel Witter Rose Room

at six-thirty, a scientific program was presented as follows:

"Tuberculosis of the Ear"—discussion led by Dr. Erling W. Hansen of Minneapolis.

"Cataract Extraction" with motion picture, by Dr. Charles N. Spratt, Minneapolis.

"Repair of Glabella Defect by Dermal Graft" and "Repair of Saddle Nose by Cartilage Implant"—motion picture from the service of Clarence R. Straatsma, M. D., New York.

GREEN BAY ACADEMY OF MEDICINE

Dr. P. R. Minahan, Green Bay, was elected president of the Green Bay Academy of Medicine at a business meeting held in the Bellin Memorial hospital on April 27th. Dr. J. C. Colignon was elected vice-president; Dr. W. C. Comee, secretary-treasurer; Dr. C. S. Williamson to the executive committee for two years; and Dr. A. J. McCarey to the executive committee for one year.

MILWAUKEE ACADEMY OF MEDICINE

At the May meeting of the Milwaukee Academy of Medicine, held on the sixteenth, the following scientific program was presented:

"Rhinoscleroma—Report of a Case," Lester M. Wieder, M. D.

"Careful Diagnosis and Conservative Management of Urinary Stones," James C. Sargent, M. D.

"Roentgen Finding in Splenomegaly," J. Edwin Habbe, M. D.

MILWAUKEE ORTHOPEDIC

At the annual meeting of the Milwaukee Orthopedic Club, held the latter part of April, Dr. Herman C. Schumm was elected president, and Dr. L. D. Smith, secretary.

MOUNT SINAI HOSPITAL INTERNS

The final meeting of the current year of the Mount Sinai Hospital Interns' and Resident Alumni Association was held at the Hospital on April 17th.

The following officers for the ensuing year were elected:

President, Dr. David V. Elconin; Secretary and Treasurer, Dr. A. J. Levin.

At this meeting Dr. I. Davidoff read a paper on "Appendicitis in Children," and Dr. J. Ackerman addressed the group on "Uterine Fibroids."

Meetings of this organization are held four times a year: in October, December, February and April.

WISCONSIN SOCIETY OF X-RAY TECHNICIANS

The newly-organized Wisconsin Society of X-Ray Technicians, composed of assistants and technicians to roentgenologists, met at the Hotel Wisconsin on May 6th.

Among those who read technical papers at the morning session were Dr. J. Edwin Habbe; at the afternoon session, Drs. Theodore Sokow, Kenosha, Harry R. Foerster, H. W. Hefke, and Frank W. Mackoy.

At the evening session papers were presented by Drs. H. B. Podlasky and David J. Ansfield.

THE WOMAN'S AUXILIARY

MRS. FRED A. NAUSE, JR., Sheboygan, *President*
MRS. EBEN J. CAREY, Milwaukee, *President-elect*
MRS. WALTER FORD, Sheboygan, *Secretary*
MISS RUTH BUELLESBACH, Madison, *Executive Secretary*
MRS. R. G. ARVESON, Frederic, *Treasurer*
MRS. JAMES C. SARGENT, Milwaukee, *Press and Publicity Chairman*
MRS. JAMES F. PERCY, Los Angeles, Calif., *National President*
MRS. ROCK SLEYSTER, Wauwatosa, *National Convention Chairman*

National Convention, Milwaukee, June 1933

On to Milwaukee

The all important month of June has arrived and with it the completion of the plans for what Milwaukee hopes will be remembered as the finest National Convention of the American Medical Association in its history. For months the Convention Committee has been at work planning a week of happiness for you. Do not fail to read the program of entertainment which has been planned and which appears in your May State Journal. These plans are, of course, confined only to the afternoons and evenings, as the mornings will be brimming full of Auxiliary business meetings which will hold much of inestimable value for every auxiliary member who is so fortunate as to attend them. The Committee has made particular effort to obtain the finest entertainment at the least possible expense to the individual and it is conscious of a real accomplishment when it announces that every luncheon, dinner, sight-seeing trip, bridge party and dance can be attended with a cost to the individual of less than ten dollars for the entire convention. You will find the entertainment to be the best and the food the finest

and the hostesses constantly desirous of fulfilling each individual wish of their guests. Feel free to ask for any kind of "special service" for that is what we are anxious to provide.

Anticipating the fact that probably many children will come to Milwaukee with their parents, the city, through the efforts of Miss Dorothy Enderis, Director of Recreation in Milwaukee, has provided a supervisor of play to take charge of children of six years or older at the Siefert Social Center on 14th and Galena Streets from nine o'clock A. M. to six o'clock P. M. each day of the Convention. There will be a story hour, opportunities in handicraft and general supervised play. Transportation will be provided for the children each morning, leaving the Hotel Pfister shortly before nine o'clock. If the parents so desire, the supervisor will take the children to lunch (to be paid for by the individual). It would be appreciated if the parents who intend to benefit by this opportunity would notify Mrs. Maurice Perlson 4137 No. 13th St., Milwaukee, at their earliest convenience so that the necessary number of supervisors may be provided.

We are very happy to announce that the golf tournament will be held at the Milwaukee Country Club and daily golf privileges may be obtained there. This course is recognized to be one of the finest tournament courses in the country and the club house and grounds are of very unusual beauty. We are confident that visitors will feel it a real opportunity to play this course.

An event of special interest to Auxiliary women is a "Bring-Your-Husband" dinner on Thursday night, June 15th. This will be held at 6:30 o'clock in the Hotel Pfister, our Auxiliary headquarters, and is planned as a dinner to precede the President's reception and ball to be held at the Schroeder Hotel at 9:00 o'clock. There will be a colorful cabaret during the dinner provided by the International House artists, each number put on by a different nationality in the costumes of their native lands. The dinner and entertainment will be over in plenty of time to make it possible for everyone to get to the President's reception on time. Don't fail to bring your husband to this dinner and enjoy with him the good food and novel entertainment.

Remember particularly your own responsibility in making the dance on Tuesday night a success.

On Tuesday evening, June 13th, following the general meeting of the A. M. A. at the Auditorium, Wisconsin will be the host to all A. M. A. members and their wives at a dance to be held at the Wisconsin Club. There will be dancing in the garden and in the ballroom and light refreshments will be served. Wisconsin people will be charged one dollar a couple to make it possible to have all "out of state" members as our guests that night. We hope that all Wisconsin members will plan to come and to feel that they are personally the hosts at the party and as such will help to see that the guests have a happy evening. Your prompt response to the ticket sale as it comes to you through your own County president, and an early report to the dance committee chairman, Mrs. James C. Sargent, 2924 N. Stowell Ave., Milwaukee, on the number of couples from each County, will be greatly appreciated by the dance committee.

Remember the dates June 12–16 and come to the Convention. It will soon be a pleasant addition to your story of happy memories. Milwaukee extends her hand in a friendly greeting to the wives of all doctors attending the Convention, inviting you to come, to stay and to enjoy her hospitality.

WISCONSIN DELEGATES TO THE NATIONAL CONVENTION

Delegates

Mrs. Eben J. Carey, Milwaukee
Mrs. J. Arthur Riegal, St. Croix Falls
Mrs. Gregory Connell, Oshkosh
Mrs. Oscar Friske, Beloit

Alternates

Mrs. J. Gurney Taylor, Milwaukee
Mrs. Fredk. A. Leighton, Sheboygan Falls
Mrs. Gustav Mueller, Princeton
Mrs. Wayne Munn, Janesville

STATE MEETING

Following the luncheon at the Wisconsin Club on Tuesday, June 13th, the *Executive Board* of the Woman's Auxiliary to the State Medical Society will hold a meeting in the Mirror Room of the Pfister Hotel.

The *General Meeting* of the State Auxiliary will be held on Wednesday, June 14th, at three o'clock in the afternoon at the Pfister Hotel.

Reports of County Auxiliaries

COLUMBIA COUNTY

The Columbia County Medical Society entertained the Auxiliary at a dinner on April 28th at St. Mary's Hospital, Columbus. After a delightful dinner they were entertained by a quartet, after which the ladies held election of officers. They are: Mrs. Hugh Caldwell, Columbus, president; Mrs. Wm. H. Costello, Randolph, president-elect; Mrs. H. E. Gillette, Pardeeville, secretary and treasurer. Following the business meeting the past president, Mrs. K. A. Snyder, Portage, entertained the members at bridge.

MILWAUKEE COUNTY

At the May luncheon meeting of the Auxiliary to the Milwaukee County Medical Society Dr. Stanley Seeger, National Convention Chairman, gave a very interesting outline of the plans for the convention, and Dr. Morris Fishbein, editor of the Journal of the A. M. A., addressed the auxiliary on "The Changes in the Practice of Medicine in the Last Hundred Years." Because of the wide interest in both of the speakers and their subjects, members of the auxiliary were privileged to bring guests,—about two hundred people attended, and enjoyed a most unusually interesting program.

The membership committee reports a total membership of 300 members, 75 of whom are newly enrolled since January, 1933. Since the first of the year the Hygeia Committee has placed nine six-month and nine one-year subscriptions in county schools and institutions as well as forty-two copies of March and April issues in the schools entered in the Health Essay Contest. The Public Relations committee reports having placed forty-one speakers in lay organizations since January. (Ten of these had been arranged by the committee of last year).

Each Saturday morning in May the Auxiliary is assisting the Medical Society in its immunization campaign by transporting the children to and from the clinics and by helping with clerical work in each hospital during the clinics.

PORTAGE COUNTY

When the Ninth Councilor District held its annual meeting in Stevens Point on April 27, the Portage County Auxiliary invited the wives of visiting physicians to attend as their guests. Forty-six ladies were present at the meeting. Many of the women were from counties in which there is no auxiliary and they appreciated the privilege of meeting with the auxiliary. All the members of the Green Lake–Waushara–Adams Auxiliary were present, and women were in attendance from Merrill, Wausau, Manawa, Marshfield, Colby, Nekoosa and Waupaca.

RACINE COUNTY

On April 26th the Racine County Auxiliary enjoyed a pleasant and educational afternoon at a luncheon meeting held at St. Mary's Hospital. An inspection tour of the new building was made. A feature of the program was a paper presented by Sister Mary Tarcissa on the history of the Franciscan Sisters who are in charge of the hospital. "It was an outstanding afternoon for our members and a goodly number attended."

SHEBOYGAN COUNTY

Miss Levina Dietrichson, superintendent of the Rocky Knoll Sanatorium entertained the Auxiliary to the Sheboygan County Medical Society and their guests, the Winnebago County Auxiliary, at the sanatorium on May 3rd after a luncheon at the Dresden Tea Room in Plymouth. The Winnebago County Auxiliary was represented by its president, Mrs. Gregory Connell, Oshkosh, and twelve members of the Auxiliary. Miss Dietrichson gave an interesting talk on the organization of the Sanatorium and also the daily routine of the patients. Later the guests were shown through the institution.

The last meeting of the Auxiliary for this season will be held at Elkhart Lake. Due to the National Convention the meeting will be postponed until the latter part of June.

DANE COUNTY AUXILIARY ORGANIZED

A Woman's Auxiliary to the Dane County Medical Society was formed on Thursday, May 18th, when thirty-three ladies met at a luncheon meeting at the Madison Club. A welcome in behalf of the Dane County Medical Society was extended to the Auxiliary by the Secretary, Dr. L. V. Sprague. The state president, Mrs. Fred A. Nause, Jr., Sheboygan, talked to the ladies on the objects of an Auxiliary. Mrs. Rock Sleyster, Wauwatosa, National Convention chairman, outlined the plans for the 1933 Convention. Following a short address by the president-elect, Mrs. Eben J. Carey, Milwaukee, election of officers was held. A unanimous ballot was cast for the following officers: Mrs. Reginald Jackson, Madison, president; Mrs. Arthur Sullivan, Madison, president-elect, Mrs. Volney B. Hyslop, Madison, secretary; Mrs. Harry A. Keenan, Stoughton, treasurer. It is the hope of the Dane County Auxiliary that another meeting can be held before the National Convention in Milwaukee June 12–16th.

HEALTH ESSAY CONTEST

Marinette–Florence County Auxiliary, Milwaukee County Auxiliary and Polk County Auxiliary have the honor of claiming the three prize winning essays. "The Dangers of Delay" by Isabel Bashford, Peshtigo High School, Peshtigo, was given first place. Second place went to Virginia Kazda, West Allis High School, West Allis. Her essay was entitled "Quelling the Quacks". The third prize essay was the "Importance of Proper Food to Good Health" by Herby Brusletten, Clear Lake, a student of Amery High School.

This Health Essay Contest was sponsored by the Woman's Auxiliary to the State Medical Society to

stimulate in our young people an interest in, and a knowledge of, authoritative health information. The essays were based upon any article or articles in the February and March issues of Hygeia, which pertained to health, and the relationship of the medical profession to the individual, the family, and the community.

Only sophomores in high schools located in counties in which Auxiliaries are organized were eligible to enter the contest. Twenty-four essays were selected for the State Contest by the following county auxiliaries: Green Lake–Waushara–Adams, Marinette–Florence, Milwaukee, Polk, Portage, Racine, Rock, Sheboygan and Winnebago.

Announcement of the winners of each county auxiliary will be made next month.

NEWS ITEMS AND PERSONALS

Dr. Alf Gundersen of La Crosse returned on May first from Cleveland and New York where he attended clinics.

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Dr. Ralph M. Carter, Green Bay, Speaker of the 1933 House of Delegates, addressed the Kiwanis Club of Green Bay on May 8th on the subject of "Crippled Children."

—△—

Dr. E. L. Schroeder of Shawano has been appointed to the University of Wisconsin Board of Visitors for a term ending in 1936.

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Dr. J. V. Herzog of Elkhorn has moved his offices from the Chicago building to a seven room suite in the Sprague Block.

—△—

Dr. Adolph Gundersen, La Crosse, was re-appointed as a member of the La Crosse Board of Health for a three-year term.

—△—

At the annual meeting of the Illinois, Indiana and Wisconsin Hospital Associations held in Chicago, May 3–5, Dr. R. C. Buerki, Madison, was re-elected president of the Wisconsin Hospital Association; Miss Grace Crafts, superintendent of Madison General Hospital, Madison, vice-president, and Mr. J. G. Crownhart, Madison, secretary and treasurer.

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Dr. C. D. Neidhold of Appleton spoke on "The Romance of Medicine" at a meeting of the Men's Club of the Methodist Church on May 5th.

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Eye, ear, nose and throat specialists of Beloit, Janesville and Rockford held their second meeting at the Hotel Hilton, Beloit, on April 18th. The speaker at this meeting was Dr. W. D. Stovall, Madison, who spoke on "Recent Developments in the Treatment of Allergy."

—△—

Dr. John W. Monsted of New London sailed on May 19th on the tour sponsored by the Interstate Postgraduate Association of North America. The group will visit universities and clinics at London, Edinburgh, Copenhagen, Stockholm, Leningrad, Moscow, Berlin, Vienna and Paris.

Dr. and Mrs. Arnold Jackson, Madison, returned from a motor trip in the south on May 21st. While there, Dr. Jackson gave a series of lectures on "Goiter" before the Missouri State Medical Society at Kansas City; the Houston Medical Society, Houston, Texas; the University of Texas Medical School; the University of Tulane Medical School, New Orleans, and the American Association for the Study of Goiter at Memphis.

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Dr. Fred W. Leeson of Beloit on April 13th announced his permanent retirement from the practice of medicine. Dr. Leeson's practice has been taken over by Dr. Harold W. Kishpaugh who has been associated with him for the last three years.

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Physicians who have been elected as members of local health boards are:

Appleton—Dr. F. P. Dohearty, city physician, and Dr. C. D. Neidhold, president.

North Fond du Lac—Dr. Harmon H. Hull, village health officer.

Madison—Dr. F. F. Bowman, health commissioner; Dr. H. E. Purcell, president.

Burlington—Dr. G. W. Newell, health officer.

Evansville—Dr. C. M. Smith was elected chairman of the Rock County Board of Supervisors.

Chippewa Falls—Dr. J. A. Kelly was elected city health officer.

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Dr. William F. Lorenz, Madison, was elected president of the Madison Fire and Police Board.

—△—

The State Medical Society broadcasts on Tuesday, Wednesday and Thursday mornings at 10:45 over the two state stations WHA Madison, and WLBL, Stevens Point. The talks are delivered by Miss Ruth Buellesbach, R. N. The subjects for May were as follows:

May 2—Goiter.
May 3—Mouth Hygiene.
May 4—"Raising Cain."
May 9—Building Good Teeth.
May 10—Vacation Health.
May 11—Vacationists with Children.
May 16—Your Convalescent Child.
May 17—Baby Teeth.
May 18—Patent Medicines.

May 23—Worthwhile Weekends.
May 24—Sickness and Character.
May 25—The Voice.
May 30—Hard Times and Health.
May 31—Exercise for the Middle Aged.

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Dr. W. A. Mowry, of the University of Wisconsin, was elected a member of the executive committee of the newly-formed Student Health Association at a meeting of forty representatives of universities and colleges in Minnesota, Iowa and Wisconsin at Minneapolis in May.

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The 34th annual meeting of the American Proctologic Society will be held in Chicago, Monday and Tuesday, June 12 and 13th at the Stevens Hotel. For additional information please address the Secretary, Dr. Frank G. Runyeon, 1361 Perkiomen Ave., Reading, Pa.

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Dr. J. N. Sisk, Madison, discussed medical care for the indigent at a meeting of the Stoughton Lions Club.

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Dr. E. B. Quade of Wausau has recovered from injuries received in an automobile accident in April.

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MILWAUKEE

Dr. and Mrs. F. J. Gaenslen and Dr. and Mrs. H. C. Schumm returned to Milwaukee about the middle of May from a motor trip to Washington, D. C. Drs. Gaenslen and Schumm attended the American Orthopedic Convention while in Washington.

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Dr. and Mrs. C. J. Coffey announce the approaching marriage of their niece, Miss Genevieve Elizabeth Coffey, to Mr. Joseph A. Dunn. The wedding will take place in Milwaukee on June 10th.

—△—

The postgraduate course in the Newer Methods of Immunization and Vaccination got off to a very good start on May 6th. Clinics were held in the following hospitals:

Hospital	*Physician in charge*
Columbia	Dr. A. B. Schwartz
Deaconess	Dr. J. H. Reynolds
Mount Sinai	Dr. S. H. Lippitt
Milwaukee	Dr. G. H. Fellman, Dr. A. L. Kastner
Milwaukee Children's	
Misericordia	Dr. E. P. Evans
Milwaukee Maternity and General	Dr. Joseph F. Shimpa
St. Joseph's	Dr. Max E. Wiese
St. Luke's	Dr. George Kelly
St. Mary's	Dr. J. C. Zuercher

Approximately five hundred persons were immunized on the opening day.

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The following luncheons will be held during the meeting of the American Medical Association in Milwaukee in June:

The University of Illinois Alumni Dinner will be held on Wednesday evening, June 14th, at 6:30 P. M., at the Liederkranz Club.

Members of the Alpha Omega Alpha fraternity will hold its annual dinner on Thursday, June 15th, at 6:30 P. M., at the Hotel Schroeder.

Members of Beta Kappa Psi will meet at luncheon at the Hotel Schroeder on Wednesday, June 14th, at noon.

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Drs. Eben J. Carey and Robert E. Purtell chaperoned the annual spring formal dinner dance given by Phi Chi, international professional medical fraternity, at the Wisconsin Club on April 29th.

—△—

Four Milwaukee physicians are serving as reserve medical officers with the conservation corps at Fort Sheridan. They are: Dr. Frank Rettig, Dr. Albert N. Tousignant, Dr. George R. Schwartz, and Dr. Max J. Primakow.

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"What Everyone Should Know About Appendicitis" was the subject of Dr. W. J. Carson's address to the Tripoli Shrine Booster Club at a luncheon held on April 21st.

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Dr. M. Fernan-Nunez, who resigned as director of laboratories at the Roger Williams Hospital, has been succeeded by Dr. W. B. Schultz, of Chicago.

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Dr. A. A. Pleyte, addressed the seventy-fifth annual meeting of the Kansas Medical Society at Lawrence, Kansas, on May 4th.

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Dr. Roland A. Jefferson returned to Milwaukee on May first from a short trip to St. Paul.

—△—

Dr. and Mrs. John L. Yates left the latter part of April for a visit in St. Louis.

—△—

Dr. and Mrs. John B. Hitz and infant daughter returned to Milwaukee early in May from a seven months' trip abroad. Dr. Hitz did postgraduate medical work in Vienna and in Innsbruck.

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Dr. and Mrs. Hoyt E. Dearholt left the latter part of April for Hartford, Connecticut, where they will visit their daughter and son-in-law, Mr. and Mrs. Timothy Goodrich.

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Dr. and Mrs. Earl L. Baum, who spent the winter and early spring at Naples, Florida, have returned to Milwaukee.

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Dr. O. R. Lillie's fishing shack at Star Lake, Wisconsin, was the headquarters for a group of Milwaukee physicians who spent a couple of weeks, early in May, trout fishing. Among the group enjoying this outing were Drs. Wilbur LeCron, Curtis A. Evans, and O. R. Lillie.

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Dr. and Mrs. Henry O. McMahon returned on May 4th from Columbus, Ohio, where they visited Mr. and Mrs. William C. McMahon, former Milwaukee residents.

BIRTHS

A son to Dr. and Mrs. A. F. Kustermann, Milwaukee, on April 14th.

A daughter to Dr. and Mrs. M. J. Kuhn, Milwaukee, on April 16th.

A son to Dr. and Mrs. P. J. Eisenberg, Milwaukee, on April 24th.

A son to Dr. and Mrs. Joseph J. Kronzer of Oshkosh on May 1st.

A daughter, Mary Fay, to Dr. and Mrs. James Allen Ballard, Milwaukee on April 30th.

MARRIAGES

Dr. Carl Oliver Diamond, West Allis, to Miss Ruth Sybil Heimovit, daughter of Mr. and Mrs. J. Heimovit on April 25th.

Dr. Francis Charles Lane of Merrill to Miss Rosemary Stange also of Merrill in the Convent of the Sisters of the Holy Cross, on May 3rd.

DEATHS

Dr. Henry Driessel, Kewaskum, died on April 25th at his home.

Dr. Driessel was born at Holy Cross, Nov. 25, 1854. He was a graduate of Louisville Medical College, Louisville, Ky., in 1898. Following graduation, Dr. Driessel opened an office in Lomira remaining there until 1907 when he moved to Kewaskum. For many years Dr. Driessel served as health officer of the village.

Dr. Royal C. Rodecker, Mercer, died on April 30th. He was found dead in his garage.

Dr. Rodecker was born in the year 1875 and was a graduate of Bennett Medical College of Chicago in the year 1898. For many years Dr. Rodecker served as the eclectic member of the Wisconsin State Board of Medical Examiners. He had previously practiced in Holcombe, Wisconsin, before coming to Mercer.

He was a member of the Ashland–Bayfield–Iron Counties Medical Society, the State Medical Society, and the American Medical Association.

SOCIETY RECORDS

New Members

H. L. Baxter, Neenah.
J. J. Kronzer, City Hall, Oshkosh.
R. A. Jefferson, 110 E. Wis. Ave., Milwaukee.
A. J. Wagner, Brillion.
H. J. Belson, St. Nazianz.
W. W. Morrison, Edgerton.
Eugene C. Smith, Lutheran Hospital, La Crosse.
Arthur C. Stehr, 503 State St., Madison.
Rolf Quisling, 123 King St., Madison.
Gunnar Quisling, 123 King St., Madison.
A. G. Kammer, Belleville.

» » » CORRESPONDENCE « « «

CERTIFIED MILK

MILK COMMISSION OF THE MILWAUKEE ACADEMY OF MEDICINE

Milwaukee, Wis., May 4, 1933.

Mr. George Crownhart, Secy.,
State Medical Society,
119 E. Washington Avenue,
Madison, Wisconsin.

Dear Sir:

Inclosed is a communication which the Milk Commission of the Milwaukee Academy of Medicine is desirous to have printed, if possible, in the next issue of your Journal.

Hoping that it has been received in time, I am

Sincerely yours,

R. M. HALL,
Secretary Milk Commission of Milwaukee Academy of Medicine.

Certified farms supplying this market have been testing their cows for abortion for as many as eight years and the Methods and Standards for the production of Certified Milk have advised abortion testing for four years and made it mandatory for the last two years. All reactors and suspects are removed from the premises immediately and the blood test is checked with a milk test from each cow every ninety days. Also no chickens or hogs are kept on certified farms so the cattle cannot become infected with caprine or porcine forms of the disease which many investigators believe are much more pathogenic to man.

Certified milk is also tested for B. Coli and Streptococcus Epidemicus (Davis) at frequent intervals, the work being done under the direction of Dr. Frost at the University of Wisconsin.

Also each employee has a throat culture made and repeated at least once per month, the laboratory work again being done at Madison. Tests are also made for the Enteric Fevers.

CENTURY OF PROGRESS

CHICAGO MEDICAL SOCIETY,
185 N. Wabash Avenue,
Chicago, May 5, 1933.

Dear Doctor:

You are doubtless aware of the fact that during the summer of 1933, The Century of Progress Exposition is being held in Chicago.

Chicago Medical Society has a booth in the Hall

(Continued on page 430)

Over Five Thousand Expected for Milwaukee Meeting of the American Medical Association

Upwards of five thousand physicians will probably attend the Milwaukee meeting of the American Medical Association during the week of June 12–16. The scientific program of the Association will be found in the fore part of this issue of the Journal.

Preceded by sessions of the House of Delegates of the American Medical Association on Monday and Tuesday, the opening general session will be held on Tuesday evening in the Milwaukee Auditorium. At this meeting the President of the American Medical Association will present his annual address and following the meeting an informal dance will be given for all visitors at the Wisconsin Club. Sectional meetings which open on Wednesday morning will be preceded by clinical lectures on Monday afternoon, Tuesday morning, and Tuesday afternoon.

Monday, June 12th, will be devoted to registration and the Annual Golf Tournament of the American Medical Golfing Association which is to be held at the Blue Mound Country Club. All those desiring to participate in the golf tournament should make arrangements early and communicate with Dr. J. W. Powers, 231 W. Wisconsin Avenue, chairman of the local Golf Committee.

The Registration Committee, of which Dr. Chester C. Schneider is chairman, urges that all Wisconsin men register on Monday, June 12th, if possible, as large numbers will be arriving from all parts of the country and early registration will relieve the congestion which will result if Wisconsin men wait until later to register.

On Monday evening, June 12th, there will be a dinner given by the State and County Medical Societies for the House of Delegates of the American Medical Association. This dinner will be held at the Wisconsin Club.

On Wednesday, June 14th, besides the scientific meetings, which will continue, alumni luncheons and dinners will be held,—most of them to be held at the Hotel Pfister at 6:30 P. M. The following alumni groups have arranged for dinners:

University of Ohio
University of Michigan
Johns Hopkins
Marquette University
Harvard–Yale
University of Maryland
University of Illinois (Smoker)
Rush
University of Minnesota
Northwestern University
University of Wisconsin
Columbia University
University of Indiana
University of Pennsylvania
Canadian Universities

WISCONSIN REGISTRATION

Registration for the annual meeting of the American Medical Association will open in the Auditorium on Monday, June 12th. Dr. C. C. Schneider, Milwaukee, Chairman of the Committee on Registration, asks the cooperation of all Wisconsin members that they register on Monday and Tuesday of the meeting week.

With such cooperation, the registration facilities will not be overtaxed at the time the majority of the out-of-state guests desire to present their credentials. It will be necessary for Fellows of the American Medical Association to present their Fellowship cards in the A. M. A. at the time of registration. Senior medical students, very recent graduates, and internes may secure guest badges if they will present credentials.

MARQUETTE ALUMNI BANQUET

Date: 6:30 P. M., Wednesday evening, June 14th, A. M. A. convention week.

Place: New Bluemound Country Club. (Not at the Pfister Hotel as previously announced). There will be *bus transportation* for out of town alumni.

Program: Dinner at 6:30 P. M.; Music and Entertainment; Address of Welcome—Father Wm. Magee, Dr. B. F. McGrath; Principal Speaker:—Dr. Frank G. Hirschboeck; *Informal "Get-together"* following the dinner.

This probably will be the largest and most important meeting of Marquette Alumni in a lifetime. The dinner itself will be a dignified affair. However, this will be balanced by the informal "get-together" after dinner. So everybody is assured of a good time.

Reservation may be made for these dinners at the desk when registering for the meetings. All who wish to attend are urged to make their reservations early.

Scientific meetings continue on Thursday, and at six o'clock Thursday evening a bring-your-husband dinner will be given by the Woman's Auxiliary. Visiting physicians, regardless of whether they are accompanied by their wives, are urged to attend the bring-your-husband dinner.

On Thursday evening the President's Reception and Ball will be held at the Hotel Schroeder.

PENNSYLVANIA ALUMNI DINNER

The University of Pennsylvania Alumni will hold its dinner meeting at the University Club, Milwaukee, on Wednesday, June 14th, at six-thirty P. M. All Pennsylvania men are urged to attend.

On Friday, June 16th, the annual meeting will be concluded with scientific sessions.

On each day during the meeting a session of the House of Delegates will be held, with the possible exception of Friday.

Hotel Reservations for June Meeting of the American Medical Association at Milwaukee

Dr. H. J. Heeb, Chairman of the Committee on Hotels for the next meeting of the American Medical Association, June 12th to 16th, announces that Milwaukee hotels are ready to accept reservations for the meeting week. Reservations may be made direct with the hotels or preferably by advising Dr. Heeb at 740 N. Second Street of the accommodations desired.

Wisconsin members are asked to use hotels other than those in the downtown district that members of the American Medical Association who come from all parts of the United States may have the use of these central accommodations. The hotels suggested for Wisconsin members and rates follow:

		Without Bath	With Bath	Suites
Abbot Crest				
150 rms. and apts.	Sin.	$1.50–2.00	$2.50–3.00	
1226 W. Wis. Ave.	Dbl.	2.50–3.00	3.50–4.00	$7.00–10.00
Ambassador				
160 rms. and apts.	Sin.		2.50–4.00	
2308 W. Wis. Ave.	Dbl.		3.50–6.00	5.00–12.00
Belmont				
116 rms	Sin.	1.50–2.50	2.50	
751 N. Fourth St.	Dbl.	3.00	3.50–4.00	
Blatz				
80 rms.	Sin.	1.50–2.00	2.00–3.00	
145 E. Wells St.	Dbl.	2.00–2.50	3.00–4.00	4.00– 5.00
Carlton				
100 rms.	Sin.	1.00–1.75	2.00–3.50	
1120 N. Milw. St.	Dbl.	2.00–2.50	2.50–5.00	4.00– 7.00
Colonial				
87 rms. and apts.	Sin.		1.50–3.50	
826 N. Cass St.	Dbl.		2.00–3.50	3.50– 6.00
Globe				
56 rms.	Sin.	1.00–2.00	1.75–2.50	
803 E. Wis. Ave.	Dbl.	1.50–3.00	3.50–5.00	
Juneau				
115 rms.	Sin.	1.00–1.50	1.75–2.50	
807-815 E. Wis. Ave.	Dbl.	1.50–2.50	2.75–3.50	
Knickerbocker				
550 rms. and apts.	Sin.		3.00–4.50	
1028 E. Jun'u Ave.	Dbl.		5.00–8.00	8.00–12.00
La Salle				
165 rms. and apts.	Sin.		2.50–3.00	
729 N. Eleventh St.	Dbl.		3.50–5.00	5.00–10.00
Martin				
200 rms.	Sin.	1.00–1.50	1.50–2.75	
707 E. Wis. Ave.	Dbl.	2.00–2.50	2.50–4.25	
Maryland				
125 rms.	Sin.	1.50–2.00	2.50–3.00	
625 N. Fourth St.	Dbl.	2.00–3.00	4.00–5.00	5.00
Plaza				
200 rms. and apts.	Sin.		2.00–3.00	
1007 N. Cass St.	Dbl.		3.00–4.50	5.00– 7.00
Republican				
200 rms.	Sin.	1.50–2.00	2.00–5.00	
907 N. Third St.	Dbl.	2.50–4.00	3.00–6.00	8.00–15.00
Royal				
130 rms.	Sin.	1.75–2.00	2.75–3.00	
435 W. Mich. St.	Dbl.	2.75–3.00	3.75–4.00	5.00– 7.50
Shorecrest				
452 rms. and apts.	Sin.		3.00–4.00	
1962 N. Pros. Ave.	Dbl.		5.00–7.00	8.00–16.00
Tower				
200 rms. and apts.	Sin.		2.50–3.00	
716 N. Eleventh St.	Dbl.		3.50–5.00	
St. Lawrence	Sin		2.50	
1026 N. Jackson St.	Dbl.		3.50	
Seven-Seventy				
Marshall	Sin.		2.50–3.00	
770 N. Marshall St.	Dbl.		3.50–5.00	

THE JOURNAL BOOK SHELF

BOOKS RECEIVED FOR REVIEW

Egg, Wheat or Milk-Free Diets. By Ray M. Balyeat, M. D., F. A. C. P., associate professor of medicine and lecturer on diseases due to allergy, University of Oklahoma Medical School; director, Balyeat Hay Fever and Asthma Clinic. Cloth. $2.50. J. P. Lippincott Company, Philadelphia.

Diseases of Tradesmen. By Bernardino Ramazzini (1633–1714). Together with biographical notes translated from the French of Francois Claude Mayer (1928) of Budapest and paragraphs from the preface of Dr. James (1746) of London, and of Dr. James (1922) of New York. The abstracts from the 1746 English translation of the Ramazzini work emphasize his comments on dermatological disturbances of workmen. Compiled by Herman Goodman, B. S., M. D., New York City. Medical Lay Press, New York City.

Dietetics for the Clinician. By Milton A. Bridges, B. S., M. D., F. A. C. P., associate in medicine at the New York Post-Graduate Medical School, Columbia University, New York. Cloth, $6.50 net. Lea & Febiger, Washington Square, Philadelphia.

BOOK REVIEWS

Any scientific publication reviewed in this column may be obtained for inspection. Orders for such inspection should be directed to the Medical Library Service, 424 N. Charter Street, Madison, Wis.

Clinical Aspects Of The Electrocardiogram. By Harold E. B. Pardee, M. D., assistant professor of clinical medicine, Cornell University Medical College; associate attending physician, New York Hospital; consulting cardiologist, Lying-in Hospital and Woman's Hospital, New York City. With 74 illustrations. Third edition, revised. Price $5.50. Paul B. Hoeber, Inc., New York.

Since the publication of the first edition of Dr. Pardee's "Clinical Aspects of the Electrocardiogram" in 1924 this book has been considered as one of the standard text books on electrocardiography and has enjoyed great popularity because of its simple and direct presentation of the essentials of the subject. This third edition, through amplification and revision, has brought the book right up to date and contains all of the latest developments which are of definite clinical significance.

The electrocardiograph and the technique of its operation is carefully described. A considerable amount of space is devoted to the detailed description and discussion of the normal record. One chapter is given over to the presentation of the theory of the electrocardiogram with a discussion of both the physiological and the mathematical aspects of this phase.

The arrhythmias are all described in detail and illustrated with appropriate tracings. Care is taken to correlate the clinical with the electrocardiographic findings.

During the last few years a considerable amount of new light has been thrown on the significance of certain changes in the electrocardiogram with respect to the condition of the coronary arteries and the myocardium. The author, who has had no small part in this work, devotes three chapters to this very important phase of the subject presenting an excellent summary of the information at present available.

Practically every type of abnormality described is illustrated by representative electrocardiograms taken from actual cases. Contained in the appendix are methods of determining the electrical axis of any electrocardiogram, a method for reading, filing and indexing records, and a bibliography of the more important contributions to the subject of clinical electrocardiagraphy.

This book should be of distinct value to the medical student, the general practitioner, and most of all to the man who is regularly devoting a certain amount of his time to electrocardiography. C. M. K.

Diseases Of The Heart. By Sir Thomas Lewis, M. D. Physician in charge of department of clinical research, University College Hospital, London; Physician of the staff of the Medical Research Council; Physician in chief Peter Bent Brigham Hospital, Boston; Honorary Fellow New York Academy of Medicine; Corresponding Member Association of American Physicians and Interstate Postgraduate Medical Association. The Macmillan Company, New York.

A text book in cardiology based on an outline of the author's own clinical teachings on diseases of the heart. It is in no sense a reference book but presents simply and briefly the author's own observations and ideas regarding the various types of heart disease. Unless this is kept in mind, the reader is apt to feel that the subject matter is presented in an unduly dogmatic form. The first few chapters deal with the various types and degrees of heart failure, tracing the symptoms, wherever possible, to the underlying physiological changes which have produced them, in an effort to present a logical explanation in terms of cause and effect. Two chapters are devoted to coronary disease and angina pectoris. The various arrhythmias are dis-

PHYSICIANS' EXCHANGE

Advertisements for this column must be received by the 25th of the month preceding month of issue. A charge is made of $2.00 for the first appearance of copy occupying 1 inch or less of space and $1.00 for each succeeding insertion of the same copy. Kindly accompany copy with remittance to cover number of insertions desired. Advertisements from members of the State Medical Society will be accepted without charge. Such copy will be taken out after its second publication unless otherwise requested. Where numbers follow advertisements replies should be addressed care Wisconsin Medical Journal.

FOR SALE—Will sell for cash the following: One Hanovia Alpine Sun Lamp, air cooled, ultraviolet, alternating current, cost $375 will sell for $200; One McIntosh Polysine Generator, giving sixteen modalities, $200, cost $475; One Fischer Superior Radiant therapeutic lamp, 1500 watts, $100, cost $150;—on account of owner's poor health these articles have been used very little and are therefore practically new; One Victor vibratory massage, $25, cost $75; One Betz metal electric light bath cabinet, $50, cost $300; one examining and massage table, $15, cost $65; Allison office table $20, cost $75; One Rochester case of electric diagnostic instruments and an Elsner cystoscope made by same firm for $25, cost $123; One Victor high frequency coil, No. 7, $25, cost $200; One Israel Carmody Suction apparatus for tonsil operations, $40, cost $95; One Victor lead x-ray protective screen, $25; Two Green and Bauer 7 in. gas x-ray tubes, $5 each; One Faught sphygmomanometer, $5; One Taylor freezing microtome, $2.50; One Fleischl's haemometer, $2.50, cost $24; one McIntosh No. 6, electric wall plate, style "A" and rectifier both for $20, cost $85; a few surgical instruments and splints at half price. Address No. 907 in care of the Journal. MJJ

WANTED—Locum tenens work by capable physician; available for short or long period; Wisconsin license; references; will not compete. Address number 851 in care of the Journal.

LOCUM TENENS AVAILABLE—Wisconsin licentiate now finishing postgraduate work in Chicago available as locum tenens on and after June first. Address No. 912 in care of the Journal. MJ

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Medical Golfers Meet Monday, June 12th

The American Medical Golfing Association, headed this year by Dr. John Welsh Croskey of Philadelphia, will hold its Nineteenth Annual Tournament over the Blue Mound Country Club course, Milwaukee, on Monday, June 12th. One hundred golfers are expected by the hardworking local committee, composed of Dr. John W. Powers, Chairman, Drs. J. O. Dieterle, G. H. Fellman, J. C. Griffith, W. F. Grotjan, E. W. Miller, S. R. Mitchell, C. W. Morter, H. S. Roby and Ralph P. Sproule.

Play will begin at 8:00 a. m., with all teeing off on the beautiful and interesting Blue Mound course before 3:30 p. m. Dinner will be served at the Club at 6:30 p. m., followed by distribution of approximately fifty trophies and prizes for the eight major events

Specific Therapy in Erysipelas

Symmers, comparing 15,277 cases of erysipelas treated without antitoxin over a period of 23 years with 705 cases treated with antitoxin, found an apparent reduction in mortality in serum treated cases of 44.5%. Symmers remarks (J.A.M.A., August 25, 1928) "The antitoxin treatment of erysipelas marks an advance, the results of which are commensurate with those obtained in the treatment of diphtheria."

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covering both 36-hole and 18-hole play. Past-President Frank A. Kelly of Detroit will be on hand with his inimitable stories. In addition, the local Committee promises that, at this tournament, Milwaukee's "fame" will not be lessened in quality or quantity.

Bargain prices will prevail this year. Thirty-six holes of golf, dinner, prizes and entertainment, will be considerable less than five dollars to Active Fellows. All Fellows are invited to play over the course for a practice round (on Sunday) before Monday's tournament. Fellows may play at all other coures in Milwaukee during the week.

Any male Fellow of the American Medical Association in good standing is eligible for membership in the American Medical Golfing Association, on acceptance of its By-Laws and payment of the enrollment fee. All communications concerning the golf tournament or enrollment can be addressed to Dr. John W. Powers, 231 West Wisconsin Avenue, Milwaukee.

One Hundred Years of Science in Medicine

How a Century of Progress Exposition Will Unfold The Sacrifices for Humanity From the Saddle Back Doctor of 1833 to the Scientific Practitioner of 1933

By EBEN J. CAREY, M. D.
Milwaukee

On February 1, 1933, four months before the formal opening of A Century of Progress, the exhibits of the Medical Sciences were 75 per cent completed. In fact, all of the exhibits from the German Hygiene Museum, Dresden, Saxony, consisting of twenty-seven large boxes, arrived in Chicago, December, 1932. There are also medical exhibits from England, France, Germany, Italy and Austria. The co-operation of medical institutions in the United States, Canada and Europe has been beyond expectation and realizes an ideal dream of the public-spirited citizens of Chicago, who are sponsoring the World's Fair.

The American Medical Association, American College of Surgeons, United States Public Health Service, the Chicago Centennial Dental Congress, the American Phamaceutical Association and various other medical associations have their exhibits practically completed. The universities of the United States and Canada that have agreed to certain displays began the installation of their exhibits on April 1. The Mayo Clinic of Rochester, Minnesota, and the Cleveland Clinic also plan exhibits.

Most of the exhibits have been in the process of building for eighteen months. Only the greatest interest and co-operation with a realization of the importance of such an event for the welfare of mankind make possible the exposition by displays at A Century of Progress in Medicine.

Neither one man, nor a committee of men alone, would be wise enough nor possess adequate available funds to occupy the stage of medical sciences with exhibits as it will be occupied in the Hall of Science in Chicago's World Fair. The spirit of confidence and co-operation gave the theme and stage for the World's Fair and the same spirit motivates the medical scientists who will use this stage to portray the epoch-making progress in medicine.

The development of the medical sciences has paved the way to our present knowledge regarding the facts and laws of the conservation of health and prevention of disease.

The body of the displays will be different from former exposition exhibits. Where endless miles of products were once exhibited, A Century of Progress Exposition will display processes. To tell the story of human advancement since 1833, to tell the story in action when this can be done, but in every case to tell the story so that every one can understand clearly how the world of a century ago has been changed into our amazing world of today—that is the theme.

SACRIFICES FOR HUMANITY

The exposition itself will be much like a vast motion picture drama. The plot is the

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story of Science and Industry and Art. The scenario includes the portrayal of sacrifice and heroism and devotion endured by men and women of science in behalf of humanity. Hard-won victories and triumphs of science and industry and art have never before been made the center of an international celebration. The celebration of 1933 must be appealing to all professions, most of all perhaps to the medical profession.

The medical arts grew out of sympathy for human beings who suffered. Compassion, and not commercialism, drove men to do their utmost to discover the causes of diseases, to find out surer methods of diagnosis, and to set forward favorable health conditions for every one. Any one who knows any doctor of the real type intimately knows that the passion which put a man into this profession and kept him there was far removed from greed and covetousness—it was almost pure humanitarianism in most instances.

One of the most distinguished members of the profession has frequently repeated the statement that greater advances in scientific knowledge and consequent professional skill have been made since the begining of this century than all former centuries of human experience have seen. If such a statement is justified it is even more justifiable to say that the sciences and arts of safeguarding human health have made their greatest advance in the past century of progress.

EXHIBITS STRIKE NEW NOTE

The exhibits of medical science at A Century of Progress will visualize, simply yet dramatically, the tremendous strides made during the past century in the causes, detections, treatment and prevention of human and animal diseases. Each display will be so planned as to be interesting and educational, not alone to physicians and medical scientists, but to the laymen as well.

In order to facilitate this great task, which never before has been attempted by an international exposition, the exhibits have been classed into four general groups as follows:

Historical exhibits, illustrating the great discoveries and achievements which have revolutionized the medical sciences in the last one hundred years.

Collective educational exhibits, depicting the present condition of the medical sciences.

Exhibits which will have an appeal because of their spectacular character.

By collective exhibit is meant one put on co-operatively by a group of scientific institutions, producers, manufacturers and distributors within an industry. Yet individualism will be maintained. Each exhibit will be a show by itself, but all of the exhibits in a group will co-ordinate and co-operate as a whole in accordance with the general plan of exhibits. This has secured the approval of all of the exhibitors who thus far have signed up for display space.

COLLECTIVE INDUSTRIAL EXHIBITS

The medical industries of the United States are telling stories of the scientific advancement of medicine, rather than a mere display of products. This type of exhibit is interesting and profitable in the long run to the exhibitor as well as to the observer. Themes that will be developed in this light are:

1. The story of the control of pain.
2. The story of the doctor's service to the sick, shown by a large diorama.
3. The story of antisepsis and asepsis in surgery, or the control of infections.
4. The story of extension and clarification of man's vision, by means of the microscope and eye glasses.
5. The story of the vitamins or the accessory food substances that man needs to prevent and cure deficiency diseases.
6. The story of the chemical messengers in the blood stream, or the hormones that regulate the body by chemical means and which in normal amounts prevent certain diseases and maintain health.
7. The story of the saddle-back doctor of one hundred years ago.

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8. The story of the x-ray discovered by Roentgen.
9. The story of infections of the teeth and the production of general diseases of of the body.

These are only examples of the many themes that will be developed.

INTERNATIONAL CO-OPERATION

The scientific medical institutions of England, France, Germany, Italy and Austria have responded in a co-operative and gratifying manner by preparing and installing exhibits related to historic and scientific advancements of an epoch-making nature. The Pasteur Institute of Paris, directed by Dr. Roux, has completed an exhibit arranged by Dr. DeNouy on the life and work of Pasteur. The Robert Koch Institute of Berlin, directed by Professor Neufeld, will have an exhibit on the life and work of Robert Koch who, fifty years ago, in 1882, discovered the tubercle bacillus that causes consumption. The control of the white plague, or tuberculosis, was dependent on the knowledge of its cause.

THE TRANSPARENT MAN

The Transparent Man is a life-size model of the human body, composed of cellon. The observer, by means of the model of the Transparent Man, visualizes human anatomy as though he possessed x-ray eyes. The location of the deep organs of the human body is electrically illuminated in rotation. The relation of these organs to the specific location on the transparent skin is readily apparent. Some of the important deep parts readily seen are: skeleton, intestines, kidneys, pancreas, spleen, thymus, thyroid gland, pineal gland, pituitary gland, brain, spinal cord, larynx, pharynx, oesophagus and trachea.

WORKING THE DYNAMIC MODELS

It is planned that visitors to the Exposition may participate in demonstrations of human anatomy and physiology through the medium of the dynamic models.

By the mere pressing of electrical switch buttons or the turning of levers, one may study the circulation of the blood; the action of the heart valves; movements of the diaphragm; the range of motion of the major joints of the body; the peristaltic waves of the stomach and the intestines; the path of a nerve impluse in the knee jerk; the various types of vocal cords that produce the soprano, alto, tenor, and bass voices; the action of the lungs in breathing; the production of sight, hearing and many other activities of the human body.

There will be no Hands-Off signs on any of the exhibits of anatomical action.

The visitor may be invited to operate the levers and electrical buttons, so that by close study of these dynamic models a knowledge of the mechanism of the major systems of the human body may be obtained in an educational manner that will be of advantage to the individual and will serve as a basis of knowledge in the conservation of health.

PRIMITIVE AMERICAN MEDICINE

The Wellcome Museum of Medical Science of London founded by Sir Henry Wellcome, will have an exhibit telling the story of a century of progress of British medicine and surgery and an exhibit on the cause, means of animal transmission, treatment and prevention of tropical disease. The airplane, as a means of travel, has transported many tropical diseases to the United States. These diseases are not so remote, therefore, as they formerly were and have become of interest to the laymen of the temperate zone.

In the Middle West at the time of the Dearborn massacre in 1812 and about the time of 1833, the Indians had a primitive medicine and a medicine man. The Milwaukee Public Museum, one of the largest Municipal museums of the United States, directed by Dr. S. A. Barrett, is preparing an exhibit on "Primitive Medicine." A typical ceremonial scene will be shown by a life-size diorama.

GREAT PROGRESS IN MEDICINE

Many of the herbs used by the American Indian became invaluable drugs for the white man, namely, quinine, cascara sagrada and others. Indian medicines, amulets and charms will be vividly displayed in this attractive exhibit, and will be transported to

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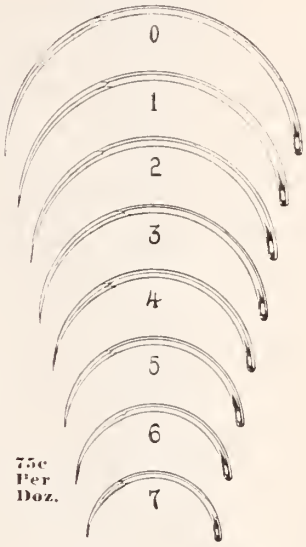

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Milwaukee as a permanent exhibit in the Milwaukee Public Museum after A Century of Progress Exposition terminates.

In 1833 Dr. William Beaumont published his epoch-making observations at the Indian outposts in Michigan and Wisconsin on digestion in the stomach. Most of the experiments were carried on at old Fort Crawford, Prairie du Chien, Wisconsin, on the Mississippi river. A collective exhibit by Washington University of St. Louis and the University of Wisconsin will portray this work of the first American physiologist who marked the transition between the primitive medicine of the Indian and the medical scientist of the present day.

The Harvard University School of Medicine and the Massachusetts General hospital are identified with epoch-making advances in medicine that will be told by exhibits illustrating the following: (1) Warren and Morton first published their work on the use of ether in a major surgical operation in 1846. (2) Oliver Wendell Holmes, the anatomist and poet, first advocated cleanliness on the part of the doctor in childbirth, in order to eradicate childbed fever. (3) The first appendix was removed at the Massachusetts general hospital in 1884 by Dr. Reginald Fitz. (4) The Minot and Murphy liver diet treatment of pernicious anemia practically eliminated this devastating disease from the list of deadly diseases.

Dr. Long of Georgia first used ether in 1842. One of Dr. Long's last patients is the present dean of the University of Georgia School of Medicine, Dr. Moss. Dr. Long did not publish his work until after Drs. Morton and Warren had published their work on ether. The state of Georgia recently placed a statue of Dr. Long in the Hall of Fame in Washington, D. C., commemorating his first use of ether.

This exhibit will be prepared by the University of Georgia. The exhibits on ether anesthesia, a fundamental contribution by American physicians and dentists, are among the most important and interesting advances in the medical sciences. This "History of the Control of Pain" has always interested the layman.

THE PHYSICIAN'S MIND

The scientific committee of the American Medical Association will present the fundamental progress in medical education and the evolution of the practice of medicine since the days of the saddle-back doctor in 1833. The history of dentistry, which is typically American and dental education will be portrayed by the Chicago Centennial Dental Congress. The original set of teeth of George Washington will be shown, and the relation of Paul Revere to dentistry will be portrayed. Among the leading dentists of colonial times was one Pol Revoire, who later changed his name to Paul Revere of Revolutionary fame. Paul Revere was also a goldsmith, a printer and an engraver, and an advertisement in a Boston newspaper of 1768 is quoted as follows:

"Whereas many persons are so unfortunate as to lose their fore-teeth by accident, and other ways, to their great detriment, not only in looks, but speaking both in public and private—this is to inform all such that they may have them replaced with false ones, that look as well as the natural, and answer the end of speaking to all intents, by Paul Revere, goldsmith, near the head of Dr. Clarke's Wharf, Boston."

The great advances made in medical education during the last thirty years will be shown by the American Medical Association; it is important for the layman to appreciate this because the treatment of the sick not based upon scientific methods is quackery. The scientific foundation of the doctor, therefore, will be shown to the public.

The American Pharmaceutical Association will show by exhibits the progress of pharmacy during the last century. The real chemical science upon which pharmacy is based is altogether different from the layman's idea. The pharmacist must have accurate scientific knowledge in order to fill a prescription. No scientific knowledge is necessary to serve ham sandwiches, coffee or soda water at a fountain. The majority of the people have this idea of a pharmacist because of the association of ordinary food and drink in a drug store. The professional

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side of pharmacy is lost to view in merchandising goods.

The American College of Surgeons will tell the story of the pasteurization of surgery by Lord Lister in 1867 after the Civil War. The simple theme throughout the ritual of a surgical operation will be exposed as the practical application of the age-old adage "Cleanliness is next to godliness." This progress was advanced by American surgeons in the standardization of hospitals and the registry of malignancy will be evident to the physician and layman.

The history of physical diagnosis is a fascinating one. The use of the stethoscope by Laennec in order to detect normal and abnormal sounds in the heart and lungs is of definite importance. The laying on of hands and thumping the chest in order to determine the physical state of deep lying organs are comparatively recent acquisitions of the physician contributed by Auenbrugger. The use of refined instruments in the detection of disease will be shown by exhibits.

Since Sir William Osler was a graduate of McGill University of Montreal, Canada, the historical exhibit of Dr. Osler has been assigned to McGill University. This is of interest to the layman as well as the physician.

WISCONSIN'S CONTRIBUTIONS

The following exhibits are being contributed by Wisconsin: Beaumont's work by Drs. Charles R. Bardeen and William Snow Miller of the University of Wisconsin; Bright's Disease by Dr. Frances D. Murphy and Dr. John J. Grill of Marquette University; Primitive Medicine by Dr. Samuel A. Barrett, Director of the Milwaukee Public Museum.

The Exposition has been singularly favored by the services of the leading medical men of the country in planning its form of exhibits. The Medical Advisory committee is composed of Drs. William Allen Pusey, Chairman; Ludvig Hektoen, Herman L. Kretschmer, Paul Nicholas Leech, Arthur Black, Bert Caldwell, Nelson Mayo, Julius Stieglitz, Benjamin H. Orndorff, A. S. Burdick, Morris Fishbein, C. H. Searle, Lloyd Arnold and Franklin Martin. Additional experts in medical practices and discoveries who are members of the committee are Prof. E. N. Gathercoal, Thomas McMahon, R. A. Whidden, Edwin R. Embree, Julius Riemenschneider, H. C. Christensen, Will J. Cameron and Harry C. Phibbs.

MILESTONES OF MEDICINE

World's Fair reduces miles of exhibits to a co-ordinated display of processes and the heroism and devotion which revealed them to science.

Exhibits to be informing to medical scientists and doctors, as well as to laymen, and will be as fascinating as a scenario.

Medicine has a new and changing story, the development of which lies primarily within the last century.

Famous medical institutes of France (Pasteur), England (Wellcome), Germany (Koch), Italy, Austria and Canada (McGill) will send exhibits.

The 137th anniversary of first smallpox vaccination by Dr. Jenner, May 14, 1796.

The 124th anniversary of the removal of the first abdominal tumor of ovary by McDowell in Danville, Ky., 1809.

The 100th anniversary of Beaumont's epochal work at Prairie du Chien, Wisconsin, on digestion in the stomach of Alexis St. Martin, published in Plattsburg, N. Y., 1833.

The 91st anniversary of the discovery of the anaesthetic properties of ether by Dr. Long of Georgia, in 1842. The statue of Dr. Long is in the Hall of Fame of the Capitol, Washington, D. C.

The 76th anniversary of the scientific proof of the Germ Theory of Disease by Pasteur, 1857.

The 68th anniversary of Antiseptic Surgery founded by Lord Lister, 1865.

The 59th anniversary of the excision of the first appendix at the Massachusetts General hospital by Dr. Reginald Fitz of Boston, 1884.

The 50th anniversary of Koch's discovery of the tubercule bacillus (Berlin, 1882) celebrated last year.

The 38th anniversary of the discovery of the x-ray by Roentgen, 1895.

UNIVERSITY OF WISCONSIN MEDICAL SCHOOL

Medical Science Course The medical science course covers two years of college work in English, foreign language, physics, chemistry and biology and two years of work in the basal medical sciences, anatomy, histology, neurology, physiology, physiological chemistry, pathology, bacteriology, pharmacology, hygiene and diagnosis. This course leads to the B. S. degree.

Medical Course At least two years of college work, including English, foreign language, physics, chemistry and biology, are required for admission. The course requires at least four years for completion. During the first two of these years the work lies chiefly in the basal medical sciences outlined above. The third year of the course is devoted to didactic and practical instruction in the wards and out-patient department of the Wisconsin General Hospital. The fourth year of the course is devoted to practical instruction under the supervision of preceptors in the Wisconsin General Hospital and in affiliated institutions.

Courses in Nursing Courses in nursing are offered in the School of Nursing affiliated with the medical school. A residential course of 32 months is offered in the Wisconsin General Hospital to those who have completed a semester of specified work in the College of Letters and Science. This course leads to a certificate of graduate nurse. A residential course of 27 months is offered to those who have completed three years of college work in specified subjects either in the College of Letters and Science or in the Department of Home Economics. These courses lead to a certificate of graduate nurse and to a B. S. degree.

Graduate Courses Opportunity is offered for graduate work in the preclinical and the clinical medical sciences and in hygiene and public health. For further information address C. R. Bardeen, Dean, Medical School, Madison, Wis.

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The 12th anniversary of the discovery of insulin by Banting of University of Toronto, Canada, in 1921.

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CORRESPONDENCE

(Continued from page 409)

of Science Building in Group K. In this booth we will have information for the visiting physicians and will be glad to assist any of the members from your State in every way possible.

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OMISSION

In the May number of Wisconsin Medical Journal, relative to case report made by me, it should have been stated that x-ray therapy done in this case was performed by Dr. H. B. Podlasky, and grateful acknowledgment is hereby made.

JOHN O. DIETERLE, M. D.

THERAPEUTIC NOTES

New and Nonofficial Remedies

In addition to the articles previously enumerated the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Cutter Laboratory:
- Polyanaerobic Antitoxin, Prophylactic (Tetanus-Gas Gangrene Antitoxin)
- Polyanaerobic Antitoxin, Therapeutic (Gas Gangrene Antitoxin)

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Fellowship in The American Medical Association . . .

BECAUSE Fellowship is a prerequisite to attendance at the sessions of the American Medical Association to be held at Milwaukee in June, the following statement has been prepared indicating how our members may become Fellows.

All members in good standing in the State Medical Society of Wisconsin are eligible to become Fellows of the American Medical Association. It is required, however, that they make formal application for that relation, pay fellowship dues and subscribe to the JOURNAL of the American Medical Association. It is to be noted, however, that Fellowship dues and the subscription to the JOURNAL are included in one annual payment of $7. This, with application for fellowship, is to be made direct to the American Medical Association, 535 North Dearborn Street, Chicago.

Any one of the special journals published by the A. M. A. may be substituted for THE JOURNAL. In case the subscription price of the special journal selected is higher than the subscription price of THE JOURNAL, it is required that the regular subscription rate of the Journal selected shall be paid (which will include Fellowship dues) If the subscription price of the special journal selected is less than that of THE JOURNAL, the regular price of $7 must be paid if Fellowship is to be included.

Fellows of the American Medical Association are given a special Fellowship card, presentation of which will admit them to all sessions of the Association at Milwaukee next June.

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VOLUME XXXII
NUMBER 7

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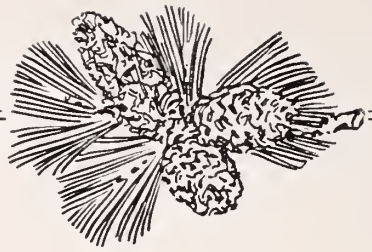

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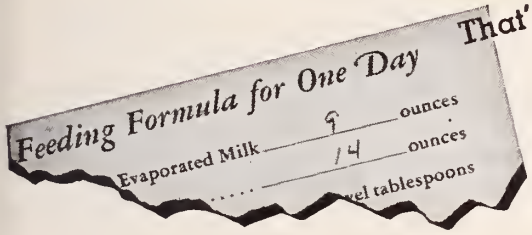

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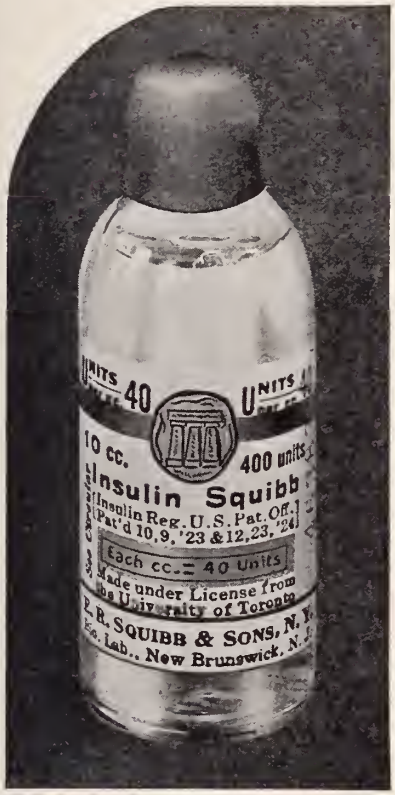
is becoming a health problem



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* Dr. Charles Bolduan, *New England Journal of Medicine*, 7-14-32.

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The Wisconsin Medical Journal

Volume XXXII JULY, 1933 No. 7

The Public, The Medical School, and The Physician

Presidential Address by STANLEY J. SEEGER, M. D.
Milwaukee

The constitution of our State Society devolves on the President the duty of delivering an address, and the importance of certain problems which have engaged the attention of physicians in this state makes it mandatory that I discuss them.

During the past few years we have been engrossed in a controversy of a type not new to mid-western states. I refer to that between the State University medical school and the medical profession. During the past year, also, economic studies relating to medicine have crystalized into two reports, those of the Committee on the Costs of Medical Care and the Commission on Medical Education. There has been displayed widespread interest in new forms of medical practice, and the problem of the cost of medical care has been the favorite windmill of many a political and social Don Quixote.

Because the relationship of the public, the medical profession, and the medical school of the University of Wisconsin has engaged so much of the time of this organization, I propose to make medical education the major topic for discussion. It will be convenient to arrange this discussion on the basis of the three accepted functions of a medical school; namely, its function of training medical practitioners, its function of public service through co-operation with physicians in practice, and its function of the advancement of learning through research.

The history of the development of medical education in America is that of the early proprietary medical schools which were developed to provide practitioners for the rapidly growing population of the new world. The reorganization of this discredited system by organized medicine itself stands out as a truly great contribution to society. The idea that there were not enough qualified medical men to care for the needs of the country persisted until after the World War. This supposed need was one of the basic arguments advanced in favor of the development of new medical schools, among them being the medical school at the University of Wisconsin. As the following abstract indicates, the recent report of the Commission on Medical Education has shed much interesting light on this question of the supply and distribution of physicians.

"There are more physicians in the United States than are needed to provide an adequate medical service for the country.

"The United States has more physicians per unit of population than any other country try of the world; twice as many as the leading countries of Europe.

"The sixty-six approved four-year medical schools in the United States are now graduating almost as many physicians as approximately one hundred and sixty schools graduated each year between 1900 and 1910, when there was a large excess production of physicians by the proprietary and commercial medical schools.

"The present medical schools in the United States are producing more physicians than the country needs.

"The oversupply is being increased by additions to the profession from unapproved medical schools in this country, from physicians from foreign countries, and from an increasing number of American students who are studying medicine in Europe, a very large proportion of whom were unable to secure admission to a medical school in this country.

"If the annual additions to the profession in this country continue at approximately the present rate, the number of persons per

* Presented before the House of Delegates of the State Medical Society of Wisconsin, Monday afternoon, June 12, 1933.

physician will decrease during the next few decades. The ratio of one physician to approximately 750 persons will be reached in a few years.

"If the annual additions are increased, as seems probable, the number of persons per physician will probably be below 700.

"Available data indicate that proper medical services can be provided on the basis of one active physician to 1,000—1,200 persons, depending on the size and type of the community, the organization of the services, and other factors. The present number of physicians probably exceeds the need by at least 25,000, although the number of thoroughly qualified practitioners is and always will remain insufficient.

"Modern transportation and communication and the numerous aids to medical practice (hospitals, nurses, laboratory technicians, physical therapists, dentists, etc.) now allow a physician to care for more patients at one time and over a wider area than in the past, thereby reducing somewhat the need for physicians.

"Although there is an oversupply of physicians in the country as a whole, there is a relative shortage in certain areas because physicians are concentrated in the larger communities. This concentration is due to the greater economic returns of practice in the city, better facilities and conveniences for practice, professional associations, social and educational advantages, and the type of medical training, which makes the physician dependent upon numerous auxiliary aids and reluctant to go into practice in areas where modern facilities, nursing, laboratory, and other services are not well developed.

"The uneven distribution of physicians is not as serious as it appears, for modern transportation and communication has reduced the isolation of many rural areas."

The 3,178 practicing physicians in the state of Wisconsin are augmented every year by the addition of nearly 200. The number necessary for replacements based on mortality and withdrawal from practice and the past rate of increase in population is about 70 per year. The medical school of the state of Wisconsin graduates annually nearly 50 physicians while Marquette University graduates annually between 50 and 60. At the present time there are 35 students from Wisconsin enrolled in the senior year of 13 representative medical schools in the United States. While the population of Wisconsin has increased steadily over a ninety-year period at the rate of about 30,000 a year and is now 2,950,000, there is a tendency for population in mid-western states to decrease rather than increase. There has been a steady decline in the birth rate in Wisconsin during the past ten years, and it is reasonable to assume that its population will not continue to increase, and it may remain stationary. This will decrease the number of physicians necessary for replacement. It is apparent that we are confronted by an oversupply of physicians not only in the nation, but in our own state.

It seems hardly necessary to emphasize that society has an interest in this situation. It is concerned, or at least it should be concerned, with the sustained welfare of the medical profession. There is more involved than the cost of training medical students. The training of a man in medicine does not fit him for business or other professions, and in some respects his training is probably a handicap. This is not true of other callings such as the law or engineering, where the nature of the preparation is a distinct asset to a man going into any one of a great variety of activities. Increasing numbers of highly trained men, who have spent years in preparation, are finding that opportunities for earning a livelihood in their chosen field do not exist and did not exist at the time they entered medical school. The exploitation of certain of these men by individuals interested in the commercial development of medical practice constitutes a hazard to society and is exemplified in some of the more pernicious forms of contract practice. The absolute and relative increase in the number of practicing physicians must be apparent to every one who has given the matter even casual attention and has been particularly impressed upon me in reviewing candidates for hospital posts. The splendid

preparation of these young men is as impressive as their great number. The difficulty of giving them opportunities commensurate with their years of training is recognized not alone by men who are practicing in the field, but by educators everywhere who have produced them.

Many social factors enter into the determination of the value of a medical graduate to the community which has produced him. Such social values cannot be reduced to law or to a mathematical equation. The use of money from a public fund must suppose a public benefit and a public need, and common sense would dictate that the cost of educating a medical student should be subjected to the scrutiny of the same accurate accounting system which has been generally accepted by private enterprise. While it is true that society has made few investments as profitable as the training of physicians, the law of diminishing returns operates here as it does elsewhere. The argument that better men are developed because of competition does not hold beyond a certain point, and I believe that in the practice of medicine that point has long since been passed. It is hoped that the Council on Medical Education and the Association of American Medical Colleges will lead the way in an effort to meet and solve the social and medical problems which are presented. Certainly the situation is one in which the high-geared expansionist psychology of a few years ago is not in keeping with the statistical data regarding the growth of population.

In discussing the co-operation of the State University medical school with the medical profession, I wish at the outset to emphasize that medicine as represented either by the individual practicing physician or by medical organizations has no vested interest in sickness. Co-operative efforts between the medical school and the practicing physician must be carried out at all times with the interest of the public in mind. In educating medical men, the public, either through the state or through endowed institutions, makes a sizeable investment, and this investment is not made with the idea of elevating a few men to aristocratic positions of relative leisure.

The recipient of benefits from society, whether that benefit be in the form of education or in the form of hospital aid, has incurred an obligation. The fact that such an obligation exists has not been emphasized by those who have maintained the policy that government is something to live on and not under. I believe, also, that in the return which medical men have made to society they have more than balanced the books in their favor.

The following extract from the report of the Commission on Medical Education develops the ideas of co-operation between the medical school and the medical profession which I wish to present to you.

"In discussing the problems of an adequate program of medical care for a community and in visualizing the individual medical needs to be met, emphasis should be placed upon the necessity of competent physicians who are familiar with current knowledge regarding the diagnosis, treatment, and prevention of disease, and upon the importance of every physician continuing to be a student throughout his professional life. A lag in the application of new knowledge has always existed and will probably continue as scientific studies reveal new information and methods. Knowledge is not distributable in packages like commodities, and medical services cannot be delivered except through trained personnel, by virtue of whose judgment and skill alone much of this knowledge is safe and useful.

"Many enthusiasts for the organization of medical services fail to appreciate fully that the successful development of adequate medical services in any community depends in the last analysis upon the training and ability of the professional personnel. There is an element of time involved in the training of physicians and in developing methods by which a considerable proportion of the profession can be kept informed of additions to knowledge. Moreover, knowledge is not static, and each year many new discoveries and concepts of disease and health are brought forward. Much of present-day medical information has actually been acquired within the recollection of physicians now

living. Another factor of great importance is that many physicians now in practice received their medical training before the contributions of the medical and premedical sciences were made or their value widely appreciated as prerequisite for medical training. Many continue to practice as they were taught when students. Some have shown little interest in keeping abreast of the newer developments in medicine. The premedical student, the medical student, the intern, the hospital resident, the general practitioner, the specialist, and the public health administrator should be looked upon from an educational point of view only as different phases in the training of personnel to meet the requirements of the country. The educational sequence from premedical education to retirement from practice should be looked upon broadly as a single problem, not a succession of isolated and unrelated experiences.

"Artificial segregation of the basic medical course, the internship, the training of the specialist, or the continuation education of the general practitioner is very likely to create serious gaps in the education of physicians which should be avoided. No single phase of the educational process as a whole can be safely isolated. The university's endeavors in various aspects of medicine should be closely correlated under a unified program."

Discussion of the inter-relationship of the medical school and the medical profession leads to a consideration of the concepts of medical practice held by both groups. The organized medical profession has expressed its disapproval of so-called "state medicine". Its concept of medical practice is built about the individual practitioner who conducts his work through a profession or guild. This represents a social adjustment which has survived many great crises, and is not an outworn system as some would have us believe. The basic reason for considering this form of medical practice as the best is that, in the long run, it has been found to be in the interest of the patient.

Some of our state university medical schools were developed in centers removed from metropolitan areas; and in order to provide them with clinical material for teaching, the care of the indigent sick of the state was linked with the medical school. The care of the indigent sick is accepted as a duty of organized society, and the unselfish and charitable contribution which medical men have made to this cause need not be emphasized here. After the establishment of our own state hospital, and after the building up of an ideal unit for the care of the indigent sick, the social theory was advanced that it was proper to make these facilities available to those able to pay, and to collect fees for this service. It is this easy extension of the functions of government to the care of the so-called private patient, who is able and willing to pay for the services which he receives, that is at the base of most of the difficulty which has been met. I wish to state that, in this matter, I am in complete disagreement with the group of men at the University which has advanced and advocated the theory just stated.

There is more involved in this problem than unfair competition between the agents of the state and the private practitioners of medicine, although I believe as does Dean Scammon of the University of Minnesota that the open competition of state university medical schools with the practitioners whom they have trained is a logical absurdity. In granting private patients the privileges of the state hospital, we are giving the citizens of the state a service for which there has been no demand and for which no real reason exists. It is argued that the presence of a certain number of private patients is not only desirable, but is necessary because of their value in teaching. I have reason to believe that a poll of medical educators would disclose some division in the ranks on this point. The small percentage of private patients in state hospitals, which is always emphasized when this matter is discussed, is in itself evidence of their negligible value for teaching purposes in these institutions. Any necessary contacts with private patients are made during the preceptorial and intern years. It is entirely probable

that the real reason why private patients are admitted to the state hospitals is that the fees collected from them help bring salaries of clinical professors to a level which it is though necessary to maintain.

The danger to the public in this arrangement is that it tends to establish a self-perpetuating bureaucracy which is impossible of control. The opportunities of securing political advantage through the use of the facilities of the state hospital are as obvious as are its dangers to the citizens of the state. It constitutes the bureaucrats' ideal set up which is "all sail and no anchor".

I have made reference to the easy extension of the functions of government and the expansive developments of bureaus which are so characteristic of democracy. I wish to make it clear, in this connection, that I do not in any way intend to reflect upon the integrity of individuals or their motives. The danger inherent in many bureaucratic projects is their apparent loftiness of purpose and humanitarian appeal. Services of a social nature are launched by government, and these services seem justified when viewed by themselves and without consideration of their many ramifications. This is their real entrenchment, and the social worker as well as the professional politician has apparently been aware of the practical value of their popular appeal in gaining his objectives. Recent proposals emanating from Madison, looking to an extension of the medical activities of the state, would indicate that there is much truth in the witty biologic analogy which Edmunds has made between bureaucrats and the protozoa. He says that the bureaucrat is in the realm of government what the protozoa are in the realm of zoölogy. Originating as a single cell, they immediately begin to reproduce by fission. The protozoa abound in stagnant waters as the bureaucrat can flourish only in the stagnation of public spirit. Protozoa are apparently content to remain protozoa, and here the analogy ends, for the bureaucrat is ever striving onward and upward, and not only subdivides itself indefinitely, but each subdivision in turn seeks to elevate itself into a mighty department.

I am fully conscious of the economic difficulties surrounding the present system of the private practice of medicine. The problems which are involved in the cost of medical care are essentially problems not of a medical nature, but are social problems having to do with poverty. The medical profession should lead in an attempt to solve them, but I am convinced that their solution does not rest in the taking over by the state of the practice of medicine. If one were to disregard its many other objectionable features, a study of the cost of the complete socialization of medicine would prove illuminating. Its cost is not often discussed by those who advocate the extension of governmental activities, but the increase in taxation which any such development would necessitate would be staggering, and it would bring about an alliance as inimical to the welfare of the people as was that which existed before the separation of church and state.

The development of medical education at the University of Wisconsin has been associated with an extension of the functions of government in the field of medical practice. The University has fostered the development of a system of medical practice the basic concept of which is contrary to that which American medicine has endorsed. In order that a medical school may properly fulfill its function of public service through co-operation with the medical profession, it is necessary that there exist a harmony of opinion and policy in the basic matters relating to methods of medical practice. Unless such harmony is brought about in our own state, continued conflict is inevitable. It is evident that the mere production of medical practitioners should not be the major function of such an institution. It is evident, also, that the development of the principal field of usefulness, namely public service through co-operation with the medical profession, is impossible while the present state of affairs exists. One need only contemplate the relative isolation of the medical school in the present situation to appreciate the truth of this contention.

In my official position as President of the State Medical Society, I shall oppose any effort to abolish the medical school at the University of Wisconsin, and I shall protest the use of any of my arguments here advanced in an effort to bring about this end. I am convinced that there is a place in the social-medical organization of this state for a medical school conducted by the State University. I have attempted to point out a field of usefulness which has not been developed. The criticisms which I have made are advanced here because I believe that the present policies of the medical school are not in the public interest. It should be remembered that the development of medical education in America is of very recent origin and that it is only a few years since the new start was made after the reorganization under the leadership of the American Medical Association. This is one reason why we need not look upon the present policies as necessarily the final ones. This is true not only in the field of medical education, but also of the relation of the medical school to the care of the indigent sick of the state. It has not been demonstrated that the present system of state aid to the indigent sick is in the interest of economy or that it is the best medical arrangement. This statement is not intended to reflect in any way upon the excellent clinical service which is rendered at the University hospital. There is little doubt that a decentralization of the care of the indigent sick will take place and probably with great rapidity. Estimates of the cost of the care of the indigent sick in local hospitals in various communities have been presented which indicate that such care can be provided at a distinct saving to the local community. I see no more reason to assume that self interest has had any influence in the development of these statistics than in those which have been presented by the state. I believe that except in very unusual and isolated cases the clinical and physical facilities offered by the state hospital are in no way superior to those which may be obtained in numerous centers throughout the state.

I do not wish to discuss the problem of research as applied to the medical school of the University. I wish only to make brief comment on the significance of research and the interpretation of the word itself as it applies to the clinical practice of medicine. It is unfortunate that during the era of rapid extension of scientific knowledge there has grown up rather a prevalent belief that research implies extensive and expensive apparatus and that it is necessarily confined to the walls of the laboratory. There has been a tendency to lose sight of the fact that the scientific mood is only another name for intelligence. Abraham Flexner in his classical study of medical education expressed the idea which I wish to convey to you in the following paragraph.

"The ward and the laboratory are logically, from the standpoints of investigation, treatment and education, inextricably intertwined. The question of precedence is quite futile. The individual patient is, in the first instance, carefully interrogated and observed; when the unaided senses have reached their limits, he is examined — that is, observed by means of stethoscope and thermometer; subsequently for reasons of convenience, examination may be carried still further in the adjacent laboratory by means of microscope and test tube; in the last resort, animal experimentation may be employed, in order to enable the physician to define observation still further. It is senseless to raise questions as to whether relevant data are obtained in one way or in another. The scientific inquirer assembles facts from every available source and by every possible means. Science resides in the intellect, not in the instrument. To call a careful and correct bedside observation 'clinical' and a laboratory examination 'scientific', as if there were some qualitative distinction between the two, is absurd. Whether the observer be seated at the bedside or bending over his microscope, he observes, elicits data, frames an hypothesis, and tentatively pursues the course of action suggested by reflection upon all the facts in his possession, regardless of where or how obtained. The term 'scientific' cannot be denied to an accurate observation at the bedside if it is conceded to

a similarly accurate observation made by means of the microscope; nor can it be denied to a correct description of a process observed in a patient, while conceded to the correct description of a process observed in a rabbit or guinea pig. The clinic is scientific, not merely in so far as it utilizes chemical or physical methods and technique, but primarily because it represents a determined, fearless, and painstaking effort to observe, to explore, to interpret, to unravel. It is not saved to science by laboratory methods; it includes them as simply additional weapons with which to do better what scientific clinicians have always done; viz., observe, explore, unravel."

The copious discussion which followed the publication of the report of the Committee on the Costs of Medical Care makes it unnecessary for me to indulge in extended comment on this particular problem. There are those who, as Mencken said, would throw the medical profession to the wolves or goad it into reform. Among them are the patriotic industrialists and business men who have entered the field of social service. These individuals criticize medical men for not devising some method of providing all of the people with what they consider adequate medical care at a price which they are able to pay. As many others have pointed out, they do not tell us how, by business methods, we can supply footwear, plumbing, food, and clothing to individuals who are without funds. The philosophy of life of the American people has been very greatly influenced by the same individuals who have at times been most critical of the costs of medical care and who seem to be interested in changing the social arrangement under which medicine is practiced. They have not been conspicuous, however, in teaching the public that sickness is a catastrophe which is in the lot of every man and should be provided for by systematic saving. They have been interested rather in securing these savings by selling the public their wares. The success of their efforts is exemplified by the fact that at the height of our recent prosperity our annual expenditures for passenger automobiles, non-commercial use of gasoline, tobacco, candy, cosmetics, soft drinks, toys, jewelry, and amusements totalled over twelve billion dollars, more than five times the direct expenditures for medical care. The amount spent on candy is more than twice that spent on civil hospitals, and that spent for cosmetics is about twice the expenditure for nursing. The amount spent for tobacco alone is about twice the total gross income of all physicians.

I am not one of those described by Keller, who, in social matters, takes the brakeman as his hero. I do not believe that any social Houdini will appear who can offer us a plan which will immediately correct all of the difficulties which confront us. It is interesting to note that the system under which medicine has been practiced through the ages is the one which is being utilized today as a matter of necessity in the settlement of debts; namely, the debtor paying what he can and the creditor not pressing for more. As a practical point, I wish to suggest the serious consideration of what constitutes adequate medical care, not alone from the standpoint of hospitalization and nursing care, but also from the purely medical point of view. It is obvious that the medical profession has not thoroughly digested the tremendous amount of scientific knowledge which has been forced upon it during the last three or four decades. The accretion of a large number of laboratory and technical procedures, whose exact place and value have not been accurately determined, has added materially to the cost of medical care to the average patient. It is a field in which much can be done through the careful evaluation of the various methods and through co-operation to reduce their cost to the patient.

In the first of the Huxley Memorial Lectures, Professor Poulton has given an insight into the character of this great man which we may profitably contemplate, and, in concluding, I give it to you. He says, "Huxley's differences with his friends—sometimes sharp differences in opinions conscientiously held, where there could be no

yielding on either side—brought no bitterness and no estrangement. The issue was treated with the utmost candour, and, with regard to it, there was the fullest recognition of divergence, but at the same time there existed on both sides a fixed determination that the difference should never be permitted to spread beyond the issue and weaken any of the innumerable ties by which friend is bound to friend."

Treatment of Morphinism with Insulin; A Preliminary Report*

By MERLE Q. HOWARD, M. D.
Wauwatosa

From time immemorial certain unstable types of mankind have sought unnatural relief from or aid to their inabilities in order to meet the requirements of their environment. This has usually been accomplished by resort to drugs that may or may not have been habit forming. The extent and scope of this practice is common knowledge. In recent years, by means of a concerted international movement to control traffic in opiates, drug addiction has been materially reduced. However, when we realize that in many countries about 40% of male morphine addicts are members of our own profession, not including allied professions such as nurses and dispensers, we can realize how far we are from a solution of this problem. I feel then that a few moments devoted to some new phases of the treatment of drug addiction are warranted.

These remarks have essentially to do with drugs that are habit forming, that is, drugs that, when withdrawn, give rise to definite symptoms, the severity of which depends largely upon the amount of the drug that is being taken. The symptoms may range from prostration to restlessness of greater or less degree. The character of the drugs of course varies greatly and such individuals require a steady increase in the strength of the drug that aids their inadequacies. We have been called upon but few times to treat addiction to drugs that were not opium or some of its derivatives. All of the patients who have been treated by the method I am about to describe were morphine addicts save two.—one used powdered opium and the other heroin.

The treatment of drug addiction is at the best a thankless task and one filled with more or less discomfort and dissatisfaction for both the physician and the patient regardless of the method used. For years different methods have been tried to supplant the unsatisfactory gradual withdrawal method, none of which have had sufficient merit to justify their continued use. A few years ago all recognized methods of treatment were given a thorough trial at Bellevue Hospital under the supervision of the Mayor's Committee of New York City. This committee decided, probably reluctantly, that gradual withdrawal was the method of choice. Any one who has treated morphinism by gradual reduction can well appreciate why the decision would be reluctant. Outside of penal institutions the difficulties are frequently insurmountable, such as the drug being supplied from outside sources, the ebbing of the physical and moral courage of the patient resulting in his desertion, the development of fancied ailments which interrupt favorable progress and do much to destroy that sympathetic understanding that the patient feels should exist for him. When a patient presents himself for treatment he has marshalled all the physical and moral courage he possibly can and it generally lasts as long as the first time he feels a cut in dosage, be it real or imaginary. This constitutes one of the difficult problems of gradual reduction. For example, a physician was treated recently who had been taking morphine by mouth. He insisted on the gradual reduction method and he was reduced $\frac{1}{16}$ grain every other day, and to all appearances he was taken off the drug without much discomfort. After the treatment was completed the patient who was apparently under the impression that the drug was to be taken

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away fairly promptly related how during the first few nights he suffered greatly, but during the last week he had been very comfortable. Which goes to show the part that the mind may play in the withdrawal of drugs, this of course is influenced by the length of time that the drug has been taken and the amount that is being used.

For the past year we have been adequately relieving symptoms produced by the sudden withdrawal of morphine from persons addicted to this drug by the substitution of insulin. At present the rationale of this treatment is not understood. The suggestion first came to us when we were using insulin as an agent to combat debility, loss of weight and appetite in psychotic and nonphychotic patients. It was observed that when insulin was given for this purpose to patients being treated for morphinism there was a relief of withdrawal symptoms and their convalescence was a shorter and more comfortable one.

At this time we were treating morphinism with deep narcosis produced by the intravenous and intramuscular administration of one of the barbituric compounds. This method was found superior to other sudden withdrawal methods and as a general rule preferable to the gradual reduction treatment. However, the deep narcosis method had features that at times gave cause for concern.

USE OF INSULIN

It was with the aid of but little previous work on the pathology of morphinism that we undertook to treat the condition by the substitution of insulin for the morphine. Little work has been done on the blood chemistry in drug addiction and most of that has been done on animals. We found that there was an increase in the blood sugar of about 25 mg. when withdrawal symptoms were first noticed by the patient. This varied with each patient as the onset of such symptoms would be influenced by the individual psychologic factor. As a rule our patients would not allow withdrawal symptoms to persist any length of time, so in order to avoid desertion of the patient, blood sugar findings prior to the substitution of insulin were followed for only a short while.

The work with rabbits that had been accustomed to large doses of morphine, showed a slight drop in the blood sugar when the morphine was withdrawn. This discrepancy in the findings of animals and that of human beings is unexplained. Most pharmacologists are of the opinion that an animal cannot be addicted to opiates, this observation seems to be based only on the inability to bring about such a condition, the reason not being explained. No doubt the higher developed central nervous system in man, as well as the psychologic factor, plays a part. Yet this does not explain at all satisfactorily the difference in blood chemistry findings. In fact a good deal of work will have to be done before the reason for the success of this method of treatment is known. For that reason I am offering this as a preliminary report with the hope of stimulating interest in further research to discover the real pathology underlying drug addiction and the symptoms that follow the withdrawal of habit-forming drugs. We found no other blood chemistry changes. We do believe that there is a decrease in the B. M. R. of about 10% during the onset of withdrawal symptoms. Physical examination for the most part disclosed nothing except a drop in blood pressure concomitant with the withdrawal of morphine from an addict.

CASE REPORTS

I. The first patient treated by this procedure was a doctor's wife, age 43, weight 155 pounds, and of normal physique. She has used morphine continuously for twenty-two years. Most of the time she has required three grains a day but for the five or six months previous to admission, following the death of her husband, she has been taking five grains a day. During the first week of treatment the dosage was gradually reduced to three grains a day. This was accomplished with no apparent discomfort. Then insulin was substituted for the morphine without the patient being told of the change. The dose was necessarily arbitrary but twenty units were given as an initial dose at the time that morphine was given. The patient apparently was not aware of the change as she was not uncomfortable but asked if the dosage had been reduced again. At the time the next dose of morphine was due she was again given twenty units of insulin instead. This was eight hours after she had received any morphine

and she showed no withdrawal symptoms such as perspiration, diarrhea, nausea, etc. There was some restlessness characterized chiefly by twitching of the legs. The pupils of the eyes were moderately dilated. At bedtime she was given fifteen units of insulin and ten grains of barbital. She went to sleep shortly but awoke during the night and was given an additional ten units. She slept in all about six hours. During the first twenty-four-hour period she was given one hundred units of insulin and the consumption of food was less than usual for her. There was no evidence of hyperinsulinism, the blood sugar varied from 100-125 mg. per 100cc.

During the next 48 hours insulin was given in 10 unit doses about every five hours. At the end of this time the blood sugar and blood pressure returned to normal and the patient was told of the procedure. She expressed herself as being quite well satisfied with the treatment and said that she had had no discomfort. The insulin was continued for a week, five unit doses being given before meals. She left the Sanitarium in very good physical condition.

II. The second patient so treated was a nurse, aged 29, weight 95 pounds. She has been using morphine for five years and for the past three years had been taking about three grains a day. She was quite emaciated and her body showed the neglect so frequently seen in the drug addict. The only physical complaint was arthritis of the spine but the existence of this condition was not confirmed. She was given morphine for a few days while examinations were made and she was put in as good condition as possible to take the treatment. The withdrawal of morphine by substitution was accomplished without difficulty, the patient required about 60 units of insulin every twenty-four hours for four days. This was effected despite the fact that the patient was a most unstable person and a constant complainer. She gained weight during the first week of treatment, although she ate a good deal better than previously. The insulin in small doses was continued for a month, and at the time of her discharge she had gained twenty-five pounds. In this case the blood sugar at the beginning of treatment was 120 mg. and soon after came down to normal.

III. The third patient, a physician's wife, age 55, whom we had treated before not only for morphinism but for mild depressed attacks. She had been always difficult to manage and during the course of treatment developed many ailments that prolonged the course of treatment unnecessarily. She was given no morphine after entering the Sanitarium, insulin therapy being instituted at once. There were practically no withdrawal symptoms, however on this occasion she had been using the drug only about six months.

The only patient of the group that developed hyperinsulinism was a physician, aged 72, whom we had treated many times before by the gradual reduction method. As is frequently the case with this mode of treatment, the withdrawal of the last grain was accompanied by greater symptoms than those following the earlier and larger withdrawals, thereby prolonging the treatment. This time he was reduced to ¾ grain gradually and he consented to take insulin for the remainder of the treatment. Twelve units of insulin were substituted for the morning dose of morphine. He was given insulin in 5 unit doses during the day when he began to feel withdrawal symptoms and he had a comfortable day. At bedtime he was given 10 units and thirty minutes later he became excited, mildly confused, and there was considerable psychomotor activity. He dressed himself in a ludicrous manner, appeared in the hall and demanded morphine. He was persuaded to take orange juice and sugar and in about an hour become quiet, and with five grains of barbital went to sleep. During the height of his excitement the blood sugar dropped to 50 mg. per 100cc. The following morning he was quite comfortable and had perfect memory and insight for what had occurred the night before. Three unit doses of insulin before meals were continued for two days. He pronounced the treatment to be the most comfortable termination that he had ever experienced.

SUMMARY

After treating ten patients in the above manner we have only conjectures to offer as to the rationale. Some patients had only a slightly increased blood sugar and the others had considerable. The blood sugar studies were followed on two patients who had been put to sleep with sodium amytal and it was found that from the eighteenth to the twentieth hour following the onset of withdrawal symptoms the blood sugar increased from 110 mg. at the onset to 165 mg., no insulin being used. One of these patients went into shock and the treatment had to be discontinued. We can only suggest that the secretion of adrenalin has some influence on the fluctuation of the blood sugar curves but we feel that this is true.

We have found that patients who had been taking more than three grains a day over a period of six months or longer should have the dose gradually reduced by half before substituting insulin for the morphine. This can generally be accomplished with little discomfort to the patient. I doubt that any treatment will ever be 100% successful because of the constitutional and psychological factors that enter into the symptomatology.

Two Cases of Suppurative Pericarditis

By E. L. BOLTON, M. D.
Appleton

Suppurative pericarditis is not a rare disease but it is not commonly diagnosed except at postmorten. Welch[1] reports in 1928 that 77% of all cases of suppurative pericarditis were not diagnosed clinically at Massachusetts General Hospital. Since more cases have been reported in the last four or five years, it is probable that not so many cases will be missed. Petersen[2], in a very complete and exhaustive article, reports that up to 1928 slightly more than one hundred operated cases had been reported. Of the 102 cases reported by Petersen there were 47 deaths and 55 recoveries. Up to 1930 eleven cases was the largest number reported by any one surgeon.

At St. Elizabeth's Hospital, Appleton, a hospital in existence for more than forty years, one of the cases reported in this article was the first and only case ever diagnosed and operated in that hospital.

Probably the chief reason for failure to make a diagnosis of suppurative pericarditis, when suspected, is the fear of an exploratory pericardiocentesis. If a large needle or trocar is used there is danger of injuring the heart or producing bleeding, but a small needle—an ordinary hypodermic needle—is sufficient. The technique for this procedure is described in all books on surgical technique. Gentleness should be the watchword when doing this.

This disease is probably never a primary disease—although some believe it may be. It is usually secondary or complicates infection of some lesion or lesions, ordinarily being due to direct extension of infection from the lung or from the lung and pleura. It may follow wounds in the chest; it may complicate a distant focus of infection, such as an osteomyelitis or abscess, or it may be a part of a general infection. The mortality of suppurative pericarditis is practically one hundred percent if not operated.

Case 1. Female age 16, student, entered St. Elizabeth's Hospital on August 10, 1932. Family and previous history essentially negative. Twelve days previous to entering hospital patient had complained of general malaise and weakness, and slight pain under left arm. A small furuncle appeared on left forearm. Patient consulted her physician and the arm was bandaged and hot fomentations applied. Next day furuncle was lanced and patient felt better. Two days later patient began to have severe pain in chest with difficulty in breathing. She spent most of the time in bed. One week later it was found that she had a rather high fever (104°). On account of pain in chest and dyspnoea she was fluoroscoped but nothing abnormal could be seen at that time. Two days later (August 10, 1932) she was brought to the hospital by Dr. J. Murphy of Clintonville, with a diagnosis of pericarditis. Physical examination was as follows: Temperature 102 degrees, pulse 130, and she appeared very ill. She was unable to lie down flat and insisted on being propped up on head rest and pillows. Slight movement caused marked dyspnoea. Head and neck normal. Apex beat could not be palpated or seen. Cardiac dullness extended to seventh interspace and nearly to anterior left axilla. Area of cardiac dullness also extended to left of sternum. No murmurs or friction sounds heard and heart sounds distant.

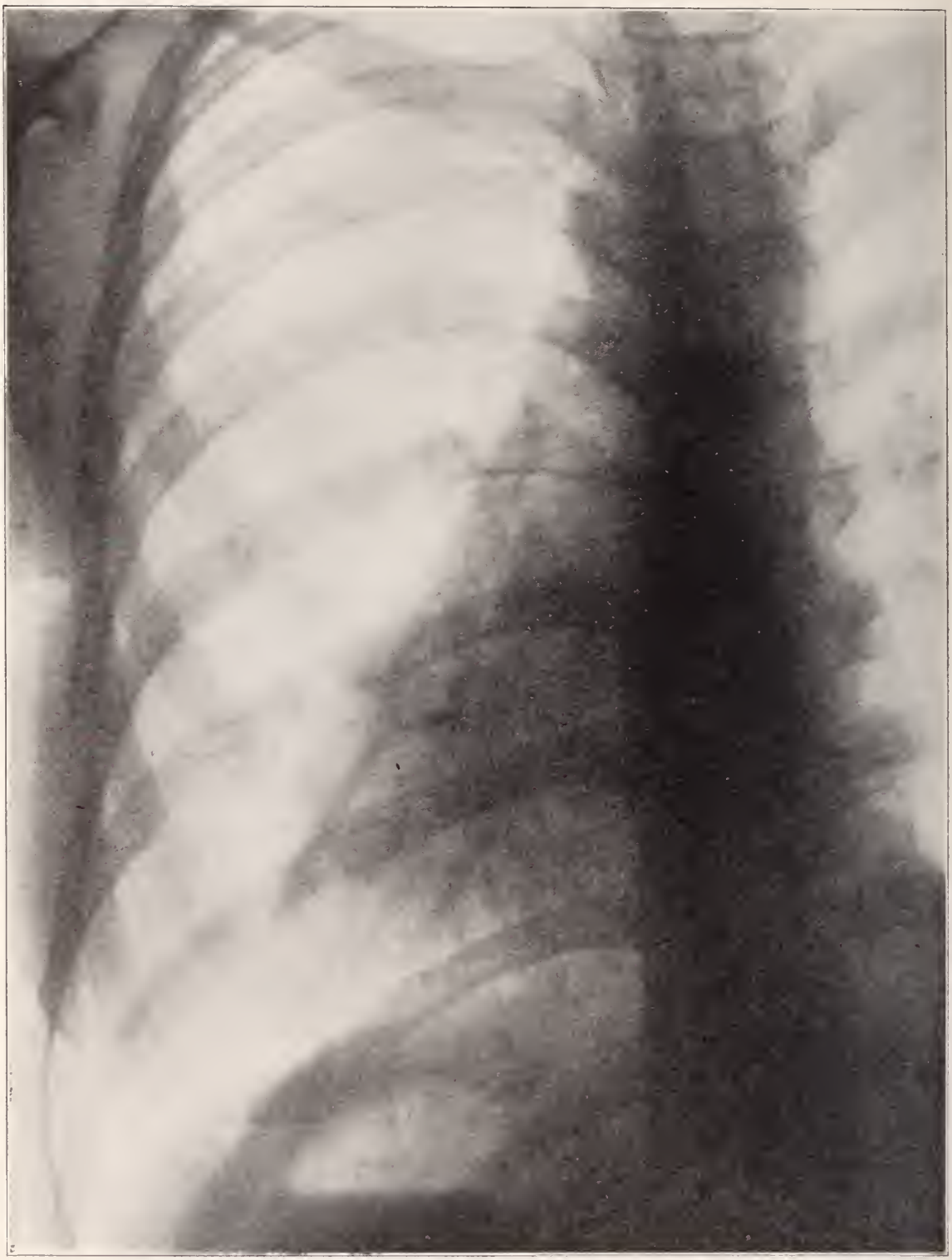
Lungs (left): Dullness extended from angle of scapula to lower border of lung and chest excursions were limited; tactile and vocal fremitus increased over above named area; whispered sounds exaggerated over same area. Right chest and abdomen were normal.

Urine contained albumin one plus, casts one plus, and leucocytes one plus.

Blood: Hemoglobin 60%, color index .8%, red cells 3,880,000, leucocytes 15,500, small lymphocytes 22%, large lymphocytes 30%, large mononuclears 10%, polynuclear neutrophiles 74%. Wassermann three plus positive. Blood culture negative.

X-ray of chest: 8/10/32 "X-ray examination made of thorax in the postero-anterior direction demonstrates the heart shadow to be increased in diameter, the left being proportionately greater than the right; the aortic shadow is also widened from below upward, blending with the heart shadow. This has the x-ray appearance of enlargement of the heart with pericarditis. The left thorax, to fourth interspace, also has an increased density; this has the x-ray appearance of a pleuritis. The border of the left heart, however, is within one centimeter to the lateral chest wall on left. The right lung appears clear." Plate No. 1 shows typical bottle-shaped shadow.

From August 10th to August 19th patient's condition remained about as follows: Temperature ranged from 99° to 103°—the morning temperature usually being lower than afternoon. Dyspnoea became more marked at times and the area of cardiac dullness increased. Blood culture was again taken and found to be negative. Patient's general condition was gradually getting more and more



Case 1. X-ray taken Oct. 19, 1932.

desperate. Although a pericardiocentesis had not been done, a diagnosis of purulent pericarditis was made and decided to operate. The night before operation patient was given grains three (grs. 3) luminal and codeine q.s. for pain. The following morning, 7:00 A. M., 1,000 cc. saline was given per hypodermoclysis. At 7:30 A. M. morphine grain one-sixth (gr. $^1/_6$) was administered, and at 8:00

A. M. grains three (grs. 3) sodium amytal were given per mouth. Patient was taken to operating room at 9:00 A. M., placed in semi-sitting position on operating table. Field of operation was prepared as usual. The skin along the line of proposed incision was infiltrated with novocaine one-half percent followed by a subcutaneous infiltration of the soft tissues of the same solution. Skin incision began just to left of sternum at level of fourth costal cartilage, extended downward close to left border of sternum, crossing the fifth, sixth and seventh cartilages then followed seventh cartilage to the left. The flap was freed on either side and retracted exposing sternum and cartilages. A portion of sixth and seventh cartilages was carefully removed. The internal mammary artery was exposed and ligated above and below, lessening the danger of hemorrhage. After separating the triangularis sterni from sternum and displacing pleura outward, the pericardium thus exposed was very tense and bulged into the wound. After injecting the pericardium with novocaine it was opened through a very short incision which was later lengthened and a purulent fluid was expelled at each heart beat. About 500 cc. was allowed to slowly escape. The incised edges of the pericardium were sutured to the skin, lessening the danger of infection of mediastinum. A soft rubber drain was inserted into pericardial sac and anchored with one suture. Patient's heart action was markedly improved as soon as fluid was evacuated.

Patient's postoperative history was uneventful. She was allowed to be taken home in an ambulance on the seventeenth postoperative day with instructions to remain in bed another three weeks at least. Smear from purulent fluid showed many pus cells but no organisms were discovered.

Patient came to my office on October 19, 1932, feeling well. The accompanying x-ray picture (plate No. 2) taken on that date shows the marked decrease in heart shadow. Her pulse was 80, temperature normal and heart sounds normal. Patient had gained about twenty pounds in weight.

Case 2. The second case is one of which I am not especially proud, as the diagnosis was not correct and operation was made by mistake. This case was operated over twenty years ago by the writer in a home. No records were made hence this report will be brief: A man, twenty-six years of age, had been ill about three weeks when first seen. He was extremely ill and very much emaciated, giving a history of having had chills, fever and cough for about three weeks. There was a large area of flatness of left chest especially anterior. A needle was inserted and a purulent fluid was aspirated and a diagnosis of empyema of left pleural cavity was made. The sixth rib was resected well out to mid-axillary line and instead of finding pus in the pleural cavity, we found the pericardium enormously distended with a thick purulent fluid. The incision was enlarged anteriorly, the fluid allowed to escape and a soft rubber drain placed in pericardial sac. I was sure we had committed a terrible blunder, but, to my surprise, the patient made a rapid recovery.

These two cases are reported with the hope that it may be an incentive for others to be on the alert and thus reduce not only the percentage of cases not diagnosed but also the mortality of this disease.

"It is often insidious in its development and its appearance may be masked by the overwhelming character of the original infection of which it is a complication, and if one does not keep constantly in mind the possibility of its occurrence as a complication of the disease with which it is usually associated, it is easily overlooked". A. E. Billings,[3] S. C. of N. Am. Dec. 1932. In the words of Pool[4] "The condition is frequently not thought of and its signs not sought." Annals of Surgery, April 1921.

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Chronic Sinusitis in General Practice

By WILLIAM C. COMEE, M. D.
Green Bay

I have always been attracted to the field of chronic suppuration in so far as it concerns my specialty, and I will ask your consideration for a few minutes of chronic suppuration of the maxillary sinus and hyperplastic ethmoiditis. In spite of the fact that some rhinologists consider the maxillary sinus done to death, I still feel it merits more attention.

Perhaps the average physician is not sufficiently methodical nor careful enough in his examination to locate frequently occurring hyperplastic ethmoiditis or an infected maxillary sinus. One or both of these conditions are frequently the cause of a chronic headache or a bronchitis which will not yield to usual treatment; or a chronic gastro-in-

Case No. 1. Showing large filling defect of right maxillary sinus.

testinal disturbance or vertigo may be the chief complaint.

Of course one must not forget that sometimes the sinus disease is the result of a constitutional derangement as intestinal toxemia, syphilis, gall bladder, endocrine disturbance, etc.; or patients who take little exercise, eat too much, may have a continually recurring vasomotor disturbance in the nose which simulates a sinus disease. I have also come to believe that there is a constitutional idiosyncrasy about some people which makes them prone to infections; but we are discussing chronic suppuration of particularly the maxillary sinus.

The pain in this condition usually manifests itself in the supraorbital area; occasionally there may be radiation to teeth or ear. Frequent colds are usual, but the nasal symptoms may be quite negative and a chronic toxemia be the only evidence of infection and routine methodical examination the only means of ascertaining the location. X-ray examination is of course of great assistance, for if the maxillary sinus is cloudy, then a lipiodol instillation may show definitely a filling defect or a thickened mucosa.

Nasal polyps are very prone to occur in chronic infections and even though a sinus appears clear, if polyps are noted in the middle meatus, a lipiodol roentgenogram

Case No. 2. Showing large filling defect of right maxillary sinus.

Case No. 3 (a). Right maxillary sinus showing marked thickening of both bony and mucous membrane walls and general clouding.

Case No. 3 (b). Left maxillary sinus fills well.

Case No. 3 (c). Two days later lipiodol leaving left maxillary sinus and right showing large filling defect.

Case No. 4. Large filling defect of both maxillary sinuses.

Case No. 6 (a). Showing mass in floor of right maxillary sinus which proved to be two large polypi.

Case No. 6 (b). Lateral view of same two large filling defects.

should be made, and even if this be negative, hyperplasia may exist in the various recesses of the sinus. This must be kept in mind in all cases of chronic toxemia.

SYMPTOMS

The symptoms of chronic suppurative sinusitis indicating interference as I have come to know them are in the order of their importance.

First:—Frequent persistent head colds or reactions simulating a head cold, and severe, at times excruciating, headache. This headache can be so severe and persistent as to seriously interfere with the patient's social problems. In fact when present I know of no other one symptom of equal importance.

Second:—Acting as a source of focal infection and causing a neuritis or rheumatic process or local disease involving some adjacent or remote part.

Third:—As a cause of asthma, tachycardia, dyspnea, cardiospasm, etc. These cases can sometimes be controlled by anesthetizing the naso-palatine ganglion. I need not mention conditions perhaps such as myocarditis, acute rheumatic fever and arthritis, etc., but for many years I have wondered why sinusitis is not mentioned in the same breath as tonsilitis, etc. It must be from a lack of understanding of the sinus pathology; and I believe that we are apt to overlook these sources of infection, and thus often be defeating our purpose.

ILLUSTRATIVE CASES

I am thinking of a few cases in particular, for instance:

1. A man, 73 years of age in good health except for headache, vomiting and vertigo whose examination revealed a chronic suppurative sinusitis of the right maxillary sinus.

2. Another patient, 38 years of age, with a history of R. frontal supraorbital pain (excruciating at times) accompanied by nasal purulent discharge for the past five years. Roentgenograms of maxillary sinus were cloudy and lipiodol pictures were made.

3. Another male patient, 43, whose chief complaint was a persistent lumbago although his maxillary sinuses had been drained by an intra-nasal method. I insisted on lipiodol roentgenograms, and you see the result.

4. A man, 59 years of age, nasal obstruction and chronic head colds for 30 years. Examination reveals polypi filling both nasal chambers. Roentgenogram shows maxillary sinuses diseased. I removed the intra-nasal polypi and further roentgenograms were made with this result.

5. A girl, 20 years of age, who had a chronic suppurative otitis media and mastoiditis following an attack of scarlet fever at age of 13.

A bilateral radical mastoid operation secured dry ears and considerable improvement in hearing, but continuous head colds persisted in spite of intra-nasal drainage of maxillary sinuses. Lipiodol roentgenograms were made, and a Caldwell-Luc operation has cleared up the infection, and the patient will be a useful member of society.

6. A boy, 18 years of age, complaining of R. frontal headache and recurrent reactions simulating head colds. Examination intra-nasal and x-ray pointed to the right maxillary sinus.

Lipiodol pictures brought out evidence of polypi of right maxillary sinus. Patient was operated, and two large polypi removed from maxillary sinus.

SUMMARY

Other radiographic media, as skiagenol, a recent preparation, are equally satisfactory, but my first work was with the one mentioned.

All of these patients had been operated upon before, but no previous effort had ever been made to understand the sinus pathology which was thoroughly corrected by this procedure.

Acute Anterior Poliomyelitis; A Pediatric Problem*

By F. R. JANNEY, M. D.
Milwaukee

It was discovered by Flexner and his associates[1] that the blood serum of recovered human poliomyelitis patients neutralized the virus of poliomyelitis. They also found that it prevented infection in the monkey and this led to the use of the convalescent serum in the treatment of human poliomyelitis. It was presumed, logically, that it would be beneficial. Favorable, but not convincing, results were reported by various physicians and its use became widespread.

Now from Flexner[2] Kramer[3], Park[4] and others, have come more recent opinions based on controlled work, which fails to substantiate the expected results. They believe the use of convalescent serum is of little or no value in the treatment of human patients, even though given in the preparalytic stage.

Assuming that this can not be refuted, we need to do still more intensive work in investigating the epidemiology and nature of the infection. Results of work on diseases of somewhat similar nature give up the right to hope that poliomyelitis may either be prevented, or its effects so minimized that people may pass through the infection and develop their immunity without serious or permanent damage.

While the clinical picture of the disease is familiar to most practitioners, it seems important to record variations occurring in different epidemics. It has been frequently observed that clinical manifestations of infectious diseases may vary from time to time. This variability may explain differing conceptions of the importance of certain symptoms as reported in different localities. In certain epidemics clinicians have mentioned a particular symptom as of diagnostic significance, which symptom may be negligible in another outbreak of the disease.

The following brief report presents an analysis of the symptoms and signs of acute anterior poliomyelitis as seen in a small group of children during the epidemic of 1931. They were admitted to the Milwaukee Children's Hospital together with others

* Presented before 91st Anniversary Meeting, State Medical Society, Milwaukee, September, 1932.

with the presumptive diagnosis of poliomyelitis. The 26 cases here considered represent those in whom the diagnosis became regarded as established. Of those, 13 were admitted in the preparalytic stage, the others having some paralysis on admission.

By far the outstanding physical sign present was stiffness of the neck and spine. This most constant finding was present in every case as determined by examination on entrance. In several instances, the child or parents had noticed this rigidity prior to hospital admission, particularly in children sufficiently old to localize distress.

In patients under three years of age, it was often quite difficult to determine how much rigidity was due to voluntary effort and apprehension. The rigidity, while generally quite definite, was not as marked as that usually caused by meningitis. Attempts at flexion anteriorally of the neck and spine always produced pain to varying degrees. The stiffness persisted for an average of about seven days, then gradually disappeared.

Fever was also present in every instance, as determined either by physicians before hospital entrance or on admission. The highest temperature recorded was 103° (R), the average about 101° (R) and lasting about three days after entrance.

Vomiting was found to be a common symptom, being present in 18 instances. As a rule it was mild in nature and occurred only from two to three times in the early stage of the disease.

Drowsiness and listlessness were also commonly present, and were evident in at least 17 of the cases. The patients preferred to be left alone and remained quiet when not disturbed. With the decline in fever, these symptoms rapidly abated. In no instance was there any stupor or coma.

Anorexia was present in about one-half of the group, persisting until the afebrile stage. Other gastro-intestinal symptoms were negligible; diarrhea did not occur.

Pain was another fairly common feature of the disease, being evident in at least one-half of the cases. Where the patients were old enough, they sometimes complained of pain in the extremities; and in a few instances a provisional diagnosis of rheumatic fever had been made. Pain in the extremities produced by passive motion was much more common than spontaneous pain, and was quite severe so that patients resented being handled.

Headache was complained of by 11 of the older children. As a rule, it was not very severe and not persistent. Contrary to the common impression, the symptom of headache is comparatively infrequent as a subjective complaint in children's diseases. Its presence, therefore, is usually of considerable importance.

Reflexes were variable. However, it is well to record that the knee jerks were usually exaggerated in all cases seen before the onset of paralysis.

Respiratory tract symptoms were not outstanding, being present in less than one-third of the cases, unless one includes the moderately injected throats so often seen in children who are apparently well.

Tremor was also an uncommon manifestation, being noted in only four children. Inasmuch as these patients were under routine ward care, it is not unlikely that other instances of tremor may have occurred without being observed. Convulsions did not occur in any of the cases.

Sweating was conspicuous by its absence; although such an interpretation is somewhat difficult, since most of these children were seen in the warm months of the year, and fever was generally present.

In regard to laboratory study, attention might be drawn to blood work. The highest leukocyte count was 11,200; the lowest 6,400. Most of the counts ranged between 7,000 and 9,000. It should be remembered that this work was done in the latter half of the first week of the illness, thus perhaps accounting for the lack of leukocytosis generally said to be present early in the disease. In this particular series, routine blood examinations were, therefore, of no particular value in diagnosis.

Spinal fluid cell counts were done in every instance. The highest count recorded was 225; the lowest, 10. Where globulin deter-

mination was made, it was present, excepting in three instances. Sugar determinations gave normal findings. Fluid obtained was usually under increased pressure.

A PEDIATRIC PROBLEM

The predominant symptoms and signs were meningitic in character—the neck sign being the outstanding uniform symptom. No matter how slight this sign, if in addition to it the child was slightly feverish and listless, and presented increased knee jerks, or resented having its extremities moved, the presumptive diagnosis of poliomyelitis was made until ruled out or confirmed by spinal tap. Inasmuch as so much depended upon establishing the presence of the neck sign, it should be noted that eliciting this sign in a sick child demands a cooperation that must prevail before trying it. The child should be approached gently and the sign tested only after the child's confidence has been obtained.

According to Stocks[5] of England, there is within each community where a poliomyelitis epidemic exists, extending parallel with it, an invisible subclinical epidemic many times greater than the visible epidemic. He estimates from an epidemiological study that to one case showing poliomyelitis symptoms there are over 100 who become immune without symptoms. This is based on known exposures only, which occur in homes where the disease exists. There are, without question, many other exposures from unrecognized cases so that the probable ratio is much greater.

While the disease occasionally occurs in adults, it is essentially a pediatric condition. Dr. George Draper states in Cecil's text that practically all people are immune after 20 years of age and that 90% of all cases occur in children under 10 years of age. Stimson in his text states that rarely more than one develops the disease to 1,000 total population. This means that there exists an immunity which is apparently even more widespread and lasting than that shown by adults for diphtheria.

The series of epidemics which we have experienced since 1916 have added to the older immune group a new younger strata each time. This widespread development of immunity with infrequent disaster suggests that with a little additional resistance those who developed mild paralyses might have avoided this damaging phase.

It also suggests that most parents have specific poliomyelitis antibodies in their blood. If the giving of convalescent serum or of adult blood known to contain specific antibodies to the patient already ill has failed to benefit him, as is now believed, it is reasonable to think that the failure is because it was given too late. It is probable that its behaviour is much like that of adult blood or convalescent serum used for the prevention of measles. This, given before the illness develops, has specific value, but given after the onset of the illness does little or no good.

Granting this hypothesis—if in the beginning of a poliomyelitis epidemic the children of the community in the susceptible age group were given parental whole blood it is not unlikely that the severity of their infection could be so diminished that they would develop immunity without paralysis.

The intramuscular giving of 1 ounce of parental blood is a harmless and simple procedure. The blood has non-specific values as well a possible specific value. One might expect it to be of help for several weeks after giving—about the duration of the usual epidemic. Such a procedure is humbly recommended. In the face of an epidemic, parents are generally willing to cooperate even without definite promise.

Advance in the control of damage done by infantile paralysis is seriously needed. The orthopedic surgeon has done much in salvaging and improving those already damaged but the work is obviously limited. The neurologist rarely sees these patients early or comes into contact with preventive possibilities. It is the men who are routinely seeing children, the general practitioner, the internist and the pediatrician, who have this opportunity.

Alertness for ever varying but suggestive symptoms, with courage enough to isolate on suspicion, coupled with such general

measures as are advocated in influenza have not been sufficiently in evidence. In addition, the prophylactic measure recommended, which is harmless, simple and of general value, to be used in the face of an epidemic is urged. It is feasible that it may temporarily raise the individual's specific resistance so that he may, if exposed, pass through the disease and develop his immunity without damage.

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4. Personal Communication to Wisconsin State Board of Health.

A member of the International Committee for the Study of Infantile Paralysis, as recorded in an Addendum, page 529, of their publication "Poliomyelitis", used adult blood as a prophylaxis in an epidemic at Bradford, Pa., Sept. 10 to Oct. 5, 1932. Of the 4000 to 4500 children between one and 15 years of age in this city, 1300 were given from 10 to 20 cc of parental whole blood. None so treated developed poliomyelitis. During this period, 32 cases besides the original eight, developed in the untreated group.

Editor's Note.

Pernocton in Obstetrics

By HENRY OLSON, M. D.
and
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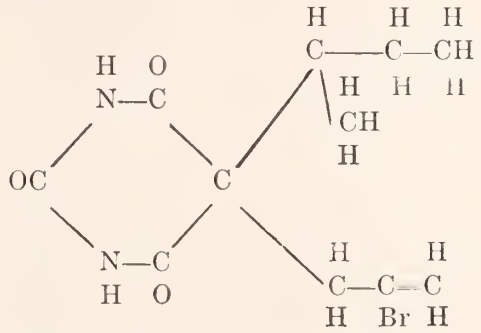
To eliminate any psychic trauma, by putting the patient in the zone of twilight unconsciousness, was the purpose of the introduction in obstetrics of the injectable barbiturate, pernocton. Amnesia is not only a recuperative factor, but, while it lasts, also relieves the patient of all the anxiety of the impending delivery. This is especially applicable in long drawn out labor where the mental resistance seems to break down. The immediate induction of sleep eliminates all worry and recollection of pain so that the whole obstetrical procedure is more agreeable to the patient.

The analgesic used for this purpose should be of a stable composition, with quick action, and not have any deleterious effects on the mother or child. Pernocton, which already has a wide successful clinical application in obstetrics and surgery, has been used in about 200,000 cases in this country and abroad. In the opinion of many clinicians the use of pernocton is a distinct refinement in anesthesia and a definite advance in obstetrical analgesia.

REVIEW OF LITERATURE

Chemistry. Pernocton is a ten per cent solution of the sodium salt of secondary butyl beta bromallyl barbituric acid, having the structural formula as follows:



The sodium salt of the acid is used as it is more readily soluble in water. The aqueous solution is a colorless, bitter tasting liquid, acid in reaction and having a P.H. of 9.8.

The barbiturates theoretically are derived from malonic acid and urea. The addition of two ethyl groups forms di-ethyl barbituric acid, or barbital (Veronal). Amytal is formed by the substitution of an iso-amyl group with secondary butyl radical, and the iso-amyl group by the beta bromallyl radical. By the addition of the bromallyl radical it has been possible to produce an acid which is quickly broken down and transformed in the body into several inert indifferent com-

pounds, when its physiological action has been accomplished. Halberkann and Reiche have shown that the bromallyl addition favors the oxidation in the organism.

PHARMACOLOGICAL ACTION

Dosage. Bumm and Somnifen, pioneer workers with pernocton, found that the average dose was 0.7 to 0.8 mg. per kg. body weight (4 to 6 cc. of the ten per cent solution). They found that the minimal lethal dose was ten times the minimal effective dose leaving a wide margin of safety.

Experiments on dogs by Boedecker and Ludwig show that the intravenous route is the most effective. The tabulation below summarizes the laboratory experiments on dogs.

Administration:	Lowest effective dose:	Medium dose Dose in Gm. per Kilo:	
Oral	0.01	0.021	4½ hrs. deep sleep
Rectal	—	0.015	3 hrs. sleep
Subcutaneous	—	0.015	2 hrs. sleep
Intravenous	—	0.035	Sleep for many hrs.

Chemical Transformation. In the organism pernocton is transformed into acetonyl barbituric acid and acetonyl malonylureic acetic acid, both of which are practically nontoxic. This transformation may be demonstrated in vitro.

Effects on the Blood. In some cases hypnotic doses produce a slight increase in the blood sugar. The insulin-hypoglycemia seems to be temporarily prolonged, the adrenalin-hyperglycemia remains unchanged during the sleep. Dimitrijevic states that pernocton acts on the inhibitory center of the brain and thus might produce a specific hyperglycemia. No hemolysis is present as in other types of anesthesia.

Effects on Circulation. Medium doses given to rabbits orally, rectally or subcutaneously does not affect the blood pressure or pulse.

Pernocton was used in digitalis standardization on frogs and rabbits by Nyiri and Du Bois. These tests were made in the pernocton sleep. Previous experiments convinced them that the slow intravenous administration, in proper doses, does not interfere with the heart action, the blood pressure or the respiration.

The duration of the intravenous injection is of great importance for the action of the drug. (Schneider). An insignificant lowering of the blood pressure is noted when one cc. per two minutes was given. A more perceptible lowering of the blood pressure is noted when too short a time is allowed for injection. Even after a rapid injection the blood pressure returns to the normal level after five to ten minutes. The P.H. of the solution is 9.8, therefore time should be given for the blood stream to assimilate the alkalinity.

Effects on Respiration. Pernocton, when given in small and medium doses, causes a reduction in the frequency of respiration but simultaneously increases the depth so that the abundance of the ventilation is improved. (Schneider).

Boedecker and Ludwig state that, in animal experiments, death from overdosage always results from respiratory failure. They found that even after breathing had already been suspended by fatal doses, the heart beat and the blood pressure remain almost normal.

The injury to the respiratory center can not be influenced for long by the giving of Lobelin or Chlorallylnarcodein.

Excretion. From 12 to 17 per cent of pernocton is transformed into the secondary-butyl acetonyl barbituric acid and rapidly excreted through the kidneys as such. The remaining 80 to 90 per cent of pernocton is completely decomposed into indifferent substances. Not more than 0.5 per cent has been recovered from the urine of patients who received the acid of pernocton orally in large doses of 0.2 to 0.3 grams.

Margin of Safety. Bumm's findings prove that there is a generous margin of safety. He found that the lethal dose was ten times the minimal effective dose. Recently, by more careful and slow administration, the effective dose has been decreased, thus increasing the margin of safety.

Keeser could not detect the substance of pernocton in the cerebrum, the cerebellum and the mid-brain of rabbits to which hypnotic doses of 40 mg. per Kilo had been administered intravenously. It was, however,

found in the spinal cord, the medulla oblongata and the diencephalon.

Effects on Repeated Use. Considerable literature is on hand concerning the repeated use of pernocton in the treatment of drug addicts. Doses of 4 to 8 cc. given 2 to 3 times a day have been given for several days without any deleterious effects.

CLINICAL APPLICATION

Pre-pernocton Medication. The early workers state that morphine is contraindicated as a pre-pernocton medication, but according to recent pharmacological investigations at the University of Vienna, small doses have no deleterious effects (Silver). Atropin, used especially in surgery, seems to be of great value when given prior to administration. It checks salivation which is occasionally seen after administration of barbiturates; it also tends to stimulate respirations and favors muscular relaxation. Gauss, originator of twilight sleep, now uses pernocton in place of morphine.

Suggestive Treatment. Suggestion prior to and during administration is regarded as an important factor in the successful pernocton administration. Suggestions such as: to relax and close the eyes, or that there will be a calm natural sleep and nothing to fear, are very beneficial.

Administration of the Solution. The rate of administration should not exceed one cc. per minute. No sudden drop of blood pressure or respiratory embarrassment was noted in cases where the solution has been given slowly. Many of the clinicians discontinue the injection if the patient goes to sleep, even if the full dose is not given. Large doses have been found to act harmfully on the vasomotor and respiratory center, causing a fall in blood pressure.

Three cases of sloughing at the sight of injection have been reported by Kautz. However, no other cases can be found in the literature.

Dosage. The calculated dose depends mainly on the general condition of the patient and the weight. Age, and state of nutrition are also considered.

One cc. per thirty pounds should serve as a rough estimation and should never be exceeded. One-half to three-fourths of the above calculated dose is sufficient if the solution is given slowly. The stage of amnesia depends more on the method of administration than on the dosage.

Prolongation of amnesia by additional injection is not contraindicated. The intravenous administration should not be repeated before two or three hours. The second dose should not exceed two cc., and should be given even more slowly than the primary dose. In some cases a third injection has been given deep in the gluteal muscles with very favorable results.

Duration of Amnesia. The duration of the amnesia depends somewhat on the individual patient and just how much of the suggestive treatment, previous to and during administration, was used. The average duration of amnesia is from two to five hours.

Contraindications. The only absolute contraindications are diseases with severe disorders of excretion and reabsorption, as nephritis with urinary retention.

Ileus, with severe toxemia, is also another contraindication.

Dangers and Antidotes. There is no specific antidote for pernocton, but due to the wide range of safety the dangers are easily avoided.

Respiratory. This is the only danger of any importance and should serve as the final warning for the discontinuation of the drug. Animal experimentation has proved that death is always due to a respiratory failure.

1. Coramine (Ciba) given intravenously (4 cc.) is an excellent antidote due to the reaction on the respiratory center.

2. Inhalation of carbon dioxide and oxygen are very beneficial in cases of impending respiratory failure.

3. Caffeine sodium benzoate (Gr. 7) also causes an increase in the respiratory rate.

Circulatory. A hypnotic dose has little effect upon the circulation, causing only a preliminary drop of about ten degrees in the blood pressure. A too rapid injection may cause a fall of twenty to thirty milli-

meters in blood pressure, but this soon returns to the normal limits. Ephedrine sulphate readily controls any fall in blood pressure.

Postoperative Excitement. Friedlander, in his series of 1200 cases, reports only four cases and believes that the excitation was due to improper technique.

Three cases of marked excitement were reported by Brown, Moloy and Laird. These cases were Latins of a volatile temperament.

PERSONAL OBSERVATION

Preparation of the Patient. No particular preparation was required prior to the administration of pernocton, unless called for by some complication of pregnancy.

In primipara, morphine sulphate (gr. 1 6) was given when the cervix was two to two and one-half centimeters dilated and the contractions were strong.

Type of Intravenous Set Used. A five or eight cc. syringe with a fine caliber intravenous needle was used. This enabled the operator to have better control of the slow rate of flow during injection, and also caused less pain at the time of insertion of the needle. At frequent intervals the plunger was pulled back so as to be certain that the needle was still in the lumen of the vessel and thus avoid any extra vascular infiltration. A small compression bandage at the end of the injection prevented back oozing from the punctured vessel. A discoloration at the site of injection was occasionally noted, but this readily reacted to moist heat. No sloughing of tissue was ever noted.

Dosage. The calculated dosage depended on the body weight, age, general condition, and nervous stability of the patient. On an average of four to six cc. was necessary to put the patient in the zone of twilight unconsciousness. The following table, based on the weight, aided in the estimation of the amount to be given:

Kilograms	Pounds	Minimum Dosage	Maximal Dosage
45	100	2.5	3.4
49	110	2.7	4.0
56	124	3.0	4.5
62	137	3.2	5.0
65	144	3.4	5.2
68	151	3.6	5.5
72	158	3.8	5.7
75	165	3.9	6.0
80	176	4.0	6.2
85	187	4.2	6.4

Administration. Strict attention was paid to the time allowed for the injection. It was found that the slower the rate of administration the more complete the amnesia, therefore, not more than one cc. was given during an interval of two minutes. It was noted that the analgesia was more quickly obtained when the solution was given between pains.

After two to three cc. of the solution the patient felt somewhat drowsy but still reacted to any question asked. After three and four cc. were injected the eyes were closed and the pupillary reflexes became sluggish. The remainder of the estimated solution was given very cautiously unless contraindicated by a marked decrease in the respirations.

Management of Patient in Twilight Sleep. The patient was under strict observation from the time the pernocton was injected until complete recovery,—a nurse being pres-

List of Cases:

Stage	Amnesia	Excitement	Type of Delivery	Effects on Child
Number of Primipara—37				
30—1st	29 complete	33 none	7 spontaneous	1 cyanotic (Thymus)
7—2nd	8 partial	3 restless	29 forceps	2 delayed
		1 marked	1 breech	
Number of Multipara—16				
15—1st	11 complete	12 none	11 forceps	1 marked delayed
1—2nd	5 partial	4 restless	5 spontaneous	
Number of Miscarriages—3				
1st	3 complete	2 none	spontaneous	none viable
		1 marked prior to and after injection.		

ent at all times. The injection was given in the labor room after elimination of any annoyance that might retard amnesia or cause the patient any excitement. Mental rest by the use of suggestion, such as, telling the patient that she would be free from pain and labor would be terminated on awakening, increased the interval of amnesia.

A small percentage of the cases showed some excitement. Forcible restraint should never be used as this leads to an increased reflex defensive reaction. The patient can be spoken to so that suggestive treatment can be used successfully.

Effects on the Mother. The patient was in a stage simulating natural sleep. The color of the face remained natural, no cyanosis or pallor ever being noted. The patient usually turned on her side and went to sleep for ten or fifteen minutes. The pains were slowed up immediately after the injection but soon would again attain their former intensity. During contractions the patient would moan or change her position but immediately after the pain she would again fall asleep. Twenty to thirty minutes after the administration of the solution the contractions seemed to be increased in intensity and duration. This was particulary noted in the great majority of multipara. Respirations were deep and regular. The pulse maintained the same quality as before the injection. The blood pressure did not show any sudden drop. Excellent results were obtained when used to control the convulsions in eclampsia. This might be best illustrated by giving an abstract of a case.

A primipara, age 23, was admitted to the hospital in a comatose state. The history obtained revealed that she had had several convulsions while at home and also one while en route to the hospital. Two months ago she was told that her condition warranted immediate diet and rest in bed, but because of religious complications she discontinued her regular prenatal visits. Examination revealed a well developed adult female about six months pregnant. Just after the blood pressure was taken 200/120 she had a convulsion of five minutes duration. Urinalysis showed a four plus albumin, granular casts and a trace of acetone present.

She was given 5 cc. pernocton immediately and treated as follows:

8:40 P.M.—Pernocton 5 cc.
9:40 P.M.—Magnesium sulphate intravenously.
6:30 A.M.—Pernocton 5 cc.
7:30 A.M.—Magnesium sulphate.
12:30 P.M.—Hypertonic glucose. Gastric lavage.
2:30 P.M.—Membranes ruptured artificially.
7:00 P.M.—Fetus expelled.
6:15 A.M.—Patient was conscious B.P. 164/104.

She was discharged eleven days later.

Effects on the Child. There were no babies that showed a definite asphyxia which could be attributed to the pernocton. One baby showed a marked cyanosis which later proved to be due to a pathologically enlarged thymus. There was no tendency for any of the babies to be dangerously narcotized, all children that were viable and uninjured breathed spontaneously.

Supplementary Anesthesia. Additional anesthesia in the form of nitrous oxide or ether or both were used when the head was on the perineum. If the stage of pernocton analgesia was light, nitrous oxide was given with the pains in spontaneous deliveries. The majority of cases were low forceps deliveries with additional nitrous oxide anesthesia. In all cases the amount of anesthesia was decreased. The usual excitement stage occurring with inhalation anesthesia was either decreased or absent, this depended on the length of time the previous pernocton injection was given. CO^2 and O_2 inhalations were given immediately after the general anesthesia so as to prevent atelectasis and also for the antagonistic action on the injectable barbiturate.

Duration of Amnesia. Amnesia with pernocton intravenous administration averaged between three to four hours. One case had a complete amnesia for eight hours, without any deleterious effects. The length and stage of amnesia seemed to depend on the stability of the individual's mental makeup prior to and during injection. The use of an opiate previous to induction of sleep seemed to put the patient more at mental ease so that proper and successful suggestive treatment could be given.

Respiratory Effects. A deepening of respirations with a simultaneous decrease per minute was the usual effect noted. This served as the most important factor in regard to the dosage. No respiratory stimu-

lants were ever necessary as none of the cases ever showed any alarming change.

Gastro-Intestinal. Nausea and vomiting were found to be decreased, especially so when compared with other types of analgesia. When supplementary anesthesia was used the preliminary pernocton analgesia decreased the nausea and vomiting so commonly seen after inhalation anesthesia. Fluids were retained and could be given earlier after completion of delivery.

Circulatory Effects. The rate and rhythm of the pulse did not show any marked change. No sudden drop of blood pressure was ever noted; the average range being an initial drop of less than ten millimeters after completion of the intravenous injection. None of the cases ever required a circulatory stimulant.

One of the cases required forcible restraining shortly after administration of the solution. This proved to be a highly nervous individual in the active stage.

Attitude of the Patient. The great majority of the cases had a complete amnesia from the time of pernocton administration until sometime after delivery. Some remembered the final stage vaguely when the labor lasted more than four hours after the intravenous injection. None of the cases ever had an unpleasant recollection.

Mortality. In this series of cases there has been no mortality that could be directly attributed to pernocton analgesia.

There were no maternal deaths and no case ever required respiratory or circulatory stimulants.

There was one fetal death thirty-six hours after delivery which need only be mentioned for completeness. This was in a case of a long drawn out labor with resulting cerebral injury to the fetus. Spinal puncture revealed a bloody fluid. No autopsy was done.

SUMMARY

1. Pernocton, the sodium salt of secondary butyl beta bromallyl barbituric acid, is suitable for intravenous administration because of its solubility and because of the absence of deleterious effects on the mother and child.

2. It has a distinct advantage over the other barbiturates due to the replacement of one hydrogen atom by the bromal radical.

3. One cc. per 12½ kilograms should serve only as the approximate dosage.

4. In the primipara, morphine sulphate (gr. 1 6) should precede the pernocton injection.

5. The solution may be given in primipara when the cervix is three to four centimeters dilated and the pains are of good intensity.

6. Not more than one cc. should be given during an interval of two minutes.

7. The patient should be under the supervision of a trained nurse at all times.

8. Suggestive treatment is very important.

9. Labor was not prolonged, which often happens with rectal analgesia and morphine.

10. Amnesia ranges from two to four hours.

11. Sloughing at the site of injection has not been noted.

12. There were no maternal or fetal deaths.

13. The tendency to produce excitation was the only unsatisfactory finding.

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Some Aspects of Bright's Disease*

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Bright's disease embraces several types of kidney disorders. All types are characterized by non-suppurative, degenerative, or inflammatory renal lesions. The various forms differ widely from one another in their pathological and clinical manifestations. To harmonize the clinical features with the anatomical changes in the kidney has been the object of innumerable studies. This is always a difficult task, and at times it is impossible, but the modern pathological classifications have made it much easier and more satisfactory. There is such a wide variety of clinical features that, for the purpose of convenience, all of the symptoms of Bright's disease may be assembled into five main syndromes, as follows: (a) urinary; (b) hypertension; (c) edema; (d) nitrogen retention; and (e) uremia. The different types of Bright's disease are identified by the presence or absence of certain of these syndromes. (See table 1). It must be emphasized that in a single case all of the syndromes need not be present at the same time; sometimes one or another syndrome dominates the clinical picture for a time, then disappears either to return at some later date or never at all.

Lipoid nephrosis is identified by massive albuminuria, extensive edema, a hypercholesterolemia, and a hypoproteinemia. Hypertension, hypertrophy of the heart, nitrogen retention, hematuria, and uremia are absent. The essential feature, however, is the presence of doubly refracting lipoids in the urine. From this lipoiduria the disease acquired its name. After years of investigation, there is no uniformity of opinion regarding the exact status of lipoid nephrosis in the classification of Bright's disease. Some believe it is merely a form of glomerular nephritis, and others hold the view that it is a constitutional disease separate and distinct from nephritis. The main reason for considering lipoid nephrosis as a separate clinical entity is that it differs in its prognosis and management from other forms of Bright's disease. Its prognosis is more favorable and the results from treatment are many times more satisfactory than in other types of Bright's disease.

Renal arteriosclerosis is associated with long continued essential hypertension and by some is thought to be a result of hypertension. Hypertension and cardiac hypertrophy are the chief clinical features. Albuminuria may be present in small quantities but never in such amounts as found in lipoid nephrosis and in glomerular nephritis. A few red blood cells, pus cells, and casts are present in the urine. The specific gravity of the urine is lower than normal. Edema, when it occurs, is the result of heart failure and is not an edema of the renal type. Occasionally nitrogen retention develops but this is rare except in the final stages. Uremia causes death in about 10 per cent of cases. Genuine uremia rarely occurs, although the convulsive form frequently does.

Finally, glomerular nephritis may be

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TABLE 1

THE SYNDROMES OF BRIGHT'S DISEASE

			URINARY						Hyper-tension	Edema	N.P.N. Reten-tion	Uremia
			Al-bumin	Oli-guria	R.B.C.	W.B.C.	Sp. Gr.	Casts				
Nephrosis	Lipoid		++++	+	0	+	Normal	0	0	++++	0	0
	Simple fatty		+	0	0	0	Normal	+	0	0	0	0
	Chemical ($HGCL_2$)		+++	+++	+++	+++	Normal	+++	+	+	+++	Genuine
	Amyloid		+++	0	0	++	Low	+	0	++	0	0
Glomerulo nephritis	Acute		+++	++	+++	+++	High	+++	++	++	+++	Convulsive or genuine
	CHRONIC	diffuse	+++	++	++	++	Low	+++	++	++++	++	Genuine or Convulsive
		focal	++	0	+++	++	Normal	0	0	0	0	0
Renal Arteriosclerosis (essential hypertension)	Benign		0	0	+	+	Low	+	++++	0	0	Convulsive
	Malignant		++++	+++	++	++	Low	++	++++	cardiac form	+++	Geniune

looked upon as the only true inflammatory kidney lesion among those classed as Bright's disease. The insidious onset of glomerular nephritis in many cases makes the diagnosis difficult. No doubt many cases of nephritis are unrecognized in their earlier phases. It is usually accepted that chronic glomerular nephritis develops from the acute form. When the streptococcal toxins overwhelm the kidneys and bring about acute renal insufficiency, the diagnosis is obvious. However, all cases do not develop in this manner. Many cases are produced by a less intense action of the toxic material which leads to a more gradual destruction of glomeruli, and renal failure occurs only after the disease has persisted for years. In glomerular nephritis, whether of the acute or of the chronic diffuse type, there is albumin in the urine with red blood cells, pus cells, and casts. Hypertension, edema, nitrogen retention, and uremia occur during certain stages of the disease. There are cases of chronic diffuse glomerular nephritis that closely simulate lipoid nephrosis. Such cases have advanced lipoid degeneration of the tubular ephithelium. The changes in the glomeruli are mild and the arterioles are normal. The terms applied to this disorder are chronic glomerular nephritis with lipoid degeneration, or chronic nephritis with lipoid nephrosis. These cases are occasionally diagnosed lipoid nephrosis only to be classed later with typical chronic glomerular nephritis. Such are cases of glomerular nephritis from the beginning, but some of the syndromes necessary for identification have been lacking. Moderate cardiac hypertrophy is usually present and at times death may follow myocardial insufficiency. Usually, however, the course of chronic nephritis is a long one ending fatally in genuine uremia.

THE SYNDROMES

Albuminuria is the sovereign sign of Bright's disease. The term albuminuria is used to indicate the presence of any protein in the urine, not only albumin, but globulin and other proteins as well. Albuminuria as a rule is produced by congestion or inflammatory changes in the kidney. So-called

benign or orthostatic albuminuria may exist, but many cases diagnosed as benign albuminuria turn out later to be nephritis. Glomerular nephritis may occasionally assume the features of orthostatic albuminuria. Large quantities of albumin, measuring from five to twenty-five grams daily, are found in the urine of patients with either lipoid nephrosis or glomerular nephritis, while in renal arteriosclerosis the amount ranges from one to four grams daily or it may be entirely absent. In order to explain the genesis of albuminuria there has been recourse to many theories. An altered condition of the capillary basement membrane and of the endothelial cells of the capillaries of the glomeruli is the most common explanation. According to this theory, plasma albumin leaks through the glomeruli into the urine. Corresponding with the massive albuminuria of lipoid nephrosis and of some cases of glomerular nephritis, there is a reduction of the plasma protein. In these diseases the plasma albumin is reduced more than the globulin and a tendency for edema formation develops.

Among the numerous elements in the sediment of the urine, the most important are casts, red blood cells, pus cells, and doubly refracting lipoids. Hyaline casts are of small significance and may occur in normal individuals. Such casts form the ground substance for the formation of other types of casts. When pus cells, red cells, or degenerated epithelial cells become attached to the hyaline matrix, a pus cell cast, a red blood cell cast, and a granular cast are formed respectively. Granular casts are most significant because they indicate that the kidney cells themselves are breaking down. In glomerular nephritis casts of all varieties are present as well as red blood cells and pus cells. Red cells are characteristically absent in lipoid nephrosis and casts are few in number. A predominance of pus cells with few red cells and comparatively few casts points to a pyelitis or pyelonephritis. If fever is present the diagnosis of a purulent disease of the kidney is clinched, for there is no fever with uncomplicated nephritis.

Hematuria occurs with acute or chronic glomerular nephritis and occasionally with the "malignant" stage of renal sclerosis; it never is present with nephrosis. Doubly refracting lipoids are seen only with the polarizing microscope. Their appearance indicates that degenerative changes are going on in the kidney and that there is a tendency toward edema formation. Their exact significance has not been determined.

One of the earliest signs of functional breakdown of the kidney is the failure to concentrate urine. This is indicated by a fall in the specific gravity of the urine. A normal specific gravity is found in acute nephritis and in congestive heart failure. A low and fixed specific gravity is suggestive of a chronic renal lesion such as chronic glomerular nephritis or a renal arteriosclerosis. When the signs and symptoms of nephritis appear suddenly and the specific gravity of the urine is low and fixed, the diagnosis is probably not acute nephritis, but a chronic one with an acute exacerbation. The quantity of urine excreted in a day is important, because the excretion of nitrogen and other products of metabolism depends upon the output of urine. When the power of concentration of the kidney falls, the kidney compensates for a while by passing an abundance of urine of low specific gravity. Later on, this polyuric mechanism fails and renal insufficiency dominates the clinical picture.

HYPERTENSION

Clinical usage has established the division of hypertension of Bright's disease into two main classes, the primary or essential, and the secondary hypertension. Many are of the belief that such division is too artificial and maintain that all hypertension of Bright's disease is of the same nature, that is, all due to extra renal factors. Notwithstanding the arguments to the contrary, a type of hypertension is recognized which occurs in patients many years before the kidney is damaged. This is known as primary or essential hypertension. The cause of it is unknown. It runs a variable course and may continue for years without any associated symptoms. Again, it may progress rapidly,

leading to death within a period of a few years. For convenience, primary hypertension has been separated into two groups, the "benign", and "malignant". Patients with few symptoms, a slowly progressing course, cardiac hypertrophy, and a simple arteriosclerosis are classed as benign. The malignant form has the following features: (a) persistent excessive hypertension; (b) violent headaches; (c) rapid progressively downward course; (d) sudden loss of weight and strength; (e) typical retinal changes; (f) a course resistant to treatment; and, (g) a termination with functional breakdown of some essential organ, usually the kidney or the heart. Such division into "benign" and "malignant" is useful provided it is recognized that:

1. The benign form may end fatally;
2. The benign may become malignant;
3. There may be transitional forms;
4. There may be degrees of intensity within the malignant group; and,
5. Finally, the benign and malignant differ from one another only in degree and not in nature.

In a recent study of primary hypertension, I found that only 10 percent of 375 patients dying with hypertension had renal failure; 50 percent died of heart failure; 13 percent of apoplexy; 14 percent of infections; and 12 percent of miscellaneous diseases. In 80 percent of patients with primary hypertension there is cardiac hypertrophy.

To turn now to the kidney itself, a shrunken kidney, known as the primary contracted kidney, is found in primary hypertension. Renal function is usually well preserved until heart failure, apoplexy, or some other complication causes death. The variety of symptoms associated with the hypertension is dependent, not on the height of the blood pressure, but upon the changes in arteries and arterioles of the body. Ophthalmoscopy has established the relationship between various stages of hypertension and the changes in the arterioles of the retina. Vascular changes in the retina are one of the best indicators of the degree of arterial changes throughout the body. In cases of early essential hypertension retinal examination reveals no abnormalties. In cases of longer duration, evidences of arteriosclerosis are usually present. Narrowing of the arterioles with increase of the light-reflex of the arteries, tortuosity of the arteries, and arterio-venous compression are the usual features. Occasionally there are small hemorrhages along the course of some vessels and at times white patches are seen produced by an old healed hemorrhagic area. The disks are clear and edema of the retina is mild. By observing these eye changes from time to time, the rate of progress of arteriosclerosis may be determined. Lesions of the fundi are always found in the "malignant" form and are characterized by papilledema, hyperemia of the disks, and constriction of the arterioles leading to the appearance of thin white lines buried in the retinal edema. Hemorrhages along the course of the arteries are frequently found. White patches, or so-called cotton wool patches, are seen to merge with the generalized edema of the retina. Changes in the eyegrounds are said to be mirrors of the changes occurring in the kidney.

Secondary hypertension may be produced by acute or chronic glomerular nephritis. It is seldom as high as that of the primary form. Hypertension may not occur in acute or chronic nephritis. It may be present for a short time, and then disappear, either to return later or never to return at all. When hypertension is found in acute nephritis, it may be used as a prognostic guide; a drop in blood pressure means a favorable outcome, while a persistent elevation, or a further rise in blood pressure, usually means the case has gone into the subacute or chronic stage and the outlook is poor. In acute nephritis it occasionally happens that the hypertension becomes severe. Consequently, this strain, added to a heart already damaged by the streptococcal toxins which produce the acute nephritis, is enough to bring about acute heart failure. During the chronic stages, hypertension may be absent during the entire course; again, it may be high for a time and normal later on. A falling blood pressure in nephritis, in the absence of heart failure, is a sign that the case

is going into a stage of remission and that the renal lesion is healing.

NITROGEN RETENTION

Nitrogen retention is present when the non-protein nitrogen of the blood is 70 mg. percent or above. The normal non-protein nitrogen is 25 to 45 mgs. percent. Other conditions than nephritis—such as, infections, pneumonia, empyema, and peritonitis—may cause elevation of the blood nitrogen. The increase of nitrogen metabolism causes the elevated blood nitrogen in such cases although the renal function may be normal. Heart failure, too, may be an important factor in causing a retention of blood nitrogen, especially if a shrunken kidney is already present. Nitrogen excretion is dependent to a large extent upon the ability of the kidney to excrete water and upon the condition of the capillaries of the glomeruli. A fall in urinary output may be produced by numerous factors, such as, heart failure, dehydration, vomiting, diarrhea, urinary obstruction, and edema. Chronic glomerular nephritis and renal arteriosclerosis render the glomeruli impermeable for urea. Following a profound oliguria or anuria in acute phases of nephritis, nitrogen retention develops rapidly. In such cases the suspension of urinary excretion of urine is responsible for the rapid rise in blood nitrogen. A more gradual retention occurs in chronic forms of Bright's disease. Here there is a polyuria representing nature's attempt to compensate for a kidney that is unable to concentrate urine. The specific gravity of the urine is low and fixed; the blood non-protein nitrogen rises slowly. Finally, the glomeruli become less and less responsive to the stimulation of the head of urea in the blood until excretion falls to a low level. Concomitant with this, the polyuria gives way to oliguria, and a severe nitrogen retention with genuine uremia results. The syndrome of nitrogen retention is transient and frequent blood analyses must be done in order to evaluate its significance. For the purpose of prognosis, after renal failure has commenced, this syndrome is of value. A non-protein nitrogen that is elevated and continues to rise from week to week indicates a rapidly failing kidney. If the non-protein nitrogen is high and begins to decrease gradually, the renal failure is only temporary and the patient's outlook is good. The single or occasional determination of blood nitrogen is of little value either for diagnosis or prognosis. It may be distinctly misleading. Repeated blood examinations, which show if there is a tendency toward retention, are helpful. Nitrogen retention, found occasionally in renal arteriosclerosis, never occurs in lipoid nephrosis, and always in some stage of diffuse glomerular nephritis. Nitrogen retention itself does not seem to cause symptoms. It is an index of the degree of renal insufficiency. When the retention becomes severe, there are unknown substances retained with it which appear to produce genuine uremia.

EDEMA

Edema is a syndrome that has been associated with kidney disease for centuries. Although many theories have been advanced to explain edema, the exact mechanism is unknown. Much has been accomplished within recent years, however, which helps explain some aspects of the problem. For clinical purposes, three forms of edema are recognized in Bright's disease: nephritic, nephrotic, and cardiac edema. Nephritic edema exists in its characteristic form in acute glomerular nephritis. The edema may be the first noticeable feature. The blood proteins are normal in amount and the edema is unrelated to the quantity of albumin in the urine. Probably the same streptococcal toxins that produce nephritis are also responsible for an injury of the endothelial cells of the capillaries of the body. Consequently, fluid passes through the injured capillary wall and accumulates in the intercellular spaces. Such edema fluid differs from that encountered in chronic forms of nephritis and nephrosis in that its protein content is higher. The cause of nephrotic edema is not definitely known. It occurs in lipoid nephrosis and in chronic glomerular nephritis with secondary lipoid degeneration of the tubules. That it is unrelated to kidney in-

sufficiency has been proved conclusively. A close relationship has been established between this edema and a reduction in the proteins of the blood. When the total plasma protein, which normally is about 7 grams percent, is reduced below 5 grams percent, edema is either present or there is a strong tendency for edema formation. Normally, blood proteins consist chiefly of albumin, four percent, and globulin, three percent. Reduction of the plasma protein develops usually at the expense of the albumin fraction. Globulin may even increase in amount to compensate for the fall in albumin. This is known as inversion of the albumin globulin ratio. When the plasma albumin, normally averaging 4 percent, falls to 2 percent, or thereabouts, either edema develops or a tendency to edema formation exists. Such effect of plasma protein deficit is explained by the fact that there is a reduced osmotic attraction of proteins for water and, therefore, water is permitted to pass from the capillaries to the tissue spaces. Albumin exerts four times as much osmotic pressure per gram as globulin; consequently, albumin deficit in the plasma has the greater effect on the water exchange in the tissues.

It has been shown frequently that an exact correlation does not exist between plasma albumin deficit and edema. Other factors, especially salt and water, influence the edema-producing effect of plasma albumin deficit. A patient may have a plasma albumin reduced to the critical level of 1.8 gram percent and yet edema may be absent; but if salt and water are given to such a patient, edema develops. Again the plasma albumin may be well above level of 2.0 grams percent and edema may be formed; withdrawal of salt and water from the diet will remove the edema, yet the plasma albumin remains at the same level. Edema may be well developed when the plasma albumin is 2.4 percent. Withdrawal of salt and reduction in water consumption will cause edema to disappear and the plasma albumin may remain at the same level. There are other modifying agents which alter the hydropigenous effect of plasma albumin deficit on edema, but the main point clinically is to recognize that edema formation is not dependent solely on changes in plasma protein content. Heavy albuminuria is the most common cause of plasma albumin deficit. In Bright's disease, however, there may be nutritional and other disturbances which interfere with normal regeneration of albumin in the blood. Excessive albuminuria corresponds to profound fall in plasma albumin. Lipoid nephrosis and glomerular nephritis are accompanied by such grave alterations in quantities of protein in the blood and urine. In these cases edema is of the nephrotic type. Renal arteriosclerosis is accompanied by a small amount of albumin in the urine and by a normal plasma protein. Edema, when it is present in the arteriosclerotic type, is of the cardiac variety. It commences in the legs; it disappears on rest; in the morning it is gone and it returns toward evening; there is no relation to the quantity of albumin in the urine; diuretics and cardiac tonics influence its course; finally, there are other evidences of heart disturbances associated with it.

Hypercholesterolemia with lipoid deposits in the epithelial cells of the tubules is a constant accompaniment of lipoid nephrosis and chronic glomerular nephritis with edema. It is related in some way to albuminuria; but the true significance of changes in cholesterol metabolism is unknown.

Experiments show that the nephrotic form of edema may be produced in animals by a process of gradual reduction of blood proteins by plasmapheresis. Such edema may be controlled by increasing the plasma proteins. In clinical work also it has been shown repeatedly that if the plasma proteins are increased by feeding large amounts of protein in the diet, edema may be reduced.

UREMIA

Uremia embraces numerous clinical symptoms. Almost any symptom during the closing days of a nephritic is called uremic. There are two forms of uremia, the convulsive, and the genuine. The convulsive, or so-called false uremia, may develop in an acute or chronic nephritis. This type is unrelated to retention of nitrogen and to renal

insufficiency, but it is always associated with hypertension and frequently with edema leading to ischemia of the brain. It resembles an epileptic convulsion. Headache and visual disturbances constitute early signs of this form of uremia. The inevitable hypertension rises rapidly before the attack. It appears that the hypertension is a causative factor in this form of uremia. Following the convulsion, which lasts for fifteen minutes or more, the patient is stuporous and may remain in a comatose state for hours. Cardiac or respiratory failure may ensue, and death may occur unless stimulants are administered. As a rule patients with convulsive uremia recover.

In sharp contrast to convulsive uremia, there is true or genuine uremia which is caused by renal failure. Prostatic obstructions, polycystic kidneys, renal tuberculosis, as well as chronic nephritis, cause genuine uremia; in fact, any condition which abolishes urinary excretion produces genuine uremia. This form of uremia always terminates fatally. Some observers reserve the term uremia for this condition alone; they believe the so-called convulsive uremia should not be considered uremia at all. Genuine uremia may be analyzed clinically by arranging symptoms according to systems in the body. (a) Cerebral symptoms. There is stupor, or delirium, or euphoria preceding coma. Convulsions are rare and when they are present there is a combination of genuine and convulsive uremia. Generalized twitching may precede the onset of a convulsion. Headache and blindness may be early symptoms. (b) Cardiorespiratory symptoms. Cheyne-Stokes' breathing is the rule. The blood pressure is commonly normal. Tachycardia, feeble pulse, and circulatory failure are generally present, and a uremic pericarditis may develop. Frequently, there is capillary bronchitis with pulmonary edema. (c) Gastrointestinal symptoms. The breath is foul and uremic. There is a brownish dry tongue and the mucous membranes of the mouth and throat are reddened and dry and covered with patches of dried muco-purulent material. A parotitis may develop as a consequence of the foul mouth. Vomiting is always present. There may be a hemorrhagic vomitus due to a hemorrhagic gastritis. A hemorrhagic diarrhea due to a hemorrhagic colitis is common. Over the entire body the skin may have petechial hemorrhages. A stiff neck, simulating meningitis, may occur and the spinal fluid may be milky. When genuine uremia sets in the treatment consists of rendering the patient as comfortable as possible, for death is inevitable. Forcing of fluids, in conjunction with repeated hot wet packs, serves to ward off uremia by stimulating the output of urine. If the output of urine is kept up, then the excretion of the elements which cause uremia is assured.

PROGNOSIS

Renal functional tests show the degree of reduction of the reserve power of the kidneys, but do not show the rate of progress of the renal injury. It is an important problem to determine, if possible, before the onset of failure, whether the pathological lesion is advancing slowly or rapidly, or if it is in an inactive state. Such information is useful in cases of glomerular nephritis and in toxemia of pregnancy before the onset of renal insufficiency. The course of glomerular nephritis frequently extends over a space of many years. There are periods of quiescence punctuated by attacks of active progression of the nephritic lesion. The symptoms of an acute attack of glomerular nephritis may disappear and it may seem that the lesion has healed completely, but ten or fifteen years later the disease returns in its chronic form with all the signs of renal failure and ends in uremia. It must not be concluded from this that all cases of nephritis run such a course. The lesion of glomerular nephritis may heal completely even following severe attacks of acute glomerulitis. To determine whether the pathological lesion is progressing or subsiding is difficult and at times impossible; however, experience shows us that there are several clinical methods worthy of trial in approximating this information. These measures will be considered seriatim:

1. In glomerular nephritis an elevated blood pressure, that remains high or tends to rise, indicates active glomerular damage. If the blood pressure falls, the lesion is usually subsiding.
2. A heavy albuminuria (10–25 gm. a day) points to glomerular activity, while a decrease in the daily output of albumin (2–4 gm. a day) means that healing has commenced.
3. Numerous red cells, pus cells, and granular casts in the urine signify progressive kidney damage. A decline in the number of those elements in the urine indicates healing.
4. Anemia (below 3,500,000) implies a progressive kidney breakdown; a rising red blood cell count bespeaks for a remission.
5. Hypoproteinemia (total plasma protein below 5 gm. percent) is associated with a progressive renal lesion, while a normal blood protein indicates a quiet or healing lesion.
6. A rapid blood sedimentation rate suggests that destruction of the kidney is taking place, while a normal rate or a declining rate means a remission of the active process. This test is valuable in deciding whether or not necrotic lesions have occurred in "malignant" essential hypertension.
7. Finally, a neuroretinitis frequently foretells the severity of the vascular damage throughout the body and especially predicts the breakdown of the kidney structure. Each procedure, analyzed separately, may give little or no information of value, but taken collectively they are of great practical value in prognosis.

REMARKS ON CERTAIN PHASES OF TREATMENT

Although the limited scope of this paper obviates a detailed analysis of therapeutic measures in nephritis, some features will be briefly discussed.

Opinions vary concerning the management of acute nephritis with renal failure. Some authorities advocate limitation of fluids during the acute phase, and others advise giving fluids. After using both methods in many cases, it is concluded here that the administration of fluids gives the best results in quantities varying from 2,000 to 3,000 c.c. daily. Fruit juices and water given by mouth, glucose solution (500 c.c of 10 percent solution) by vein, or water administered by rectum accomplished satisfactory results. To promote diuresis is the main object of treatment. Objections have been made to the use of large quantities of fluids on the ground that it favors the formation of edema and especially edema of the brain. Anuria, if unchecked, leads to an early uremia and it involves more danger to the patient than edema. Hot wet packs, applied twice or three times a day, in conjunction with adequate fluid consumption, frequently bring relief. Packs do not benefit the patient by extracting fluid or poisonous substances through the skin but they aid in promoting diuresis. When convulsions threaten, a spinal tap should be done at once, and repeated two or three times a day if there is increase of pressure of the spinal fluid. As much fluid as possible should be removed with each tapping. In addition, 20 c.c. of 10 percent magnesium sulphate may be given intravenously several times in 24 hours, if needed, to control convulsions. Diuretic drugs are disappointing and may do more harm than good by irritating a kidney already irritable. If other methods fail to produce diuresis, and anuria or severe oliguria persist for 72 hours, then a decapsulation of the kidney is indicated. Striking results have been seen following unilateral decapsulation in some acute cases. Like many therapeutic measures, this operation has gone through the several stages of development. First was the stage of enthusiasm when all sorts of kidneys were operated upon with a high percentage of failures; secondly, came the period of almost universal condemnation; and now, finally the stage of careful selection of cases for decapsulation with a large number of favorable results. It should not be done in chronic nephritis. If the operation is delayed until coma sets in,

the operation fails to do good. In acute nephritis, when the blood pressure is elevated, blood transfusions do more harm than good.

Diet is of little consideration in the acute phase but is of considerable importance in the chronic. It has been the habit to restrict protein in the diets of chronic nephritis to a very low limit. While this may be permissible in acute nephritis, it is harmful in the chronic form. Such protein limitation leads to a hypoproteinemia with a subsequent edema formation. Furthermore, it depletes the body of strength and promotes anemia. A diet containing 50 to 60 gm. of protein daily is one which does not injure the kidney in any way and has a beneficial action. Sodium chloride should be limited to from 2 to 5 gm. daily, and especially so if a tendency towards edema formation is present. Fluids may be restricted to 1,500 c.c. daily in cases where edema is present, providing no renal failure threatens. Diuretics are of small value in treating the edema of chronic nephritis, and they are contraindicated in active glomerular nephritis. But when edema is the outcome of cardiac insufficiency, diuretics are required. Novasurol or salyrgan should be given intravenously every second day in conjunction with 50 grains of ammonium nitrate three times a day. Albuminuria, due to renal congestion, is no contraindication for the use of mercurials. If the edema of chronic nephritis becomes troublesome and the plasma albumin is low, a high protein diet is indicated. Repeated small transfusions of blood help to raise the blood protein. Hypertension, associated with nephritis, requires vigorous treatment when acute heart failure endangers the patient's life. Aside from dietary methods, certain drugs are often beneficial. Ten grains of theobromine with 1½ grains of luminal three times a day are frequently required. One-fourth of a grain of morphine sulphate repeated often enough to bring relief is the sovereign drug in such cases. Venesection in some cases may relieve the heart. Physical as well as psychical rest is of greatest importance. Genuine uremia is resistant to treatment. The main object of treatment is to combat acidosis and promote elimination. Alkalies and alkaline fluids help combat acidosis. Mild catharsis, in conjunction with hot packs and a high fluid intake, aids excretion of toxic substances from the body.

The dyspnoea and pulmonary edema of uremia are treated by means of digitalis and caffeine sodium-benzoate. When coma seems imminent, 50 c.c. of 50 percent glucose solution, or 20 c.c. of 50 percent sodium chloride solution, should be given intravenously. If twitching or convulsions occur, spinal fluid should be drained off and magnesium sulphate given intravenously as in acute nephritis. During and following a convulsion, respiration may become shallow, and death may occur unless respiratory stimulation is resorted to. Carbogen (O_2 95 percent with CO_2 5 percent) or oxygen are used with great benefit at this stage as well as are injections of caffeine sodium-benzoate in five grain doses.

No doubt many readers will have cause, supported by their own experience, to disagree with some of the statements made here. It would require a monograph to give an adequate discussion of the opinions and theories of other writers on these problems; therefore I have merely cited my own conclusions arrived at from a study of over one thousand patients with Bright's disease.

FOOD POISONING DUE TO STAPHYLOCOCCI

Ralph McBurney, University, Ala. (Journal A. M. A., June 24, 1933), reports the seventh outbreak of food poisoning due to a golden yellow staphylococcus. Of the seven outbreaks, two were traced to milk, two to cake, one to cheese, one to chicken gravy, and one to chocolate eclairs. All such outbreaks reported have occurred in the United States or its possessions. The history, short period of onset and acute symptoms studied in cases and human volunteers should clearly point to the etiologic factor involved in future outbreaks. It is probable that a large number of outbreaks of food poisoning in this country and elsewhere, in which the etiologic factor has not been determined, have been due to organisms of the staphylococcus group. The source of contamination of food with these organisms has not yet been definitely ascertained. Pointing, however, to man himself, it appears that pastries, custard fillers, and the like, should be well protected against possible contamination in preparation and storage and that cheap cotton, paper or cellophane mittens might be used in bakeries in the handling of the finished products. Custard fillers should be refrigerated immediately following preparation until ready for use. After baking, cakes and pastries should be covered or placed in especially constructed cases and not left about in the open or on tables where they may be exposed to contamination from the coughing and sneezing of baker personnel. These precautions could well apply to the storage and handling following delivery, especially in institutions in which large kitchen forces are employed.

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OFFICIAL PUBLICATION OF THE STATE MEDICAL SOCIETY OF WISCONSIN

EDITORIALS

AMERICAN MEDICAL ASSOCIATION

535 North Dearborn St.

Chicago, June 21, 1933.

Olin West, M. D.,
Secretary and General Manager.

Mr. J. G. Crownhart,
Secretary, State Medical Society
of Wisconsin,
Madison, Wis.

Dear Mr. Crownhart:

In behalf of the officers and members of the American Medical Association I am writing to convey, through you, to the officers of the State Medical Society of Wisconsin a message of very genuine appreciation of the delightful hospitality that was extended to all of those who attended our Milwaukee session and of the sincerest gratitude for the splendid arrangements that were made and that helped so much in making the session a remarkable success.

Very sincerely yours,

OLIN WEST.

THE MILWAUKEE SESSION

NEARLY twelve hundred physician members of our State Society were in attendance at the recent Milwaukee session of the American Medical Association. While all were hosts to this meeting in the broad sense, all appreciate that it was the efforts of the members and officers in Milwaukee County that made possible the splendid record of a wonderful scientific meeting and a cordial hospitality that was established in the name of Wisconsin.

To the membership of Milwaukee, its Auxiliary, and its officers, the members in the State at large make grateful acknowledgment of hard work well done. It was a wonderful meeting and will live always in the minds of the Wisconsin membership.

THE TREATMENT OF CIRCULATORY FAILURE

IN a recent editorial reasons were given to prove that the general use of digitalis in so-called heart failure in infections and infectious diseases can not be rational or in line with modern physiological thought.

Then, you will say, if you take digitalis from us what must we do when we need to stimulate the circulation? One can not enter into the whole argument of circulatory failure here, suffice it to say that there is ample evidence to prove that when the circulation fails the following conditions exist in the body: (1) Low blood volume and insufficient venous return flow, (2) Hemoconcentration, (3) Decreased blood chlorides, and, (4) Low venous pressure. The heart will continue to beat if it is provided with suffi-

cient blood to assure adequate diastolic stretching of the ventricles, and sufficient oxygen, insulin and glucose for its nutrition. The treatment is then to restore, if possible, to normal the changed conditions noted above. Naturally here are violent, overwhelming infections against which no treatment is successful or even temporarily helpful. Unfortunately we have no drug which will surely increase the circulating blood volume. It is said that strychnine in adequate doses will do it, but the evidence is still not conclusive. However, I have used the drug in such cases for many years in doses of gr. 1/20 to gr. 1/10 hypo every one to three hours. Caffein sodiobenzoate or camphor may be given, the latter is evanescent in its action. The preparation known as Cardiozal (Metrozal) is a camphor derivative and is recommended in these cases. Adrenaline, ephedrine and pituitrin (pitressin) are substances which act on the peripheral circulation and in sudden collapse adrenaline or pitressin should be used. Ephedrine may be given by mouth but in my hands it has not shown any appreciable action. The most logical method of increasing blood volume is to administer fluids intravenously. Normal saline and glucose, whole or citrated blood, or 6% acacia solution may be used. The last is now available in ampoules which is easily diluted with distilled water to make the required solution. One important point to bear in mind is that saline and glucose do not remain long in the circulation but tend to be lost into the tissues so that the increase in blood volume is temporary. In using blood one introduces substances which tend to keep fluid in the blood vessels due to the content of proteins, (albuminous and globulus). For this purpose citrated blood is just as useful as whole blood, in fact it is better as it can be given very slowly. This is advantageous. Acacia solution acts something like blood; it tends to remain longer in the circulation. One does not give blood primarily to introduce any antibodies against infection but to increase blood volume, combat anemia, and increase the chloride content of the patient's blood. Practically one should give 2–3 liters of saline and glucose (5–10% of latter) daily, 500 c.c of blood or acacia solution every second or third day. If pneumonia is the disease one is treating, the patient should be put in an oxygen tent with a 40–50% oxygen at the first sign of anoxemia and kept there continuously.

Ill people have recovered under all sorts of treatment, some quite bizarre, so it is difficult to prove at the bedside that one treatment is better than another. Many doctors, long in practice, are sure that certain kinds of drugs have cured their patients. We must bear in mind that the body fights disease and tends to recover as its normal reaction. Our part should be to assist nature in every rational way towards recovery. The fact that many patients have recovered following the use of various supposedly stimulating drugs proves only that marvelous recuperative powers lie within the human body. Treatment such as is recommended based on physiological principles will not cure every ill person, but it should here and there help an ill patient to recover who otherwise would succumb. L. M. W.

AS OTHERS SEE US

FIGHTING CANCER

All Wisconsin physicians will be required to report to the state board of health all cases of cancer, carcinoma, sarcoma and tumorous growths that come to their attention as part of the state's effort in co-operation with other states to fight cancer.

Through the compilation of these reports, which will be confidential and open only to scientists or qualified societies working for the extermination of cancer, it is believed that a vast amount of material will be gathered to provide a definite comparative basis that will enhance the knowledge and thereby speed the ability of scientists to find both a cause and cure for cancer.

Whatever any state can do in furthering the battle against cancer is a work in behalf of its own citizens and all humanity.

Editorial, *Fond du Lac Commonwealth Reporter*, May 10, 1933.

STANLEY J. SEEGER, M. D.

President, State Medical Society of Wisconsin, 1934

Dr. Stanley J. Seeger of Milwaukee was born in 1889 at Manitowoc, Wisconsin. He attended the public schools of Manitowoc and Kewaunee, and received his degree of M. D. at Northwestern University in 1911. For two years he served as intern at Michael Reese Hospital in Chicago and was then associated for two additional years with Dr. J. G. Cross of Minneapolis in the practice of internal medicine.

From 1915 to 1917 Dr. Seeger served as surgical assistant at the Mayo Clinic, moving to Milwaukee in the latter part of 1917 where for five years he was associated with the firm of Sifton and Evans. During the War he served as 1st Lieutenant at Fort Ogelthorpe, Georgia, and subsequently at Camp Custer with the 254th Ambulance Company of the 14th Division, and later at the General Hospital No. 26 in Detroit, Michigan.

Dr. Seeger is presently Chief of Staff of Columbia Hospital; head of the Surgical Department of the Milwaukee Children's Hospital, and attending surgeon at the Milwaukee Hospital and Milwaukee County Hospital. He is Past President of the Medical Society of Milwaukee County, a member of the Milwaukee Academy of Medicine and a Fellow of the American College of Surgeons.

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SOCIETY PROCEEDINGS

BARRON-WASHBURN-SAWYER-BURNETT

Members of this Society met at the Land O'Lakes hotel at Rice Lake on June first. The following papers were given:

"Resection of the Prostate" by Dr. W. G. Sexton of Marshfield.

"Some Aspects of Purpura Hemorrhagica" by Dr. Karl Doege of Marshfield.

"Cancer of the Cervix" by Dr. Paul Doege, Marshfield.

FOND DU LAC

Upwards of thirty physicians attended the meeting of the Fond du Lac County Medical Society held at Sunnyview Sanatorium at Oshkosh, May 31st.

Dr. E. B. Pfefferkorn, Oshkosh, presided as master of ceremonies. Brief talks were given by Drs. G. B. McKnight of Fond du Lac and J. W. Lockhart of Oshkosh. The principal speaker of the evening was Dr. Forrester Raine of Milwaukee whose subject was "Surgery in Tuberculosis." His lecture was illustrated with slides and x-ray photographs.

JEFFERSON

A meeting of the Jefferson County Medical Society was held on June 8th at the Cottage Hotel, Lake Mills, Wis. Following the dinner at six-thirty, Dr. C. C. Schneider of Milwaukee spoke on "Modern Management of Fractures" with x-ray demonstration by Dr. A. M. Dorr of Milwaukee.

LA CROSSE

Dr. G. E. Hudson, assistant professor of gynecology at the University of Minnesota, was the guest speaker of the evening before a meeting of the La Crosse County Medical Society held at the Stoddard Hotel on May 16th.

MILWAUKEE

In the evening of June 9th, at 8:00 P. M., The American Therapeutic Society, which held its thirty-fourth annual meeting in Milwaukee on June 9th and 10th, held a joint meeting with The Milwaukee Academy of Medicine and The Medical Society of Milwaukee County, with Drs. D. E. W. Wendstrand and James C. Sargent, Presidents respectively, presiding.

At this meeting the following scientific papers were presented:

"Treatment of Granulopenic Syndrome", F. D. Madison, M. D., Milwaukee.

"Insulin as an Aid in Withdrawing Morphine", Merle Q. Howard, M. D., Wauwatosa.

"Newer Ovarian Preparations and Low Dosage Irradiation in the Treatment of Functional Menstrual Disturbances in Young Women", Della G. Drips, M. D., Rochester, Minnesota.

"Effects of Pancreatic Tissue Extract on Muscle Pains of Ischemic Origin", Nelson W. Barker, M. D., Rochester, Minnesota.

MONROE

A meeting of the Monroe County Medical Society was held at the Hotel Sidney, Sparta, Wisconsin, following a tri-county meeting. The members of the three counties of Juneau, Vernon and Monroe had met to form a tri-county society which was done.

President, Dr. A. E. Winter, presided.

A nominating committee was appointed by the President, as follows:

Dr. C. S. Phalen, Sparta; Dr. J. S. Allen, Norwalk, and Dr. A. R. Bell, Tomah.

The Committee reported as follows:

Nominee for President, Dr. G. C. Devine, Ontario; nominee for Vice-President, Dr. J. M. Scantleton, Sparta; nominee for Sec'y-Treas., Dr. H. H. Williams, Sparta.

The report was adopted and the secretary was instructed to cast the unanimous ballot for the officers nominated.

Four new applications for membership were taken in: Dr. R. O. Bassuener, Warrens; Dr. D. C. Beebe, Sparta; Dr. Harry Vander Kamp, Tomah; and Dr. C. F. Foley, Wilton. The Board of Censors recommended that all be accepted into membership upon payment of dues. The members voted favorably upon the names.

Dr. G. C. Devine was elected censor for three years to succeed himself. Delegate to the State Society, Dr. A. R. Bell, Tomah. Alternate delegate to the State Society, Dr. G. C. Devine, Ontario. H.H.W.

ONEIDA-VILAS

A meeting of the Oneida-Vilas County Medical Society was held in St. Mary's Hospital, Rhinelander, at 5:00 p. m. June 1, 1933, with the largest attendance in the history of the society, all but three members being present. The meeting was followed by a dinner given by the Sisters of St. Mary's Hospital in the open pavilion adjoining the hospital on the bank of the Pelican River.

The program began with a paper by Dr. R. A. A. Oldfield, Eagle River, on "Dupuytren's Contraction," and a case report with specimens was presented by Dr. W. S. Bump.

The following officers were elected for the coming year: President, Dr. R. A. A. Oldfield, Eagle River; Vice-President, Dr. T. G. Torpy, Minocqua; Secretary-Treasurer, Dr. I. E. Schiek, Rhinelander. I.E.S.

OUTAGAMIE

The last spring meeting of the Outagamie County Medical Society was held on June first at the Hotel Northern. Dinner was served at six-thirty P. M.

Dr. E. F. Mielke of Appleton gave a very excellent discussion, illustrated with lantern slides, on the subject of "Silicosis." Mr. B. E. Kuechle of the Employers Mutual Liability Insurance Company of Wausau followed this with a very able discussion of the subject from the medico-legal side of the question. Dr. C. D. Boyd of Kaukauna then followed with discussion of the two papers. The meeting was very well attended and well received.

R. V. L.

POLK

The Polk County Medical Society held its regular monthly meeting in May at Frederic at which meeting the directors of the Polk County Association of Commerce were guests of honor.

The health program of the Polk County Medical Society was discussed at this meeting.

RACINE

The regular meeting of the Racine County Medical Society was held on May 18, at 8:15 P. M.

An address on "Pre- and Post-Operative Preparation and Care" was given by Dr. Morris L. Parker, Chicago, Illinois.

Dr. George H. Ewell, Madison, addressed the group on "The Diagnosis and Treatment of the Rectum and Anus." This address was illustrated with lantern slides.

Luncheon was served following the meeting. S.J.

SHEBOYGAN

A meeting of the Sheboygan County Medical Society was held in the lecture room of St. Nicholas Hospital, Sheboygan, on Thursday evening, May 25th, at eight o'clock.

The following program was presented:

"Modern Fracture Management" by Dr. C. C. Schneider of Milwaukee, with x-ray demonstrations by Dr. A. M. Dorr of Milwaukee.

WINNEBAGO

"Some Advances in the Treatment of Pyelitis in Children" was the subject discussed by Dr. S. F. Morgan of Milwaukee before a meeting of the Winnebago County Medical Society held in the staff room of Mercy Hospital in May.

FOURTH DISTRICT

The annual meeting of the Fourth Councilor District was held Wednesday, May 24th, in Grantland Club rooms, Lancaster.

Representatives from all of the counties composing the district were present and quests from Viroqua and East Dubuque, Ill. The following program was presented:

"The Anemias" by Dr. O. O. Meyer of Madison; "Iodine in the Treatment of Exophthalmic Goitre" Dr. S. F. Haines, Mayo Clinic, Rochester, Minn.; "Plastic Operations on the Genital Tract", motion picture demonstration by Dr. Carl H. Davis, Milwaukee; "The Diagnosis and Treatment of Leucorrhoea" by Dr. Benjamin E. Urdan, Milwaukee.

There was a good attendance. A six-thirty o'clock dinner was enjoyed with the Kiwanis Club, followed by an impromptu program with Dr. J. C. Doolittle, toastmaster. M.B.G.

GREEN BAY ACADEMY OF MEDICINE

An open meeting of the Green Bay Academy of Medicine was held in the Hotel Northland at six-thirty o'clock on May 20th. Dr. Karl A. Meyer of Northwestern University School of Medicine, spoke on "Treatment of Acute Perforative Appendicitis" and Dr. Raymond W. McNealy, also of Northwestern University, read a paper on "Surgical Risk."

CENTRAL WISCONSIN SOCIETY OF OPHTHALMOLOGY AND OTOLARYNGOLOGY

A meeting of this Society was held on May 15th at the Hotel Witter at Wisconsin Rapids in the afternoon and evening.

Papers were presented by Dr. Erling Hansen of Minneapolis; Dr. Fred S. Cook of Eau Claire and Dr. A. E. Rector of Appleton. Discussions were led by Dr. Herman T. Schlegel of Wausau; Dr. James J. Robb of Green Bay, and Dr. L. J. Friend, Beloit.

Dinner was served at six-thirty o'clock which was followed by an address by Dr. Charles N. Spratt of Minneapolis.

MILWAUKEE OTO-OPHTHALMIC

Dr. Percy F. Swindle, professor and director of the department of physiology at Marquette University, was the guest speaker at the May meeting of the Milwaukee Oto-Ophthalmic Society, which was held on May 23rd in the Medical School Building of Marquette University, following a dinner given at the University Club.

Dr. Swindle's subject was "Circulation and Drainage of The Eye." Demonstrations of anatomical specimens showing results of his private research accompanied the address.

SECTION ON RADIOLOGY

Dr. R. L. Troup of Green Bay was elected chairman of the Section on Radiology of the State Medical Society of Wisconsin at its ninth annual meeting held in Fond du Lac in May. Dr. F. H. Kuegle of Janesville was named vice chairman. Dr. F. W. Mackoy, Milwaukee, was re-elected secretary-treasurer. Dr. J. E. Habbe, Milwaukee, was elected to the executive committee and Dr. J. A. Evans, La Crosse, became the senior member and chairman. Dr. L. V. Littig, Madison, is the third member.

WISCONSIN SOCIETY OF RADIOGRAPHERS

On Saturday, May 6th, at the Wisconsin Hotel, Milwaukee, the first convention of the Wisconsin Society of Radiographers was held. Registration for the day totaled sixty-five, consisting of x-ray technicians and physicians from all sections of the state.

Papers on the morning program were presented by: Flora Brammer, R. T., Wausau; T. H. Joyner, R. T., and Henry Jongewaard, Madison; Mrs. Gura Schmidt and Dr. J. Edwin Habbe, Milwaukee. Afternoon by: Sister M. Seraphine, Madison; Joseph Duncan, Sheboygan; Sister M. Gaudentia, and Helen L. Wyman, R. T., Dr. H. O. Foerster, Dr. H. W. Hefke, and Dr. F. W. Mackoy, Milwaukee, and Dr. Theodore Sokow, Kenosha. Evening by: Dr. H. B. Podlasky, Frank J. Cygmanski, Dr. David J. Ansfield, O. E. Baldridge, Milwaukee, H. A. Tuttle, R. T., Chicago, and H. H. Hook, R. T., Madison.

At the business meeting Virginia H. Eller, R. T., Pember-Nuzum Clinic, Janesville, Wisconsin, was elected President; Marvin G. Walsh, Mercy Hospital, Oshkosh, Vice-President; and Harry H. Hook, R. T., Wisconsin General Hospital, Madison, Secretary-Treasurer. Executive committee members: O. E. Baldridge, County Emergency Hospital, Milwaukee, Chairman; Mary A. O. Stigler, R. T., Milwaukee, and A. Marion Lehnert, Milwaukee. V.H.E.

THE WOMAN'S AUXILIARY

MRS. EBEN J. CAREY, Milwaukee, *President*
MRS. ROCK SLEYSTER, Wauwatosa, *President-elect*
MRS. GEORGE H. EWELL, Madison, *Secretary*
MISS RUTH BUELLESBACH, Madison, *Executive Secretary*
MRS. R. G. ARVESON, Frederic, *Treasurer*
MRS. ROBERT FITZGERALD, Milwaukee, *Press and Publicity Chairman*
MRS. JAMES BLAKE, Hopkins, Minn., *National President*

The National Convention

Wisconsin women may indeed be extremely happy and proud over the outcome of programs, both social and business, which they planned for the guests at the American Medical Association Convention which was held in Milwaukee June 12th to 16th. The weather was clear and comfortably warm, the registration satisfactory, and the attendance at all functions most gratifying. Milwaukee had little of such historic interest to offer, as had Philadelphia and New Orleans, and so she put forth every effort to make up for that loss by making each function sufficiently attractive always to be remembered for its own merit. This, together with the very apparent joy on the part of all Wisconsin women over the privilege of entertaining our guests, created a most festive atmosphere and spirit of fellowship which predominated noticeably over the entire Auxiliary program. Sincere appreciation is extended to the Convention chairman, Mrs. Rock Sleyster, for her untiring efforts and her marvelous management of all convention activities. She wishes at this time to express to all Wisconsin women her appreciation for their wonderful spirit of cooperation and their unusual dependability for carrying out every responsibility that was theirs. The wish of all Wisconsin women is that our guests have returned to their homes with as much happiness in their hearts over the convention as the hostesses have for the opportunity of entertaining them.

Wisconsin registered the largest number of women at the convention, 397, with Illinois next with 107, followed by New York with 44. The total number registered was 974, a gain of about 50 over the New Orleans registration. All of the functions were well attended. Some 275 attended the luncheon at the Wisconsin club on Tuesday; approximately 1600 attended the dance on Tuesday night; 444 attended the annual auxiliary luncheon on Wednesday at the Pfister Hotel; 505 took the bus trip to the Oconomowoc Lake District as guests of the Carnation Milk Co., and 577 were served at the dinner at the Pfister on Thursday night.

The business meetings each morning were well attended and were presided over by Mrs. James Percy, Los Angeles, Calif., president.

At the meeting on Wednesday morning the following officers were unanimously elected: Mrs. Robert W. Tomlinson, Wilmington, Del., president-elect; Mrs. James F.

Percy, Los Angeles, Calif., treasurer; Mrs. T. Mitchell Burns, Colo., recording secretary. Four vice-presidents were elected. Mrs. Rock Sleyster, Wauwatosa, was elected together with two other members to be on the Board of Directors for two years. Wisconsin can justly be proud of her Convention Chairman. The new officers were installed, and the gavel and president's pin were transferred to the new president, Mrs. James Blake, and Mrs. James Percy, the retiring president, was presented with the appropriate pin by Mrs. J. Newton Hunsberger, Pa.

The Chairmen of the Standing Committees, ratified by the National Board at the post-convention board meeting were unanimously accepted at the general meeting on Thursday. With the new president, Mrs. James Blake, in the Chair, the Chairmen were announced:

Program_____Mrs. Arthur B. McGlothlan, Mo.
Finance_____Mrs. Fred L. Adair, Ill.
Legislation_____Mrs. Philip S. Doane, Calif.
Public Relations_____Mrs. David S. Long, Mo.
Hygeia_____Mrs. Rogers N. Herbert, Tenn.
Revisions_____Mrs. John A. McCaw, Colo.
Press and Publicity____Mrs. Robert Fitzgerald, Wis.
Printing_____Mrs. John Catlin, Minn.
Archives_____Mrs. Wm. Burrill Odenatt, Pa.
Exhibits_____Mrs. Henry R. Miner, Neb.
Historian_____Mrs. Willard Bartlett, Mo.
Parliamentarian_____Mrs. Wm. J. Brynes, Minn.
Supplies_____Mrs. J. Newton Hunsberger, Pa.
Corres. Secretary_____Mrs. Martin Nordland, Minn.

One of the greatest rewards which the Wisconsin women feel has come to them during their activities on convention plans is the number of choice friendships which they have made among their own people. Mere acquaintances have grown into close friendships and a feeling of camaraderie in working with a unity of purpose has enveloped the entire local auxiliary.

We are already looking forward to the next meeting which will be held in Cleveland, Ohio, and the renewal of the fine friendships which we made during the convention week in Milwaukee.

GOLF TOURNAMENT

The golf tournament was held on Thursday morning, June 16th, with 16 women playing. Mrs. E. L. Whitney of Detroit, Michigan, won the championship cup from Mrs. B. A. Rhinehart of Little Rock, Arkansas, who had won it the two previous years. Mrs. Rhinehart, and Mrs. Walter Gray of Milwaukee played off a tie for runner-up and Mrs. Rhinehart lost to Mrs. Gray. The Low net was won by Mrs. C. H. Baumgart, Milwaukee; Mrs. Mark Bach, Milwaukee, won the blind bogie; and Mrs. G. I. Hogue won the putting contest, with Mrs. John Reynolds second and Mrs. John Blair third, all from Milwaukee.

STATE BOARD MEETING

The annual meeting of the Executive Board of the Woman's Auxiliary to the State Medical Society of Wisconsin was held on Tuesday afternoon, June 13, in the Mirror Room, Pfister Hotel, Milwaukee, with the president, Mrs. Fred A. Nause, Jr., Sheboygan, in the Chair.

Very exhilarating reports were given by committee chairmen, and plans for the year were discussed. The reports of the county presidents were very interesting. Motions were unanimously carried to the effect that letters of appreciation be sent to Mrs. Rock Sleyster and Mr. George Crownhart for their untiring and generous help in all auxiliary plans in the past year. The meeting was especially honored by having the new national president, Mrs. James Blake give a word of greeting and inspiration for the new year.

STATE MEETING

The annual Wisconsin State Auxiliary meeting was held on Wednesday afternoon, June 14th. The nominating committee consisting of Mrs. Gregory Connell, Oshkosh, Chairman; Mrs. T. O. Nuzum, Janesville; Mrs. Victor Falk, Milwaukee; Mrs. C. D. Partridge, Cudahy, presented the following slate which was unanimously elected. Mrs. Rock Sleyster, Wauwatosa, President-elect; Mrs. George H. Ewell, Madison, Secretary; Mrs. Raymond G. Arveson, Frederic, Treasurer.

The executive secretary, Ruth Buellesbach, reported a total paid membership for the state of 564 members.

Those attending the meeting were inspired by a short talk by the new National President, Mrs. James Blake, in which she expressed the belief that each county auxiliary should work out its own program according to the needs of its own members and locality, saying that no one set of rules could possibly be of value in every community. She feels that the idea of being "over organized" in this age should be a help rather than a hindrance to auxiliary work as so much of value to an auxiliary is accomplished through those same contacts in other lay organizations. She paid a very wonderful tribute to the Wisconsin Medical Journal and its editor Mr. George Crownhart, saying that nothing better could be found as a text book for auxiliary members to use for good reading which will keep us in touch with the things that are uppermost in the minds of Wisconsin doctors today. She feels that its handling of all material on the report of the committee on the Costs of Medical Care ranked about the best of any state medical journal in the country. Mrs. Nause transferred the gavel to the incoming president, Mrs. Eben Carey, Milwaukee, who expressed her appreciation for the honor given her and asked the cooperation of all, so that the coming year might be a successful one.

The retiring president was presented with flowers and the meeting adjourned with the new president in the Chair.

HEALTH ESSAY CONTEST

Nine county auxiliaries entered the Health Essay Contest: Marinette–Florence, Milwaukee, Polk, Sheboygan, Rock, Portage, Winnebago, Racine and Green Lake–Waushara–Adams.

The first state prize of ten dollars was received by Isabel Bashford, Peshtigo, Marinette–Florence County, the second state prize of five dollars by Virginia Kazda, West Allis, Milwaukee County, and the third state prize of two dollars and fifty cents by Herby Brusletten, Clear Lake, Polk County.

The following students received first prize in the amount of two dollars and fifty cents for the best essay submitted to the county auxiliary: Arlyle Mansfield, Sheboygan, Sheboygan County; Arnold Field, Beloit, Rock County; Vernon Paulson, Rosholt, Portage County; Marian Borenz, Menasha, Winnebago County; Mildred Murphy, Burlington, Racine County, and Jim Wyse, Princeton, Green Lake–Waushara–Adams County.

The Chairman of the Health Essay Contest, Mrs. Henry Gramling, Milwaukee, awarded the prizes by check.

NEWS ITEMS AND PERSONALS

Dr. William Snow Miller, Madison, professor emeritus of medicine, University of Wisconsin, presented an address on the La Crosse Medical School before the meeting of the American Association for History of Medicine which met at Washington, D. C. on May 8th.

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Drs. M. J. Donohue, E. G. Bloor and L. A. Steffen, all of Antigo, were chosen directors of the staff of the New Memorial Hospital at Antigo.

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Dr. E. V. Smith, Fond du Lac, addressed the Wisconsin Rapids Kiwanis Club on May 10th on the subject of "Medicine and Surgery as Professions."

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Dr. J. J. McCarthy, Madison, returned the middle of May from a six months' stay in Europe, where he took postgraduate courses. He visited Germany, Austria, France, Italy, Jugoslavia, and Hungary.

Dr. McCarthy left for Philadelphia on June 15th, where he has accepted the post of resident physician at the Jewish Hospital. Dr. McCarthy formerly practiced at Sun Prairie, Wisconsin.

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Dr. H. A. Shearer of Beloit was elected president of the Rock River Valley Eye, Ear, Nose and Throat Association at its meeting at Rockford, recently. Dr. A. H. Pember of Janesville was elected vice-president and Dr. William Beyer of Rockford was chosen secretary and treasurer.

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Ten minute broadcasts are given by the State Medical Society of Wisconsin over stations WHA, Madison, and WLBL, Stevens Point, at 10:45 A. M., every Tuesday, Wednesday and Thursday. They

are delivered by Miss Ruth Buellesbach, R. N. Following are the subjects for June:

June 1—The Baby in Summer.
June 6—A Carrier of Disease.
June 7—Children's Tonsils In or Out.
June 8—Rickets.
June 13—Farsightedness.
June 14—Teaching Your Child to Swim.
June 15—Carbuncles, Ouch!
June 20—How to Avoid Ear and Sinus Infection During the Swimming Season.
June 21—Prevention of Blindness (Disease).
June 22—Prevention of Blindness (Accident).
June 27—Have you Missed Something?
June 28—Percussion, The Detector.
June 29—Safety First in the Water.

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Dr. J. W. Lockhart of Oshkosh was unanimously chosen for district governor of Rotary International at a meeting of the 13th district in Milwaukee in May.

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Dr. H. Hendrickson of Green Bay was re-elected president of St. Mary's Hospital staff at the annual staff meeting in May. Others elected were: Dr. James C. Colignon, vice-president; Dr. Karl Icks, secretary-treasurer, and Dr. A. J. McCarey on the executive board.

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Dr. W. J. Irvine of Manawa was elected president of the Manawa Lions Club for the ensuing year.

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Dr. and Mrs. R. H. Jackson, Madison, celebrated their silver wedding anniversary at a dinner party at their home on Sunday evening, June 4th.

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At a meeting of the staff of the Beloit Municipal Hospital, Dr. E. B. Brown was elected president. Other officers elected were Dr. Thomas Flarity, vice-president and Dr. Oscar Friske, secretary-treasurer.

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Dr. T. W. Tormey of Madison was elected treasurer of the newly organized Wisconsin unit of the Circus Fans Association of America, which is conducting the celebration at Baraboo of the 50th anniversary homecoming of the Ringling Brothers.

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Dr. E. L. Bolton of Appleton gave an illustrated talk on "Appendicitis" before a meeting of the Kiwanis Club of Appleton.

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Dr. Lester L. Weissmiller of Madison has purchased the practice of Dr. A. Milton Cox of Albany who has moved to southern Illinois. Dr. Weissmiller was formerly associated with the University student health clinic.

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Dr. and Mrs. C. A. Squire, Sheboygan, and daughter, Miss Susan, spent a short vacation at Lake Enterprise in northern Wisconsin.

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Dr. Thomas Dobbins of Kenosha was appointed as special representative of the Industrial Commission of Wisconsin to direct relief in the city of Kenosha. For several years Dr. Dobbins has been in charge of the medical department of the Nash Motors Company and has been granted an indefinite leave of absence from that position in order that he may devote his entire time to relief work.

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Mr. Albert Ottow, 82, father of Dr. Albert F. Ottow of Beloit, died on May 25th at Beloit Municipal Hospital. Mr. Ottow was born in Germany and came to this country when a young man. He had resided on his farm near Watertown for the past sixty years.

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Dr. J. B. MacLaren of Appleton was elected district governor of the Eleventh District, Rotary.

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At the annual dinner of the managing staff of St. Catherine's Hospital, Kenosha, Dr. Thomas Dobbins spoke on poor relief. A talk was also given by Dr. W. C. Stewart, president of the Kenosha County Medical Society.

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Dr. W. B. Diamond, Madison, who for the past four years has been associated with Dr. F. A. Davis, has opened an office in the Gay building, Madison. He will specialize in eye, ear, nose and throat diseases.

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Dr. J. W. Prentice of Ashland was elected county physician at a meeting of the board recently.

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The marriage of Miss Ruth Caldwell, daughter of Dr. and Mrs. H. C. Caldwell, St. Croix Falls, to Mark A. Foster, son of Mr. and Mrs. J. E. Foster of Ashland, La., took place at the Baptist Student headquarters in Madison in early June.

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Dr. Francis J. Donnelly of North Lake, Wisconsin, is recovering from chest injuries received when his automobile was struck by a street car in Milwaukee. Dr. Donnelly was on his way to the American Medical Association meeting.

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Dr. R. O. Ebert of Oshkosh gave a description of his European tour before a meeting of the Rotary Club in June.

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Joseph S. Brendler, a student at Messmer High School, Whitefish Bay, won the fifth annual Gorgas Memorial essay contest and will compete for national honors as a result of his victory.

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Dr. James P. Dean, Madison, was elected a director of the University of Wisconsin Alumni Association at the annual meeting of the association held in Madison recently.

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Dr. Philip R. Fox, Madison, returned to the practice of medicine after an absence of seven months due to illness.

Dr. George W. McCarthy of Kenosha described his travels in Egypt before a dinner meeting of the Kenosha Round Table Club.

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MILWAUKEE

At the May meeting of the medical staff of St. Joseph's Hospital, the following officers were elected: President, Dr. Henry Pfeifer; Vice-President, Dr. Urvan J. Durner; Secretary-Treasurer, Dr. R. E. Stockinger.

The executive committee is made up of Drs. Felix Schmit, John W. Powers, Louis Jermain, and Frederick A. Stratton.

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Lieutenant Colonel Walter G. Darling, commander of the 326th medical regiment, is in charge of all medical examinations of recruits from the Milwaukee district for the federal forestry conservation corps. Dr. Darling is being assisted by Colonel Harvey E. Webb.

To date Drs. Rudolph Teschan, E. O. Gertenbach, and Arthur A. Schaefer have been assigned from the medical reserve officers' corps for the work.

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The Speakers' Bureau, sponsored by the Educational Committee of The Medical Society of Milwaukee County, was represented by the following members during the month of May:

On May 4th, Dr. Harvey E. Webb addressed the Parent-Teacher Association of the North Pierce Street School on "Normal Living."

Dr. Samuel Plahner was the guest speaker at the meeting of the Mothers' Club of the Lapham Park Social Center on the afternoon of May 9th. His subject was "Your Child and the School."

"Your Blood Pressure" was the subject of Dr. Norbert Dettmann's address to the Vega Chapter of the Eastern Star on the afternoon of May 9th.

At a meeting of the Parent-Teacher Association of the Twelfth Street School on May 18th, Dr. F. R. Janney spoke on "Health of School Children."

Dr. D. W. Roberts was invited to be the guest speaker at the meeting of the faculty of the North Division High School at a meeting held on May 22nd.

"What You Should Know About Your Heart" was the topic chosen by Dr. L. M. Warfield for his address to the Ladies' Aid Society of the Holy Ghost Lutheran Church on May 25th.

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Dr. Edward L. Miloslavich expects to begin his duties on October 1st, as professor of legal medicine in the Royal University of Zagreb, Jugo-Slavia.

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Dr. and Mrs. H. A. Sifton left Milwaukee early in June for their country home at Sister Bay, Wisconsin, where they expect to remain for the summer months.

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On May 9th, Dr. Samuel Plahner addressed the Parent-Teacher Association of the E. A. Kegel School on "Do We Understand Our Children?"

Misericordia Hospital, 2224 W. Juneau Avenue celebrated its twenty-fifth anniversary on May 26th. The institution was founded in 1908 when the late Archbishop Sebastian G. Messmer invited Mother St. Cecelia, then superior general of the Sisters of Misericorde of Montreal, Canada, to open a house of the congregation in Milwaukee.

The hospital work was at first confined to maternity cases and infant care. In 1923 it was decided to enlarge its activities, and the hospital building was erected. The hospital has an accredited school of nursing which provides a three-year course.

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Dr. Arthur W. Hankwitz, son of Dr. and Mrs. P. G. Hankwitz, has returned from a year's postgraduate study abroad in Berlin and Vienna and is now associated with his father at 2570 South Kinnickinnic Avenue, Milwaukee. Dr. Hankwitz, a graduate of Washington University, recently made a Diplomate of the National Board, completed his hospital service at the St. Louis City Hospital.

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Dr. and Mrs. W. H. Halsey, with their four sons, David, Jonathan, Donald, and Thomas, left Milwaukee late in May for Washington, en route to Vienna and Rome where Dr. Halsey expects to take up the study of neuropsychiatry.

Dr. Halsey formerly practiced surgery, but, due to an accident which occurred during an experiment, in which his left hand was burned by sulphuric acid, he was forced to abandon his specialty.

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Dr. Arthur Vollert and his son, Arthur, Jr., of San Francisco, California, arrived in Milwaukee early in June for a month's visit with Dr. Vollert's parents, Mr. and Mr. O. J. Vollert.

Dr. Vollert is a graduate of Marquette University, and attended the reunion of the medical men, held during the American Medical Association convention.

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Dr. Jacob J. Horwitz, son of Mrs. Rebecca Horwitz, Milwaukee, left Berlin, where he has been doing postgraduate and research work, on May 1st for a trip to Palestine, Egypt, India, and China. In Peiping, Dr. Horwitz will visit the Rockefeller Foundation Hospital.

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Dr. and Mrs. Arthur T. Holbrook returned to Milwaukee late in May from a motor trip through the South.

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At the final session of the annual four-day meeting of the American Society of Clinical Pathologists, held in Milwaukee, June 9, 10, 11, and 12, Dr. Alvin Foord of New Orleans was elected president, and Dr. F. H. Lamb of Davenport, Iowa, was named president-elect.

Other officers elected were Dr. J. J. Seelman, Milwaukee, vice-president, and Dr. A. S. Giordano, South Bend, Indiana, secretary.

With the broadcast of May 31st, the weekly health talks, sponsored by the State Board of Health and delivered by Mr. Theodore Wiprud, executive secretary of The Medical Society of Milwaukee County, were concluded until fall. The broadcasts will be resumed in September or October.

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Dr. H. T. Kristjanson was elected president of the Diplomate of the National Board, June 16 at their annual meeting during the session of the American Medical Association.

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Miss Mary Laffey, daughter of Mr. and Mrs. Michael Laffey, for several years a member of the office staff of the executive office of The Medical Society of Milwaukee County, was married on June 5th to Mr. Bartholomew Foley of Waterloo, Wisconsin.

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Dr. and Mrs. Frank E. Darling, Jr., and son, who have been residing in Philadelphia for the past year, were Milwaukee visitors during the month of June. They returned to the East early in July where Dr. Darling expects to continue his studies in obstetrics and gynecology.

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Dr. H. T. Kristjanson was the principal speaker at a meeting of the Scandinavian Society held on June the 7th. Dr. Kristjanson spoke on "Early Icelandic Norse Mythology."

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Dr. T. L. Harrington addressed the Milwaukee Optimist Club on May 29th on the subject of "The Newer Things In Medicine."

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Dr. and Mrs. D. E. W. Wenstrand visited in California in May.

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Dr. and Mrs. Maurice Altman, who spent the winter at Palm Beach, Florida, returned to Milwaukee the first of June.

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Dr. and Mrs. Claude S. Beebe, with their daughters, the Misses Adele and Betty, sailed on June 23rd for an extensive European tour. After a two weeks' motor trip through England, they will cruise to the Scandinavian coast, after which they will return to London for a brief sojourn before returning to this country.

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Mrs. Francis B. McMahon returned to Milwaukee on June 13th from a three weeks' visit in Washington, D. C.

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Dr. and Mrs. Emerson Trow of Toronto, Ontario, were the guests of Mrs. T. J. Pringle during the meetings of the American Medical Association.

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Dr. and Mrs. Gamber Tegtmeyer, who have been residing in St. Louis for the past year, returned to Milwaukee about the middle of June to make their home here.

Dr. and Mrs. F. J. Hohn and daughter, Miss Catherine R. Dittman of Saginaw, Michigan, were June visitors at the home of Mrs. Hohn's aunt, Mrs. John K. Russell. Dr. Hohn attended the American Medical Association convention.

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Dr. and Mrs. Henry Helmholz, with their sons, Lindsay and Frederick, and their daughter Margaret, were guests early in June of Mrs. George L. Sindsay.

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Dr. J. Eastman Sheehan of New York and Paris, internationally-known plastic surgeon, who visited Milwaukee during the meetings of the American Medical Association, was entertained on June 14th at the home of Mrs. Forsyth Johnston.

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Many Milwaukee physicians entertained visiting medical men attending the American Medical Association convention:

Dr. and Mrs. M. G. Peterman had as their house guest Dr. E. Gorter, of the University of Leyden, Holland. Dr. Gorter came to Milwaukee as the guest speaker for the section on children's diseases.

Dr. Frederick Schlutz of Chicago was also the guest of the Peterman's.

Dr. and Mrs. William Meyer of Savannah, Georgia, were the guests of Dr. and Mrs. Selby V. I. Brown.

Dr. and Mrs. Lawrence Post of St. Louis, visited at the home of Mr. and Mrs. Kenneth Hamilton.

Major General G. H. Patterson of Washington, surgeon general of the United States Army, was the house guest of Dr. and Mrs. Gilbert E. Seaman. Dr. Seaman and Dr. Patterson both served on the medical staff of the United States Army during the World War.

Dr. R. G. Arveson was the house guest of Mr. and Mrs. Theodore Wiprud.

Dr. and Mrs. T. L. Tolan had as their guests Dr. and Mrs. A. C. Fuerstenberg of Ann Arbor, Michigan.

Dr. and Mrs. Carl W. Eberbach and Dr. and Mrs. William Egan also entertained out-of-town visitors.

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The gardens of Mr. and Mrs. Nathanael Greene were opened for the wives of physicians on Tuesday, June 13th, from 4 to 6 P. M.

BIRTHS

A daughter to Dr. and Mrs. Julius Heil, Milwaukee, on May 6th.

A son to Dr. and Mrs. Ralph W. Garens, Milwaukee, on May 13th.

A daughter, Marlene Lois, to Dr. and Mrs. H. L. Jorgenson of Marinette on May 30th.

A daughter to Dr. and Mrs. John F. Wyman, Milwaukee, on May 31st.

A son to Dr. and Mrs. William B. Walton, Milwaukee, on May 13th.

A daughter to Dr. and Mrs. Walter A. Brussock, Milwaukee, on May 16th.

A son to Dr. and Mrs. Norbert F. Dettmann, Milwaukee on May 25th.

A daughter to Dr. and Mrs. James Rowan, Milwaukee, on May 28th.

ENGAGEMENTS

The engagement of Dr. Robert T. McCarty of Appleton and Miss Clara Ewens, daughter of Mrs. Rose M. Ewens, Milwaukee, was announced on May 14th.

The engagement of Dr. John E. Haberland and Miss Irene Pamperin, daughter of Mr. and Mrs. Paul Pamperin of La Crosse, was announced on June 4th.

On May 20th the engagement of Dr. Norman DeNosaquo, son of Dr. and Mrs. Samuel DeNosaquo, and Miss Anita Cohen was announced.

MARRIAGES

Dr. William Casper, Milwaukee, son of Dr. and Mrs. R. O. Brunkhorst, and Miss Betty Sullivan, daughter of Circuit Judge and Mrs. D. W. Sullivan, Milwaukee. The marriage took place a year ago.

Dr. Earl V. Hicks, Madison, to Miss Ruth A. Marie Heiden of Sheboygan, on June 3rd at Madison.

Dr. Walter Mauthe of Whitewater to Miss Marie J. Rolfs, daughter of Dr. and Mrs. T. H. Rolfs of Milwaukee on June 1st.

Dr. Meyer S. Fox, Milwaukee, to Miss Sylvia Meyer, Milwaukee, on May 14th.

Dr. Rudolf Noer, Madison, to Miss Anita Showerman, daughter of Prof. and Mrs. Grant S. Showerman, Madison, on June 22nd at Madison. Dr. Noer is the son of Mrs. Marion Noer and of the late Dr. P. J. Noer of Wabeno.

DEATHS

Dr. Harry B. Moe, Deerfield, died at a Madison hospital where he had been receiving treatment for heart disease. He had been ill only a few days.

Dr. Moe was born Nov. 6, 1889, in McFarland, Wis., and was a graduate of the University of Wisconsin and of Rush Medical College, Chicago. He had practiced for fourteen years in Blanchardville before coming to Deerfield.

Dr. Moe was a member of Rock County Medical Society, the State Medical Society, and the American Medical Association.

He is survived by his widow and four children.

Dr. E. G. Aston, Port Washington, died on June 2nd.

He was born in the year 1896 at New Diggings, Wisconsin. He was a graduate of Marquette University School of Medicine in the year 1924. Following internship, he began the practice of medicine at Glidden where he remained for a few years and then moved to Port Washington. During the World War he served in the U. S. Tank Corps and was stationed at New Orleans.

Dr. Aston is survived by his widow.

Dr. F. E. Webster, Amherst, died at his home, June 3rd, following a long illness.

Dr. Webster was born on August 24, 1862. He was a graduate of Rush Medical College in the year 1891 and had practiced at Amherst since that time.

He was a member of Portage County Medical Society, the State Medical Society, and the American Medical Association.

He is survived by his widow.

Dr. Louis R. Head, Madison, died in a Madison hospital on June 27th following a three months illness.

Dr. Head was born at Albion, Wisconsin, in the year 1862, where his father, Dr. Charles R. Head, began the practice of medicine in 1845. He was a graduate of the University of Wisconsin in 1882 and of Rush Medical College in 1885. Completing his course there, he took postgraduate work at the College of Physicians and Surgeons in New York City. Finishing his studies, he became superintendent of the Oakwood Retreat, Lake Geneva, and later was superintendent of the State Hospital for the Insane at Mendota for two years prior to starting private practice in Madison in 1891. He was a director and vice-president of the Wisconsin Anti-Tuberculosis Association, and served as superintendent of Morningside Sanatorium, Madison, since 1915.

Dr. Head was a member of the Dane County Medical Society, the State Medical Society, and the American Medical Association.

He is survived by his widow, one son, Dr. James R. Head of Evanston, Illinois, and four daughters: Mrs. T. E. Coleman of Madison; Mrs. Sigurd Gundersen, La Crosse; Mrs. Walter Buchen, Winnetka, and Miss Eleanor of Philadelphia.

SOCIETY RECORDS

New Members

F. J. Mantell, 319 No. 76th St., Wauwatosa.
H. R. Ausman, 2637 W. National Ave., Milwaukee.
L. J. Monaghan, 2237 No. 61st St., Wauwatosa.
H. Mendeloff, 536 W. Wisconsin Ave., Milwaukee.
V. A. Chapman, 312 E. Wisconsin Ave., Milwaukee.
H. A. Gantz, 324 E. Main St., Waukesha.
Harry Vander Kamp, Tomah.
D. C. Beebe, Sparta.
L. W. Gregory, Manitowoc.
J. J. Rouse, Neshkoro.
R. J. Hudson, Prairie du Sac.
E. D. Stanton, Reedsburg.
E. H. Grumke, Limeridge.
C. J. Garding, Jefferson.
P. J. Purtell, 720 N. Jefferson St., Milwaukee.
Geo. E. Thill, 2200 N. Third St., Milwaukee.

Changes in Address

A. E. Bachhuber, Jr., Mayville to Kaukauna.

» » » CORRESPONDENCE « « «

"SENSATIONAL PRACTICES"

THE SOCIETY OF PLASTIC AND RECONSTRUCTIVE SURGERY

New York, N. Y., June 10, 1933.

Mr. J. G. Crownhart, Editor,
Wisconsin Medical Journal,
Madison, Wisconsin.

Dear Sir:

Enclosed is a resolution on sensational and irresponsible practices in the field of plastic surgery which was adopted by the Society of Plastic and Reconstructive Surgery at its Stated Meeting, May 26, 1933. This resolution is sent to you in the hope that its publication will serve to better inform the profession on the true scope of this important branch of surgery and the danger which threatens thousands of uninformed potential victims of quackery in this sphere.

Sincerely yours,

JWM:C JACQUES W. MALINIAK, M. D.

From the Society of Plastic and Reconstructive Surgery, 1125 Park Avenue, NYC.

The following resolution condemning sensational presentations of plastic surgery by irresponsible and non-representative individuals and groups was adopted by the Society of Plastic and Reconstructive Surgery at its stated meeting at the N. Y. Academy of Medicine on May 26th.

"WHEREAS, Sensational stories frequently appear in lay publications concerning the cosmetic repair of the face and body with special reference to the correction of nasal malformations and the eradication of the stigma of age; and

"WHEREAS, These stories convey the erroneous impression that plastic surgery is purely for cosmetic purposes and involves procedures that may safely be performed by lay cosmeticians in an environment that does not provide the strict asepsis and other safeguards of a hospital operating room; and

"WHEREAS, These stories are designed to appeal to, and promote the exploitation of, unstable and often psychopathic individuals who have no genuine deformity but are overly sensitive to negligible imperfections and the changes wrought by age,

"*Therefore be it resolved*, That the Society of Plastic and Reconstructive Surgery take steps to inform the public

(1) That plastic surgery is a regular surgical specialty, embracing the reconstruction of defects and malformations that interfere with normal function as well as the repair of gross cosmetic deformities;

(2) That those engaged in the practice of Plastic and Reconstructive Surgery require the same scientific and technical training as the practitioners of any other surgical specialty and are bound by the same ethics, adopted in the interests of the public, that govern all reputable physicians, and

(3) That the safe performance of even minor plastic and reconstructive procedures demands the precautions and safeguards of a first grade operating room;

"*And be it further resolved*, That this Society condemn the performance of any plastic operations whatsoever by lay cosmeticians and the use of beauty shops, hotel suites and convention halls for this purpose;

"*And be it further resolved*, That this Society warn the public of the dangers of any surgery at unqualified hands and the unreliability of sensational, self-aggrandizing publicity;

"*And be it further resolved*, That this SOCIETY urge the community to recognize the social aspects of plastic and reconstructive surgery and make it available, at competent hands, to the poor as well as the rich in cases where cosmetic or functional repair is genuinely indicated."

Four Thousand Six Hundred Fellows of American Medical Association Attend 84th Annual Meeting at Milwaukee

Four thousand six hundred Fellows of the American Medical Association attended its 84th Annual Meeting at Milwaukee during the week of June 12–16. This registration included upwards of one thousand one hundred fifty members of the State Medical Society of Wisconsin, which establishes a new high record for Wisconsin registration at any state or national meeting. In addition to this Fellowship registration, some nine hundred seventy-five members of the National Auxiliary to the American Medical Association registered at the Auxiliary headquarters in the Pfister Hotel, and it was estimated by A. M. A. officials that all told some ten thousand people visited Milwaukee for the purpose of attending upon some part of this national meeting.

The meeting was opened by sessions of the House of Delegates on Monday and Tuesday with a general scientific meeting on Tuesday and sectional meetings on Wednesday, Thursday, and Friday. The final meeting of the House of Delegates was held on Thursday afternoon. All scientific exhibits and commercial-scientific exhibits, as well as the scientific sessions, were housed in the Milwaukee Auditorium.

In its annual elections, the American Medical Association, after installing Dr. Dean Lewis of Baltimore as its current President, selected Walter L. Bierring of Iowa as its President-Elect, Dr. John H. Musser of New Orleans as its Vice-President, re-elected Dr. Olin West of Chicago as Secretary and General Manager, and elected Herman L. Kretschmer of Chicago as Treasurer. Dr. Frederick C. Warnshuis of Michigan was re-elected Speaker of the House of Delegates, and Dr. N. B. Van Etten of New York was elected as Vice-Speaker. Dr. Austin A. Hayden of Chicago, a former resident of Shullsburg, Wisconsin, was selected as a Trustee of the Association, as was Dr. C. B. Wright of Minneapolis, Minnesota. Cleveland was selected as the place of the 1934 meeting.

The entertainment of the Wisconsin Society opened with a dinner to the House of Delegates and officers of the American Medical Association held at the Wisconsin Club on Monday evening, June 12th. Following the formal opening meeting of the Association at the Auditorium on Tuesday evening, members and their wives from out of state were guests of the Wisconsin Auxiliary at a dance at the Wisconsin Club. Throughout the week, entertainment in the greatest detail was planned for visiting wives by the Auxiliary to the Medical Society of Milwaukee County and the State Auxiliary and for the membership through many committees of the Medical Society of Milwaukee County.

Official actions of the House of Delegates of the American Medical Association will be reported in detail in the August issue.

THE MILWAUKEE SESSION

Editorial, J. A. M. A., June 24

The annual session of the American Medical Association just held in Milwaukee aroused most favorable comment because of the exceeding smoothness of organization by the local committee in the handling of the convention affairs. Event succeeded event exactly on schedule without apparent extraordinary activity and to the immense satisfaction of every one who participated. Moreover, the hospitality of local physicians seemed to reach every convention visitor.

If the majority of visitors were asked to name the most striking feature of the convention they no doubt would choose the Scientific Exhibit. By a felicitous arrangement, the individual exhibits were for the most part correlated with the papers read in the various sections, except for special exhibits by various departments of the Association and others particularly planned by the Committee on Scientific Exhibit. Because of the practical and timely character of the exhibits shown, many of the exhibit spaces were crowded with visitors throughout the day. The Scientific Exhibit apparently constitutes one of the best types of direct graduate education available. Particularly interesting is the fact that several of the state societies are planning a similar arrangement on a smaller scale for the coming year, an evidence of the appreciation of this work by those who saw the exhibit function.

The opening meeting and the President's reception were delightfully arranged and attracted capacity audiences. The Woman's Auxiliary of the State Medical Society of Wisconsin and particularly of the Milwaukee County Medical Society developed a pro- ous commendations. Almost a thousand women reg- gram of entertainment which again met with numer- istered with the Auxiliary and there were perhaps an additional thousand who enjoyed the meetings, teas, luncheons and dinners without formally registering.

At the meetings of the House of Delegates, almost 160 delegates were in attendance. Topics of major interest to the medical profession that were discussed included the economics of medical service, changes in the nature of medical education, the certification of specialists and the routine work of the American Medical Association. In its executive session the House of Delegates tabled a resolution of the Committee for the Investigation of Birth Control and unanimously adopted a resolution against the persecution of any human being because of race or religion.

Exhibitors in the technical exhibits were also warm in their approval of the usefulness of this annual session, many of them expressing delight in what seemed to be a turn upward in general business conditions as reflected by numerous orders for books, medical preparations and apparatus. The total registration, over 4,600, afforded opportunity to exhibitors to meet considerable numbers of physicians and to give them at first hand insight into some of the newer methods and technics available in medical practice.

A final word must be said relative to the remarkable performance of the weather man responsible

PHYSICIANS' EXCHANGE

Advertisements for this column must be received by the 25th of the month preceding month of issue. A charge is made of $2.00 for the first appearance of copy occupying 1 inch or less of space and $1.00 for each succeeding insertion of the same copy. Kindly accompany copy with remittance to cover number of insertions desired. Advertisements from members of the State Medical Society will be accepted without charge. Such copy will be taken out after its second publication unless otherwise requested. Where numbers follow advertisements replies should be addressed care Wisconsin Medical Journal.

FOR SALE—Will sell for cash the following: One Hanovia Alpine Sun Lamp, air cooled, ultraviolet, alternating current, cost $375 will sell for $200; One McIntosh Polysine Generator, giving sixteen modalities, $200, cost $475; One Fischer Superior Radiant therapeutic lamp, 1500 watts, $100, cost $150;—on account of owner's poor health these articles have been used very little and are therefore practically new; One Victor vibratory massage, $25, cost $75; One Betz metal electric light bath cabinet, $50, cost $300; one examining and massage table, $15, cost $65; Allison office table $20, cost $75; One Rochester case of electric diagnostic instruments and an Elsner cystoscope made by same firm for $25, cost $123; One Victor high frequency coil, No. 7, $25, cost $200; One Israel Carmody Suction apparatus for tonsil operations, $40, cost $95; One Victor lead x-ray protective screen, $25; Two Green and Bauer 7 in. gas x-ray tubes, $5 each; One Faught sphygmomanometer, $5; One Taylor freezing microtome, $2.50; One Fleischl's haemometer, $2.50, cost $24; one McIntosh No. 6, electric wall plate, style "A" and rectifier both for $20, cost $85; a few surgical instruments and splints at half price. Address No. 907 in care of the Journal. MJJ

WANTED—Locum tenens work by capable physician; available for short or long period; Wisconsin license; references; will not compete. Address number 851 in care of the Journal.

LOCUM TENENS AVAILABLE—Wisconsin licentiate now finishing postgraduate work in Chicago available as locum tenens on and after June first. Address No. 912 in care of the Journal. MJ

FOR SALE—X-ray equipment. Standard six inch gap transformer; standard hand tilt fluoroscopic table with arrangement for sterio views of chest; one Potter bucky diaphragm; one four-chamber stone developing tank; one Wheatstand sterioscope, screens, cassettes, etc. A bargain for cash. For further information write the Lakeside Clinic, Rice Lake, Wis. MJJ

FOR SALE—Fischer Diathermy Portable. Address No. 909 in care of the Journal. MJJ

FOR SALE—Surgeon's instruments A-1 shape. Drugs at a liberal discount. Large unit General Electric X-ray. Inventory on request. Address No. 910 in care of the Journal. MJJ

WANTED—Physician with good surgical training and experience wants an association with an established physician. Address No. 911 in care of the Journal. MJ

FOR SALE—at bargain prices the following equipment in good condition. Rose Diathermy, Carbon Arc Lamp, Z12 Zoalite, Sanborn Graphic, B. D. Mercury Manometer, three examining tables, Fairbanks office scale, instrument cabinet, electric sterilizer, Complex Transformer, desk and chairs, mahogany wall cabinet, No. 5 Underwood. Address No. 916 in care of the Journal. JAS

ASSISTANTSHIP WANTED—Male, 26 years, Gentile, A.B. Wisconsin; M.D. Washington University Medical School; one year rotating internship; one year obstetrical and gynecological internship, desires assistantship with surgeon or general practitioner. Address No. 908 in care of the Journal. MJ

WANTED—Associate in ophthalmology or in otolaryngology, or OALR. Give complete information and references in first letter. Address No. 917 in care of the Journal. JAS

FOR SALE OR RENT—Physician's fine brick home and office in city of 4,000 in southeastern Wisconsin. Office equipment and household goods optional. A real opportunity. Will introduce. Address No. 915 in care of the Journal. JAS

FOR SALE—One Koken chair, two cabinets, leg dressing stands and platforms and instruments; all practically new. Address No. 914 in care of the Journal. JJA

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for conditions in the state of Wisconsin. Just before the opening of the annual session he blasted the Middle West with a heat wave that will still be recalled by the oldest inhabitants a century hence. As the visitors and Delegates began to arrive he suddenly relented and during the entire period of the annual session moderate temperatures and salu brious breezes prevailed. The foliage in the garden of Wisconsin blossomed profusely, cooling beverage audiences. The Woman's Auxiliary of the Wiscon the society notes in the country newspapers ar wont to say, a pleasant time was had by all.

Dr. T. J. O'Leary Selected as President-Elect of State Medical Society; Green Bay in 1934

Rushing through its business in two complete afternoons that the membership might attend general sessions of the American Medical Association, the House of Delegates of the State Medical Society of Wisconsin concluded its business on Tuesday afternoon, June 13th, with the selection of the following officers:

Dr. T. J. O'Leary, Superior—President-Elect.

Dr. Ralph M. Carter, Green Bay—Speaker of the House.

Dr. Gunnar Gundersen, La Crosse—Vice-Speaker.

Dr. Joseph F. Smith, Wausau—Delegate to A. M. A.

Dr. M. D. Bird, Marinette—Alternate Delegate.

After inspection of convention facilities and formal approval by the Council, the House of Delegates accepted the cordial invitation of the Brown-Kewaunee-Door County Medical Society to hold the 1934 meeting of the State Society in Green Bay. 1934 will be the Ter-Centennial year of Green Bay and the meeting will be held on dates to be selected in September, 1934. At earlier sessions of the House, the following Councilors were unanimously re-elected to the Council:

Dr. A. W. Rogers, Oconomowoc.

Dr. Frank W. Pope, Racine.

Dr. F. G. Johnson, Iron River.

Dr. R. W. Blumenthal, Milwaukee.

Upon recommendation of the Council, President Seeger was authorized to appoint a liaison committee to work with executive officers of the Wisconsin General Hospital. This committee will be announced by the President directly. Also upon recommendation of the Council the House voted a consolidation and granting of a new charter for Brown, Kewaunee, and Door Counties, an amended the By-Laws to provide Medica Editor of the Journal should be ex-officio a member of the Committee on Scientifi Work.

At its first session on Monday afternoo one delegate from each district was selecte to be a member of the Nominating Committee. Delegates elected by the House to thi important committee were:

First District—Dr. H. P. Bowen, Watertown.

Second District—Dr. T. C. Hemmingsen Racine.

Third District—Dr. J. F. Mauermann Monroe.

Fourth District—Dr. C. A. Armstrong Prairie du Chien.

Fifth District—Dr. C. J. Weber, Sheboygan.

Sixth District—Dr. D. J. Twohig, Fond du Lac.

Seventh District—Dr. C. F. Peterson, Independence.

Eighth District—Dr. T. J. Redelings Marinette.

Ninth District—Dr. S. M. B. Smith, Wausau.

Tenth District—Dr. F. E. Butler, Menomonie.

Eleventh District—Dr. C. H. Christiansen Superior.

Twelfth District—Dr. H. J. Gramling Milwaukee.

Thirteenth District—Dr. E. G. Ovitz Laona.

Reference committees of the House during this session were appointed by Speaker Carter as follows:

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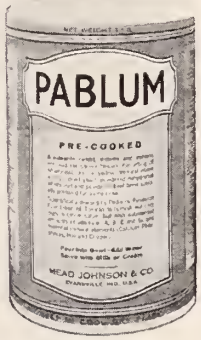

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Reference Committee on Reports of Officers:

Dr. D. J. Twohig, Fond du Lac, Chairman.
Dr. R. W. Hammond, Manitowoc.
Dr. C. D. Boyd, Kaukauna.

Reference Committee on Reports of Standing Committees:

Dr. James C. Sargent, Milwaukee, Chairman.
Dr. T. J. O'Leary, Superior.
Dr. H. T. Barnes, Delafield.

Reference Committee on Credentials:

Dr. D. E. W. Wenstrand, Milwaukee.
Dr. E. G. Ovitz, Laona.
Dr. W. M. Trowbridge, Viroqua.

Reference Committee on Resolutions:

Dr. R. G. Arveson, Chairman, Frederic.
Dr. George F. Adams, Kenosha.
Dr. E. W. Miller, Milwaukee.
Dr. J. F. Mauermann, Monroe.
Dr. H. Y. Fredrick, Westfield.

Dues for the year 1934 were continued with a 20% reduction established by the Council for 1933—$12.00. The House laid upon the table an amendment to the Constitution to provide that Councilors should be elected in district meetings. This amendment will be again before the House at its 1934 meeting in Green Bay. Committee reports and reports of officers were sent delegates in advance of the meeting and will be published as part of the minutes of the House sessions in the October issue of the Journal.

While the address of the President is printed as the first article in the Scientific Section of this issue of the Journal. his committee appointments follow:

(Appointments by President Seeger are in italics).

REVISED COMMITTEES

Committee on Scientific Work:

Arnold S. Jackson, Madison, Chairman 1933–1936
Wenzel Wochos, Kewaunee 1933–1935
T. L. Squier, Milwaukee 1933–1934

Committee on Public Policy:

Ralph M. Carter, Green Bay, Chairman 1933–1936
R. H. Jackson, Madison 1933–1934
S. E. Gavin, Fond du Lac 1933–1935

Editorial Board:

H. P. Greeley, Madison, Chairman 1933–1934
Oscar Lotz, Milwaukee 1933–1936
G. H. Ewell, Madison 1933–1935

Committee on Medical Defense:

A. J. Patek, Milwaukee, Chairman 1933–1936
Arthur G. Sullivan, Madison 1933–1934
E. G. Ovitz, Laona 1933–1935

Committee on Medical Education and Hospitals:

F. D. Murphy, Milwaukee, Chairman 1933–1936
C. R. Bardeen, Madison 1933–1935
Jos. W. Lambert, Antigo 1933–1934

Committee on Medical Economics:

R. G. Arveson, Frederic, Chairman 1933–1936
V. F. Marshall, Appleton 1933–1934
W. G. Riopelle, Beaver Dam 1933–1935

Committee on Health and Public Instruction:

R. W. Blumenthal, Milw., Chairman 1933–1936
H. M. Stang, Eau Claire 1933–1934
W. G. Sexton, Marshfield 1933–1935

Advisory Committee on Medical Extension:

Gunnar Gundersen, La Crosse, Chr. 1933–1935
Carl Henry Davis, Milwaukee 1933–1936
K. H. Doege, Marshfield 1933–1936
E. F. Schneiders, Madison 1933–1935
J. F. Wilkinson, Oconomowoc 1933–1934

Cancer Committee:

D. L. Dawson, Rice Lake 1933–1935
R. L. MacCornack, Whitehall 1933–1935
C. G. Richards, Kenosha 1933–1935
F. Eigenberger, Sheboygan 1933–1934
F. Gregory Connell, Oshkosh 1933–1936
W. E. Ground, Superior 1933–1936
Paul Doege, Marshfield 1934
S. J. Seeger, Milwaukee 1934
G. R. Daer, Marinette 1933–1936
J. F. Wilkinson, Oconomowoc 1933–1936
G. Benson, Richland Center 1935
W. D. Stovall, (Chairman) Madison 1934
G. E. Moore, Antigo 1935

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MINUTES OF THE COUNCIL

University Club, Milwaukee, Monday, June 12th

1. Council called to order by the Chairman, Dr. Arthur W. Rogers, at 11:00 A. M.

2. Roll call showed the following present: Councilors Rogers, Pope, Harper, Cunningham, Heidner, Beebe, Stang, Johnson, Gavin, Schiek, Duer and Smith; Speaker Carter; Otho A. Fiedler, Chairman of the Committee on Public Policy; President Jackson; President-Elect Seeger, and the Secretary, Mr. Crownhart.

3. Moved by Heidner-Stang that the Council approve the minutes of the January meeting as published in the Wisconsin Medical Journal in February, 1933. Carried.

4. The Council approved the three mail ballots conducted since the last meeting. The ballots approved follow:

a. Extending the date for payment of dues from March 31st to June 1st. Ayes—13; Noes—none.

b. Authorize the Secretary to appoint a select committee (in the absence of the President and Chairman) to meet with administrative officers of the Wisconsin General Hospital. Ayes—13; Noes—none.

c. Accepting the report of the select committee (Drs. Seeger, Gavin and Smith) and relieving the Committee of further duties. Ayes—13; Noes—none.

5. The Secretary reported that it was the desire of the membership in both the Brown-Kewaunee and Door Counties Medical Societies that their present charters be surrendered and that a new charter be granted to the joint counties to be known as Brown-Kewaunee-Door County Medical Society. Moved by Stang-Harper that the Council recommend to the House of Delegates the granting of such a charter. Carried.

6. Moved by Stang-Heidner, at the request of the Board of Directors of the Medical Society of Milwaukee County, that a life membership be granted to Dr. John Steele Barnes of Milwaukee, a member who has paid his dues for forty consecutive years.

7. Green Bay invitation. The Secretary reported on the hotel facilities and other facilities in Green Bay in view of the invitation of the members in that city to hold the 1934 sessions of the Society in Green Bay. After discussion it was moved by Stang-Gavin-Beebe that the Council approve of such facilities and so advise the House of Delegates. Carried.

8. State Chamber of Commerce. The Secretary reported that the Society had been invited into the Wisconsin State Chamber of Commerce and advised that the cost would be in the neighborhood of $200 annually. After discussion it was moved by Beebe-Gavin that the invitation be laid on the table. Carried.

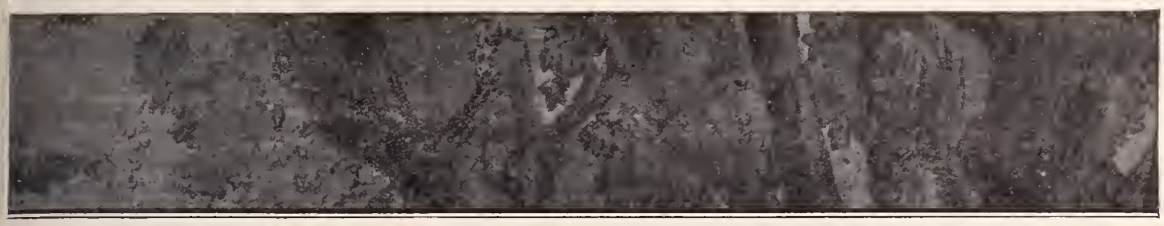
9. Illegal membership. The Secretary reported that it had been brought to his attention that Dr. ---------- had been elected to membership in a County Medical Society in whose jurisdiction he did not reside and that membership had been refused in the County Society in whose jurisdiction he did reside. After full discussion it was moved by Cunningham-Gavin that the Secretary instruct the Society concerned that membership of this physician must be contingent upon conforming to the requirements of the By-Laws. Carried.

10. Wisconsin Anti-Tuberculosis Association. Pursuant to action of the November, 1932, meeting of the Council, the Secretary brought from the table the special committee report on this Association. After full discussion it was moved by Cunningham-Pope that the Chairman of the Council appoint a committee to cooperate with the W. A. T. A. to the end of maintaining a harmonious relationship between the profession and the Association; further, that the special committee report be referred to this committee. Carried. The Chairman announced the reappointment of the former committee consisting of Dr. J. F. Wilkinson, Oconomowoc, Chairman; Dr. Wilson Cunningham, Platteville, and Dr. H. M. Stang, Eau Claire.

11. Advisory Committee to the State Auxiliary. This committee consists of the President of the Society, the Chairman of the Council, the Secretary, Dr. C. A. Harper and Dr. Jessie P. Allen. The term of Dr. Allen having expired, it was moved by Blumenthal-Cunningham that Dr. Rock Sleyster be appointed. Carried.

12. Wisconsin General Hospital. The Secretary called attention to the fact that the Dean of the Medical School of the University of Wisconsin had expressed pleasure over the proposal that the executive officers of the Wisconsin General Hospital meet with a special committee of the Council at least twice a year to discuss matters of joint concern. After discussion it was moved by Blumenthal-Cunningham that the Council recommend to the House of Delegates that authority be vested in the President to appoint such a committee. Carried.

13. Annual audit. The Secretary presented the reports of audits of the accounts of the Treasurer and the Secretary in the joint capacity as Secretary and Managing Editor of the Wisconsin Medical Journal. Moved by Blumenthal-Pope that a committee of three be appointed to inspect these audits and then report to the next meeting of the Council. Carried. Chairman Rogers announced the appointment of the committee as follows: Dr. Joseph F. Smith, Chairman; Dr. R. W. Blumenthal and Dr. F. W. Pope.



One of a series of advertisements prepared and published by PARKE, DAVIS & COMPANY in behalf of the medical profession. This "See Your Doctor" campaign is running in the *Saturday Evening Post* and other leading magazines.

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14. American Medical Association entertainment. The Secretary reported on the budget for the A. M. A. as outlined by the Council and the present status of the planning expense.

15. Scientific Work. President-Elect Seeger suggested to the Council that the By-Laws of the Society be amended to provide that the Medical Editor be ex-officio a member of the Committee on Scientific Work. It was moved by Cunningham-Heidner that the Council recommend such an amendment to the By-Laws of the House of Delegates. The Council adjourned at 2:00 P. M.

J. G. CROWNHART,
Secretary.

Approved:
ARTHUR W. ROGERS, M. D.,
Chairman.

SECOND MEETING OF THE COUNCIL

Athletic Club, 5:30 P. M., Monday, June 12th

Pursuant to the Constitution, the Council met following adjournment of the first session of the House of Delegates and there being no business on the desk of the Secretary, the Council then adjourned.

THIRD MEETING OF THE COUNCIL

Athletic Club, Tuesday, June 13th

Pursuant to the Constitution, the Council met following adjournment of the combined second and third sessions of the House of Delegates on Tuesday afternoon, June 13th. There being no further business on the desk of the Secretary, the Council then adjourned to the call of the Chairman.

Wisconsin Men Place First and Second in Golf Tournament

In the 19th Tournament of the American Medical Golfing Association held at the Blue Mound Country Club on Monday, June 12th, the Association championship with the Will Walter Trophy was won by Dr. Mark Bach of Milwaukee with 157. Second place was won by Dr. G. R. Love, of Oconomowoc, with 159, and Dr. R. E. Fitzgerald, of Milwaukee, drew a tie for fourth place.

In the Association handicap the Detroit Trophy was won by Dr. W. A. Ryan, of Milwaukee, with 137; Dr. J. F. Blair, of Milwaukee, was in a tie for third; and Dr. Hyman Mendeloff, of Milwaukee, was in a tie for fourth.

In the eighteen hole net Association handicap, Dr. V. J. Taugher, of Milwaukee, scored second, while Dr. J. C. Griffith, of Milwaukee, was in a tie for third.

In below gross eighteen hole contest, second place was won by Dr. Edwin C. Bach, of Milwaukee; Dr. C. M. Schuldt, of Platteville, was in a tie for fourth, and Dr. J. E. Rueth, of Milwaukee, won fifth place.

In the eighteen hole low net for the Thomas Trophy, first place was a tie between Drs. A. J. Carthaus and H. A. Pfiefer, with Dr. N. J. Wiedeman, of Milwaukee, in second, and Dr. A. J. Weber, of Milwaukee, in fifth.

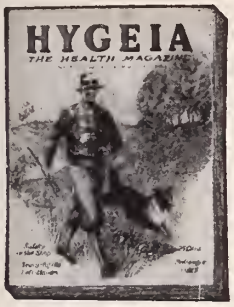
Following the Golfing Tournament Dr. John Powers, of Milwaukee, local chairman, was selected as vice-president of the Association. The next Golf Tournament of the American Medical Golfing Association will be held in connection with the 1934 meeting at Cleveland.

THE JOURNAL BOOK SHELF

BOOKS RECEIVED FOR REVIEW

Gastric Anacidity. By Arthur L. Bloomfield, M. D., professor of medicine, Stanford University, San Francisco, and W. Scott Polland, M. D., instructor in medicine, Stanford University, San Francisco. Price $2.50. The Macmillian Company, New York.

Surgical Pathology. By William Boyd, M. D., professor of pathology, University of Manitoba; pathologist to the Winnipeg General Hospital, Winnipeg, Canada. Third edition, thoroughly revised. 866 pages with 477 illustrations and 13 colored plates. Cloth $10.00 net. W. B. Saunders, Philadelphia and London, 1933.



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William G. Stearns, M. D. Medical Director

Obstetrics and Gynecology. (Volume I) By 80 leading specialists. Edited by Arthur Hale Curtis, M. D., professor and head of the Department of Obstetrics and Gynecology, Northwestern University Medical Hospital, Chicago. Complete in 3 volumes and separate desk index. 3,500 pages with 1,664 illustrations, many in colors. Per set, cloth $35.00 net. W. B. Saunders Company, Philadelphia and London, 1933.

A Text-Book of Surgical Nursing. By Frederick E. Neef, B. S., M. D., formerly professor of gynecology and dean of department of obstetrics and gynecology, Fordham University, School of Medicine; attending surgeon, St. Elizabeth's and Misericordia hospitals, and New York City Cancer Institute. Illustrated with 41 engravings. Lea & Febiger, Philadelphia, 1933.

Materia Medica and Therapeutics. A text-book for nurses. By Linette A. Parker, B. S., (Columbia Univ.), R. N., formerly instructor in nursing and health, Teachers College, Columbia University, New York. Fifth edition, thoroughly revised. Illustrated with 32 engravings and 3 plates. Lea and Febiger Co., Philadelphia, 1933.

Pediatric Nursing. A text-book for nurses. By Abraham Levinson, B. S., M. D., associate in pediatrics, Northwestern University Medical School; attending pediatrist, Sarah Morris Hospital for Children of the Michael Reese Hospital, Chicago. Second Edition, thoroughly revised. Illustrated with 28 engravings and a colored plate. Lea and Febiger Co., Philadelphia, 1933.

Senile Cataract. Methods of Operating. By W. A. Fisher, M. D., F. A. C. S., Chicago. Professor of ophthalmology, Chicago Eye, Ear, Nose and Throat College. 267 pages, 183 illustrations, 112 of which are colored. Published by Chicago Eye, Ear, Nose and Throat College, Chicago, Ill.

The Interpretation of Dreams. By Prof. Sigmund Freud, M. D., LL.D. Authorized translation by A. A. Brill, Ph. B., M. D. Lecturer on psychoanalysis and the Psychosexual Sciences at Columbia University, New York. New edition completely revised. The Macmillan Company, New York, 1933.

The Law Against Abortion. By William J. Robinson, M. D., editor of The Critic and Guide, consultant to the Bronx Hospital. The Eugenics Publishing Co., Inc., New York, 1933.

Medical State Board Examinations. By Harold Rypins, A. B., M. D., secretary, New York State Board of Medical Examiners. J. B. Lippincott Company, Philadelphia.

Arteriosclerosis. A publication of the Josiah Macy, Jr., Foundation. Edited by Edmund V. Cowdry, Washington University, St. Louis. Price $5.00. The Macmillan Company, 60 Fifth Avenue, New York.

Diet in Sinus Infections and Colds. By Egon V. Ullmann, M. D. Price $2.00. The Macmillan Company, New York.

Urology in Women. By E. Catherine Lewis, M. D., (London), F. R. C. S. (Eng). Surgeon to the Royal Free Hospital; surgeon and urologist to the South London Hospital for Women. Price $2.25. William Wood and Company, Baltimore, 1933.

A Text-Book of Neuropathology. By Arthur Weil, M. D., associate professor of neuropathology, Northwestern University Medical School, Chicago. Illustrated with 260 engravings. Price $5.00 net. Lea & Febiger, Washington Square, Philadelphia.

1932 Collected Papers of the Mayo Clinic. Edited by Mrs. Maud H. Mellish-Wilson and Richard M. Hewitt, B. A., M. A., M. D. Octavo of 1,205 pages with 233 illustrations. Cloth $11.50 net. W. B. Saunders Company, Philadelphia and London.

Surgical Anatomy. By C. Latimer Callander, A. B., M. D., F. A. C. S., assistant clinical professor of surgery and topographic anatomy, University of California Medical School; associate visiting surgeon to the San Francisco Hospital. With a foreword by Dean Lewis, M. D. 1,115 pages with 1,280 illustrations, some in colors. Cloth $12.50 net. W. B. Saunders Company, Philadelphia.

The Organs of Internal Secretion. By Ivo Geikie Cobb, M. D., M. R. C. S., author of "A Manual of Neurasthenia" "The Glands of Destiny" "Aids to Organotherapy." Fourth edition. William Wood and Company, Baltimore, 1933.

An Introduction to Dermatology. By Norman Walker, Kt., M. D., LL.D., F. R. C. P., consulting physician, assisted by G. H. Percival, M. D., Ph.D., F. R. C. P., assistant physician for Diseases of the Skin, The Royal Infirmary, Edinburgh. Ninth edition, Price $8.00. William Wood & Company, Baltimore, 1933.

BOOK REVIEWS

Any scientific publication reviewed in this column may be obtained for inspection. Orders for such inspection should be directed to the Medical Library Service, 424 N. Charter Street, Madison, Wis.

Annals of Roentgenology. By James T. Case, M. D., professor of roentgenology, Northwestern University Medical School, Chicago. Volume fourteen. Net $10. Paul B. Hoeber, Inc., 76 Fifth Avenue, New York.

This timely monograph demonstrates convincingly the great importance which roentgenology has assumed during the last ten years in the diagnosis and treatment of intracranial tumors. It also leaves no doubt in the reader's mind as to the value of close cooperation between neurological surgeon and radiologist.

Following a brief introduction the author presents the subject matter under the following headings: Direct roentgenological evidence of intracranial tumors; The meningiomas; The hypophyseal adenomas; The acoustic neurinomas; The craniopharyngiomas; The gliomas, osteomas and angiomas; Ventriculography and encephalography; and Radiation therapy of intracranial tumors. The clinical ma-

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terial on which the book is based comprises 209 verified tumors, 61 unverified tumors and 57 suspected tumors; the majority belong to the glioma group. Numerous illustrations and case histories are inserted; the reproductions are well done and facilitate materially the study of the text. There is also a bibliography with ample references appended. This book undoubtedly offers a valuable post-graduate course on the extremely interesting and difficult diagnosis and treatment of intracranial tumors.

E. A. P.

The Principles And Practice Of Obstetrics. By Joseph B. DeLee, A. M., M. D., Sixth edition, published by W. B. Saunders Company, Philadelphia and London, 1933.

This book has been written by an author who started out in an obstetrical practice in the slums of a large city, dealing with obstetrics as applied to the home. Later the author combined his practice in the home with the facilities of a Lying-In Hospital which finally developed into one of the large maternity centers of the world.

The text book has been carefully written from the standpoint of the family practitioner, the surgeon, and the specialist in obstetrics. This book reflects the experiences of its author who has for many years taught medical students and has trained young men in obstetrics. Then, too, it deals with the experiences of one of the truly great obstetricians of all time, in dispensary, hospital and private practice.

A large reference to the literature has been used in preparing the text. It reflects the inspiration and subject matter of other great writers.

The author has divided the subject matter of his book into four parts: The Physiology of Pregnancy, Labor, and the Puerperium; The Conduct of Pregnancy, Labor, and the Puerperium; The Pathology of Pregnancy, Labor, and the Puerperium; and Operative Obstetrics.

This book has been brought up to date in all that is new in the field of obstetrics; such as: the operative; problems in research; anesthesia as applied to obstetrics; narcotics; and a variety of other subjects.

I recommend this text as second to none and unhesitatingly as a reference, a haven of knowledge, and a source to help solve the problems that may arise in practicing the science and art of obstetrics.

R. E. C.

Diseases of Tradesmen. By Bernardino Ramazzini (1633–1714). Together with biographical notes translated from the French of Francois Claude Mayer (1928) of Budapest and paragraphs from the preface of Dr. James (1746) of London, and of Dr. James (1922) of New York. The abstracts from the 1746 English translation of the Ramazzini work emphasize his comments on dermatological disturbances of workmen. Compiled by Herman Goodman, B. S., M. D., New York City. Medical Lay Press, New York City.

The author's recent study of a case of dermatitis occurring in an employee of a silk mill had two distinct results. It resulted in his being able to differentiate the mal de vers or mal des bassins of ancient writers from the chemical dermatitis produced by contact with the anti-mildew solution used in the silk industry. It also resulted in his becoming acquainted with the works of that great physician Ramazzini. The effect of the latter discovery was a translation of chapters of Ramazzini's book on Diseases of Tradesmen and this is given together with a delightful biographical sketch of his life. The latter part of the book is a comprehensive resume of the processes of the silk industry with particular emphasis on the causes of various types of dermatitis which are associated with it.

R. L. McI.

Annual Reprint of the Reports of the Council on Pharmacy and Chemistry of the American Medical Association for 1932. Cloth. Price, $1.00. Pp. 104. Chicago: American Medical Association.

The Council on Pharmacy and Chemistry still carries on its work of informing the medical profession concerning the new medicinal products brought out by the various manufacturers of pharmaceuticals. This volume contains the reports on products considered and rejected by the Council during the past year. Among the reports of special interest are: Amertan, an unoriginal mixture of tannic acid and merthiolate in a water soluble jelly, marketed under a proprietary, uninforming name; Antiopin, a mixture of indefinite composition offered under a nondescriptive, therapeutically suggestive name and marketed in a way that may foster the drug habit; Eubetin, another insulin substitute for oral administration marketed under a proprietary uninforming name with unwarranted claims; Ferro-Copral, a mixture of saccharinated ferric oxide, manganese citrate and copper proteinate proposed for use in the treatment of pernicious anemia and marketed under a proprietary name with unwarranted therapeutic claims; Hepatex P.A.F., a liver preparation proposed for intravenous use and marketed under a proprietary and insufficiently descriptive name with no satisfactory evidence of the safety of its recommended intravenous use; Bi-So-Dol, an unscientific "alkalinizing" mixture offered under an uninforming proprietary name with exaggerated and unwarranted claims of therapeutic usefulness; Gan-Aiden, consisting mainly of the well known ethyl amino-benzoate (benzocaine), a preparation of undeclared composition marketed under a noninforming, proprietary name; Myodin, Subidin, and Sanguiodin, unscientific preparations of iodine marketed with unwarranted claims and indefinite, incorrect statements of composition, under proprietary uninforming names and Tonikum-Roche (Now Elixir Arsylen Compositum-Roche), a "shot-gun" proprietary "tonic" marketed with misleading therapeutic claims.

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Courses in Nursing Courses in nursing are offered in the School of Nursing affiliated with the medical school. A residential course of 32 months is offered in the Wisconsin General Hospital to those who have completed a semester of specified work in the College of Letters and Science. This course leads to a certificate of graduate nurse. A residential course of 27 months is offered to those who have completed three years of college work in specified subjects either in the College of Letters and Science or in the Department of Home Economics. These courses lead to a certificate of graduate nurse and to a B. S. degree.

Graduate Courses Opportunity is offered for graduate work in the preclinical and the clinical medical sciences and in hygiene and public health. For further information address C. R. Bardeen, Dean, Medical School, Madison, Wis.

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Besides the reports on rejected articles, the volume contains "Preliminary" and "Special" reports of exceptional timeliness and value: The preliminary report on Thorotrast, a colloidal thorium dioxide preparation proposed for use in retrograde pyelography and for roentgen visualization of the liver and spleen by intravenous administration, is an excellent example of this class of reports. The articles on Nirvanol and Tri-ethanolamine are also interesting and effective preliminary reports. Among the "special" reports those on Sulpharsphenamine and Mercurochrome are outstanding. Each report definitely clears up the present status of the drug concerned, the former, on the basis of a questionnaire circulated among leading syphilologists, and the latter on the basis of independent bacteriologic investigation, done by consultants of the Council.

New and Nonofficial Remedies, 1933, containing descriptions of articles which stand accepted by the Council of Pharmacy and Chemistry of the American Medical Association on Jan. 1, 1933. Cloth. Price, Postpaid, $1.50. Pp. 498; lvi. Chicago: American Medical Association.

The annual editions of this volume contain all that the busy physician needs to know concerning the newer preparations which he is daily importuned by the detail men of the pharmaceutical manufacturers to use. The remedies listed and described here have been examined and found acceptable by the Council on Pharmacy and Chemistry, the deliberative body charged by the American Medical Association with the performance of this service for the practitioner, who has not the time or means to make the determinations for himself. Among the new preparations admitted during the past year are: Tri-chlorethlyene-Calco, an inhalation anesthetic proposed especially for use in trigeminal neuralgia; Nostal, an additional barbituric acid compound; Decholin and Decholin Sodium, bile salt preparations for use in functual insufficiency of the liver, the sodium salt being suitable for intravenous use when necessary; Biliposol, Bismo-Cymol, and Iodobismitol, bismuth compounds for use in obtaining the systemic effects of bismuth, especially in syphilis; Triphal, a gold salt proposed for use in the treatment of lupus erythematosus; a number of improved liver preparations for use in the treatment of prenicious anemia; two halibut liver oil preparations of high vitamin A and vitamin D content; and Pentnucleotide, the sodium salts of the pentose nucleotides derived from the ribonucleic acid of yeast, proposed for use in infectious conditions accompanied by a leukopenia or neutropenia.

The book contains general articles, descriptive of the classification under which the various drugs are listed. According to the preface, more or less thorough-going revisions have been made of the articles: Arsenic Compounds; Dyes, Iodin Compounds; Liver and Stomach Preparations; Radium and Radium Salts and Silver Preparations.

Medical State Board Examinations. By Harold Rypins, A. B., M. D., secretary, New York State Board of Medical Examiners. J. B. Lippincott Company, Philadelphia.

This book should be of value not only to the recent graduate preparing for state board examinations but also to practitioners who desire to review some of the fundamentals in the medical sciences. It is the result of ten years' experience in state board examination work. It is in no sense a quiz compound but is a thoughtful attempt to stress the essential in the midst of the vast amount of detail which characterizes modern scientific medicine. The subject is considered from the point of view of fundamentals of anatomy, physiology, chemistry, bacteriology, pathology, hygiene and preventive medicine, obstetrics and gynecology, medicine and surgery, essential for medical practice. The index could be improved. Thus, although hydrogen-ion concentration, or "Ph.," is briefly described in the text, neither is referred to in the index. C.R.B.

Obstetrics & Gynecology (Volume I). By 80 leading specialists. Edited by Arthur Hale Curtis, M. D., professor and head of the Department of Obstetrics and Gynecology, Northwestern University Medical Hospital, Chicago. Complete in 3 volumes and separate desk index. 3,500 pages with 1,664 illustrations, many in colors. Per set, cloth $35.00 net. W. B. Saunders Company, Philadelphia and London, 1933.

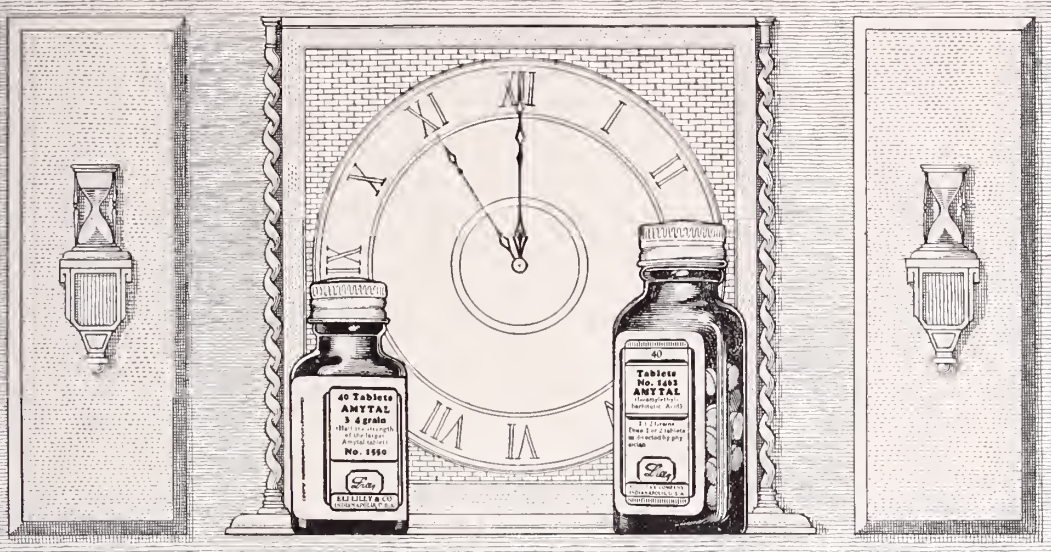
This is the first of a three volume system of obstetrics and gynecology written by American teachers under the able editorship of Arthur H. Curtis. This volume covers the fields of anatomy, physiology, embryology, normal pregnancy and labor, the newborn child and the pathology of pregnancy.

In the words of the editor the purpose of this system is to portray "what America has to tell about obstretrics and diseases of women". The present volume certainly fulfills the purpose of the editor. In thoroughness and completeness it is safe to say that it stands alone.

The reviewer wishes to commend especially the sections on the history of obstetrics and gynecology by Dr. Irving S. Cutter and the physiology of the reproductive organs by Drs. Novak and Hartman. The former is a subject that receives scant consideration in American books and the latter is without doubt the best presentation of the subject that has appeared in the English language.

The illustrations are generous in number, well chosen and beautifully reproduced. In every way the physical make-up of the book is worthy of the text.

There has been a real need for an authoritative reference work of obstetrics and gynecology in the English language and the first volume gives ample evidence that with the completion of this system this need will be adequately filled. J.W.H.



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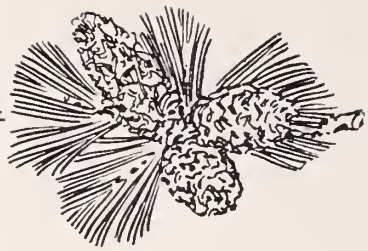

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Constitutional Factors in Disease*

By JULIUS BAUER, M. D.
Vienna, Austria

Before entering upon the subject of my talk, I want to express my deep appreciation of the high honor which you have bestowed upon me by giving me the opportunity to address your Society.

My talk is on "Constitutional Factors in Disease." As far as I know, all physicians do not have quite a clear idea about what constitutional factors really may be. I must say, constitutional pathology is frequently considered as something different than I would like to consider it.

Many men are coming to Vienna and are asking me what methods we are applying, how we are working, and they are astonished to hear that we do not apply particular methods that indicate that constitutional pathology is not a particular branch of medicine. We believe it does not require particular methods of investigation. We do not care for many measurements, in particular the anthropologic measurements which are usually used. I do not think that much is gained by taking many measurements, the more the better, and then trying to correlate the results of his measurements with the activity of the individual, with the different predispositions to diseases. I do not think that these investigations will give us more knowledge than we have today, or than the old medical men had.

I think constitutional pathology, thanks to being there always, is an integral part of the complete picture of the patient, due to the fact that the whole individual, the whole man, developed once from one fertilized ovum, and that in this fertilized ovum was everything which developed later. His organism is one unit and you cannot separate this unit into different parts which give only a sum. The organism is not a sum of organs and not a sum of functions. There exists a very intimate relationship between all organs, between all functions, and if a man has a lesion, or has impairment of one organ, or one function, he is sick as a whole. We have always to consider the whole cycle or unit of a person.

I think that is the constitutional standpoint of medicine, of pathology, and this constitutional standpoint is indispensable in order to understand many things. I hope to show you how indispensable it is in order to avoid erroneous diagnosis, and how important it is giving the appropriate treatment to a patient, and in understanding the etiology and pathogenesis of many conditions.

When I arrived in your city I found in the library of my friend, Dr. Warfield, a book by Jennings, your great biologist in Baltimore, on the biological basis of human nature. I think that every physician should read this book in order to get an appropriate understanding of what clinical medicine desires.

I would like to give you just a few examples, showing you how I wish to regard these items. Let us say, if we have to take care of a man who is complaining of palpitation of the heart, or of stinging pain in the apical region of the heart. We examine him very carefully, we find a murmur. Maybe we find, even with absolute certainty, evidence of mitral stenosis, and we make this diagnosis—mitral stenosis. Then we are right to a certain extent. Fortunately, these pathologists will not have the opportunity to judge.

In this regard I speak of a case as absolutely compensated who has not the slightest reason to show disorder of the machinery of his circulation. He has a mitral stenosis quite definitely, but he is not complaining of anything directly the result of his mitral

* Presented before 91st Anniversary Meeting, State Medical Society, Milwaukee, September, 1932.

stenosis. He is complaining of something which is superimposed upon his mitral stenosis, and which we have to consider as a nervous hyperirritability, a hypersensitiveness in a weakened part of his organism or a locus minoris resistentiae. We see this frequently. It is quite erroneous to consider treating his circulation, but this happens frequently,—at least in Vienna. I do not think it is different in other regions. This man is suffering from a nervous superimposition, and it is important to know that.

We have to deal with patients suffering from gall stones. Certainly we have to have the best methods to visualize these gall stones. We make certain the man is suffering from gall stones. But, is he suffering from gall stones? Maybe we are wrong to consider the suffering during an attack as something different from the many weeks, sometimes months and years, when the same man with gall stones does not suffer at all. Suffering from gall stones is not dependent only on the presence of these stones. It is also dependent on either some complication of these stones—the complications being due to infection of the biliary ducts, of the gall bladder or biliary vessels—or it may not be associated with any inflammatory complication, but rather to a particular tendency to spasms, contraction, colic, etc. And such a colic is released by this stone. But it is not always released. It is released at a certain time, under certain conditions, and it is released easier in a man with a hypersensitive vegetative nervous system.

You heard yesterday about the vegetative sympathetic system. I do not like to say what I would advise on account of that, but I would like to say I agree with Dr. Crile on this point, that we have much more to consider than we used to have in any discussion of sensitiveness in the vegetative nervous system. It may be a dietetic error, a tiring out, and with exhaustion the gall stones may be the releasing factor for an attack of colic. In another individual the stone may cause no trouble throughout life.

ENTEROPTOSIS

It is not very long ago that the surgeons, if they had to deal with an enteroptosis, sewed up what was to be sewed up. I just remind you of Rovsing, the great Danish surgeon. But we are not doing that anymore. Even the surgeons are not doing that, or we are doing it only quite exceptionally. It is unusual for a ptotic kidney to give rise to torsion of the renal vessels. Likewise ptotic intestines rarely cause mechanical impairment of function. The great majority of these people have complaints, if they have complaints, not on account of the presence of ptosis but on account of a constitutional make-up which is coordinated with ptosis. The ptosis is one side, and the nervous psychic lability with vegetative hyperirritability is the other side, and both are qualitative.

You heard yesterday a very interesting talk about the differential diagnosis of hyperthyroidism neuroses. No doubt it is important to make these differential diagnoses, but not always. We have to ask these questions, and not always are we able to answer, because a question has been put wrong. The question was not correct.

It is not always possible to say: Is this condition which we have to deal with really due to a simple, primary hypernervousness? May we say that means hyperirritability of the sympathetic and parasympathetic system? Which was the cause of the symptoms, and which was at the same time also the cause of a certain hyperfunction of the thyroid? That means the thyroid is unaffected, just as an affected organ of the vegetative nervous system, as other glands, as the stomach or sweat glands, or endocrine glands are. And it may be that these hyperfunctions of the thyroid are a consequence, and, on the other hand, it may be they are a primary cause.

I speak of neurothyrosis, or thyroneuroses —and it means we are not able to separate the two factors, and that, therefore, from the constitutional point of view it does not make a great difference which is the first—the thyroid, or the vegetative nervous system—the hen, or the egg.

ALLERGY

You heard yesterday a great deal of very interesting matter on allergy. No doubt allergic conditions are of the highest interest, and of the highest importance, and you heard also something about their differentiation from neurotic conditions. It may be that we are not quite right to always make this differentiation, and we see not infrequently that a condition starts as an allergy, no doubt, and that it is continued on account of the physiological principle of the facilitation of reflexes. What we call in German, Bahnung—the facilitation of reflexes, or, conditioned reflexes. We see a neurotic continuation of something which had been allergic. First, allergy, then nervous superimposition, or continuation, then you get the mixture, which is very difficut to understand, if you do not take into account the whole personality of the person.

INFECTIOUS DISEASES

We are too much inclined to consider all differences in infectious diseases the result of differences in the germs. We think every different disease, every different infectious disease, mut be due to a different germ, but we have learned in the last few years something that would have been quite incredible when I studied medicine—that the streptococcus viridans, streptococcus haemolyticus, even pneumococcus, may originate from one and the same strain. Also that you can transform one into the other, dependent on the culture medium used.

The culture medium is of more importance than we usually assume. The different types of tuberculosis which we have to deal with are not due always to different germs, to different types of Koch's bacilli, with different qualities. They are just as much due, or much more, to different types of media.

Dr. Bauer concluded his lecture with a discussion of a number of slides illustrating his conception of the constitutional factors in a varied group of diseases.

Some Lessons Learned From Our Mistakes*

By JOHN C. DOOLITTLE, M. D.
Lancaster

At this meeting, where we are privileged to hear many splendid constructive addresses, it is with some reluctance that I present my pessimistic topic, and I hasten to assure you that it is foreign to my nature because I am an optimist first, last, and always, but I believe that I may be of more service by a frank discussion of some of our mistakes with the hope that it may aid some of you in avoiding these pitfalls.

Like the golfer on the first tee, or the good wife when you bring company for dinner, I will preface my remarks with an apology. All of the mistakes I will mention were not made by myself, but, on the other hand, I must confess I have made some that I dare not tell you about.

I have observed many errors in the handling of drainage material and will cite a few instances. A boy, seventeen, was seen in consultation and found to have a very extensive empyema. He was immediately taken to the hospital where I resected a rib and placed two rubber tubes, ten inches long and a half inch in diameter, into the pleural cavity. These tubes were anchored with a silkworm suture grasping tube and an inch of skin and muscle on either side. Everything went well until about the tenth day, when I did the daily dressing, I was indeed surprised to find one tube missing. I put the boy under the fluoroscope and there was my tube in the bottom of the pleural cavity. Well, I took a long dressing forceps and went fishing for the tube, and, if you have never tried it, I will tell you that it is no easy job. Though he was but a medium sized boy, I can swear his pleural cavity was as big as a barrel. I finally landed the tube, and perhaps you have landed a big trout or bass, but the thrill is insignificant compared to the one I had when I finally got that tube

* Presented before 90th Anniversary Meeting, State Medical Society, Madison, September, 1931.

out of the wound. I naturally felt that I was the biggest D— Fool in practice and I confided my trouble to a few of my colleagues and was surprised to find four similar instances in talking to but six surgeons, and one of these gentlemen showed me an x-ray film of a case where he had been unable to recover the tube, and the patient, a young man, had worn it several years with no apparent detriment to his health.

Another case had been operated upon in the city for an extensive infection of the hand and came under my care for dressings. The hand was doing well but refused to heal after many days, and on further investigation I discovered a three-inch split tube lost in the wound. A similar case was one of a leg operated upon for osteomyelitis and months later eight inches of rubber tube was removed. You are all aware of these occurrences, but the thing to remember is that they actually happen and are going to happen again, so be sure it does not happen to you.

Do not depend on anchorage of your drainage material with sutures because an infected wound will soon macerate the skin and your sutures may cut through. Use good live rubber if you are using tubes and put a safety pin in the end of the tube larger than the wound opening and you will never have this trouble.

SPONGES

You know all about sponges and other foreign material left in the abdomen, but allow me to remind you that it does occur and will continue to happen. I could cite many instances of sponges, towels, and instruments being sewed up in the abdomen, but am thankful that it has never occurred in my small surgical practice. One of my friends is now being threatened with suit for leaving his glasses in the peritoneal cavity. He has never worn glasses, neither do his assistants, but six years after a laparotomy a piece of glass worked out of the wound, and this resembled a lens from spectacles. This surgeon now not only has a careful sponge count but checks up on overcoats, umbrellas and collar buttons.

I employ a sponge rack and the surgical nurse puts as many hooks on rack as she puts out sponges. The used sponges are put on the hooks in plain view and in this way you do not rely on the count of two or more nurses. As an added precaution I use laparotomy sponges three feet long and on the end of each sponge is sewed a pearl button the size of a half dollar, and there was once when this saved me much anxiety. Our sponge count was one short and I looked everywhere including the abdomen, but could not find it, so I closed and put the patient under the fluoroscope and could find no button so felt safe. My regular surgical nurse was on her vacation and she was short one sponge in a package but had plainly marked it one short, but we had not noticed this.

The injection of pituitrin, for post-operative intestinal stasis. Is this or is it not a mistake? I am bringing it up as there is much difference of opinion on this subject. Many of our leading surgeons advocated it some time ago and now many condemn this practice, although I must admit that it has seemingly been of great benefit in my small surgical practice. I can readily understand why it would be inadvisable if you have more or less real obstruction because increased peristalsis means increased oedema and irritation, and increased obstruction.

But in your clean cases where you have that vicious circle of paresis and distention, caused by prolonged Trendelenburg position or excessive handling of the viscera, it seems to me that pituitrin is indicated as it helps restore the tone that you need so badly.

My procedure has been, if the usual enemata do not get results, to use hot turpentine stupes and give an enema of hot milk and molasses, and if this fails I repeat the process, give lc.c of surgical pituitrin, and I have had few failures. I have performed enterostomy four times where it failed and all made good recoveries. Recently I had a case of fracture of the spine at the level of the fifth dorsal vertebra, with complete sensory and motor paraylsis below this level. I was able to get satisfactory bowel movements by the use of pituitrin and this has proved conclusively to me that the action is directly on

the unstriped muscular fibers. I would certainly welcome discussion of this subject by some of you men of more experience.

Speaking of peristalsis, are you aware that many doctors give castor oil for the belly-ache or so-called "acute abdomen"? I find it to be a rather frequent practice.

Do you remember a few years ago one of our best known surgeons was down east and he developed a severe belly-ache. What did he do? He immediately took a good dose of castor oil. The next day he was operated upon for gall bladder trouble and the next day for appendicitis where they found the trouble. Yes, indeed, it is human to err and none of us are angels.

One evening I was called in the country and found a girl aged three years with a history of moderate cold for two days, who a short time before I arrived had been seized with a severe convulsion. She was semi-conscious, temperature 102, pulse 150 and respiration 70 and very laboured. She was cyanotic and everywhere over her chest were coarse and fine moist rales with very little air entering the lungs. My diagnosis was severe broncho-pneumonia. I gave a poor prognosis and sent them several miles to get a nurse. On visiting this patient early next morning I found her at breakfast and quite well and it was not until then that I realized I was dealing with a case of bronchial asthma. You probably think the differentiation should have been easy, but when you consider that this was her initial attack and there were none of the typical asthmatic breath sounds present I believe it would have deceived many of you.

The favorite nurse of one of Chicago's leading surgeons comes from my home city. Last summer she was home on her vacation when she was called back to Chicago because this Doctor's daughter was very ill with pneumonia. When she arrived in Chicago the child was about well and this case proved to be parallel to the one I have described. Several famous internists had seen this child and missed it. If confronted with a similar case. I should give a small dose of morphine and atropine with a few drops of adrenalin, and if asthma was a complication would expect rapid improvement.

GUARDING THE PROGNOSIS

Early in my practice a man came to me with a cauliflower-like growth just above the angle of the jaw. It was of two months' duration, progressing rapidly, and involved the cervical glands and inside of cheek. It was a typical clinical picture of carcinoma and I called in an older doctor and he agreed with me. I sent him to Dr. A. J. Ochsner and his diagnosis was inoperable carcinoma and in his opinion his expectancy was eight to ten weeks.

He returned to me and I dressed it daily, keeping it clean and using bland ointments. To make a long story short, in ten weeks he was completely healed, quite well, and died of other causes twenty years later, never having had a recurrence. Of course this was a case of mistaken diagnosis or one of those rare instances of spontaneous healing. I believe it was the latter. Wouldn't he have been a dandy for a chiropractor or some other cultist?

Yes, it is well to be guarded in our prognosis and other remarks to our patients, as we are often misunderstood and various and serious complexes are often set up in the minds of our patients that last a lifetime. You have all had patients tell you that some good old Doctor years ago had warned them to be careful of their weak heart, kidneys or what not and this poor patient had been labouring under this complex for years when you find the suspected trouble was only a myth.

Sick people rapidly revert to childhood, and usually the stronger and more virile the patient the more infantile they become. Remember that a proper balance of kindness, cheerfulness, sympathy and encouragement is wonderful medicine. I know, having been seriously ill several times, that I would almost as soon die under the care of certain Doctors as get well under the care of others. Suggestion and faith do play an important part. Crile, in a study of forty so-called remedies for toxic goiter, all of which were admittedly worthless, found that a ma-

jority so treated showed temporary improvement, due to faith and relaxation of the nervous tension. Of course there was no lasting benefit, but it simply goes to show that these measures may help your patient get a toe hold that will be a distinct adjunct to proper therapy.

APPENDICITIS

This common malady, that the laity now accepts with little seriousness, offers many chances for errors and I will tell you briefly of some of my own. Rather early in my practice I was called in the country to see a female aged thirty, complaining of severe general abdominal pain. History revealed that she had a self-induced abortion one week before. Temperature was 100 and pulse 100 and pelvic examination was difficult on account of tenderness. There was no vomiting and no nausea. Although the pain and tenderness were more marked over the right lower quadrant, I ruled out appendicitis because the lectures of that great teacher J. B. Murphy were fresh in my mind and many times I have heard him emphasize that always in acute appendicitis you have pain, nausea, vomiting, elevation of temperature and leucocytosis, and always in that order. My patient became much worse and a couple of days later I opened her abdomen in her home. She died on the table and my investigation revealed that it was a simple ruptured appendix with no pelvic disease demonstrable. There was no vomiting nor trace of nausea at any time in her illness, and I believe that had this lady vomited or at least had been nauseated her life would have been saved. I have seen other cases where there was little or no vomiting if operated very early but that is the only instance of the kind in my experience without nausea. One other case of mine came to a fatal end because I was unable to make a proper diagnosis. This case was one of a fine boy of twelve, who started with an enteritis at the season of the year when it is so common. Stools were very frequent and contained traces of blood and much mucus and it was too late when I discovered that he had a ruptured appendix accompanying this condition.

Some years later I had a boy of ten who had eaten a large amount of white grapes. He was seized with nausea vomiting and a profuse diarrhoea. His pain was severe and tenderness more marked over McBurney's point, so remembering my former experience, I took him to the hospital and put him on the so-called Ochsner treatment and a week later opened an appendiceal abscess and his recovery was uneventful.

HEROIC TREATMENT VERSUS MASTERLY INACTIVITY

Each has its distinct place in treatment, and many errors are committed by choosing the wrong one. You have all seen cases of ruptured appendices and perforated gastric ulcers that did not appear half as ill as a kid who had eaten green apples. It is sometimes a great temptation to temporize and wait, especially if the case is somewhat obscure, when in reality death is but a few hours away unless heroic treatment is instituted. On the other hand there are many desperate cases that are not doing as well as we wished and we are liable to become panicky and embued with the spirit of moving mountains and exhibit all the means known to science in our attempt to keep the slender thread of life intact, when in reality our repeated insults to an already worn out and much shocked system may be the means of breaking this slender thread. He who has not erred in this respect is a master indeed.

We Doctors make many mistakes outside of our practice and as I look over you men I can frankly say that you appear to be an intelligent bunch of fine fellows, but we cannot deny that to the grafters, con-men, solicitors and super-salesmen we are first on the sucker list and known as the champions of chumps. This is perhaps due to the fact that we usually have a little money, and as our stock in trade is trouble and we see so much of the morbid side of life, we may take life less seriously or at least take our money less seriously.

If the church needs a new roof, a road is to be built or the kids need new baseball suits, whom do they see first? The Doctor and I heartily approve of this type of phil-

anthropy. If you play the stock market or the ponies I say that it is O. K., as you know or should know that you are sure to lose but you get some fun for your money. What I resent is the super-salesman who attempts to make a sucker of us for a gold brick whether it be for blue sky stock or some miracle working equipment or remedies. We are often as gullible as the laymen purchasing their snake oil at the medicine show on the corner. But I do believe we are becoming wiser and have hopes that we may soon be moved down the list. Personally I have developed a sales resistance to the point where I fear I may miss some good things. Remember that the fads of today are often the jokes of tomorrow.

We all make a great mistake by not giving better cooperation to the A. M. A. Council on Pharmacy and Chemistry. This is an important branch of our organization and we are paying considerable money for its functioning. I would like to see this service extended and believe all Council accepted products should be so labeled. This would be a great help in driving out the manufacturers of spurious nostrums and would guarantee us that we were using drugs and chemicals of the highest standard and up to label.

Now my latest, but I hope not my greatest, mistake was to take twenty minutes of your valuable time with this heterogenous mass of incongruity, for which I ask your forgiveness.

The Use of Cortin in a Case of Acute Hypo-adrenia Occurring as a Sequela of Acute Streptococcic Sore Throat

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The discovery of the active principle of the cortex of the adrenal gland by Hartman and his collaborators,[1] and later by Swingle and Pfiffner,[2] will, to my mind, result in a most valuable addition to the practicing physician's glandular, therapeutic armamentarium. Only now are we begining to understand the extensive influence of the adrenal glands on the physiological function and the control of many of the physiological activities of the body. This new understanding is the result of the many recent investigations made upon the functions of the adrenal glands.

The stimulus toward these investigations came, perhaps, from the researches of Wheeler and Vincent,[3] who were the first to prove that the medulla was not essential to life.

The next step forward was necessarily the preparation of an extract of the cortex of the adrenal gland containing the hormone which is essential to life. This extract should contain a sufficient amount of hormone to replace that secreted by the adrenal glands, and should be free from epinephrin, particularly if the extract is to be concentrated.

Rogoff and Stewart,[4-5] in October, 1927, described two preparations of the adrenal cortex; one, a simple 0.9 per cent Nacl extract and the other a glycerol extract. These preparations were administered to adrenalectomized dogs. Their report did not give the average survival of treated animals as compared to that of controls. However, of thirty dogs treated, six lived longer than the longest lived of the control animals. The amount of material which could be injected was limited, because the methods which were used did not eliminate the epinephrin from the extracts.

The next preparation is that of Hartman, MacArthur, and Hartman,[1] who in October, 1927, described, for the first time, a method of preparing an epinephrin-free, suprarenal, cortical extract. With this preparation they were able to increase the survival period of completely adrenalectomized cats from an average of six days for the controls to an average of twenty-one days for the treated animals.

In March, 1930, Swingle and Pfiffner,[2] described a method of preparing a concentrated suprarenal, cortical extract of sufficient potency to maintain the lives of adrenalectomized cats indefinitely.

In June, 1930, Hartman and Brownell,[6] described a simpler process for the preparation of an adequately concentrated suprarenal cortical extract.

In October, 1931, Swingle and Pfiffner,[7] described methods for the preparation of a more highly concentrated form of cortical extract, (one c.c. of which is equivalent to thirty grams of cortex or the entire amount of cortical material from two steers) which contains less than one part of adrenalin in 4,000,000. They also reported the fact that extracts made from whole adrenal glands are active and will restore, to apparently normal condition, cats prostrate with adrenal insufficiency.

PHYSIOLOGICAL FUNCTION OF THE ADRENAL GLANDS

The discovery of the active principle of the adrenal cortex has resulted in an increase in our knowledge of the physiological functions of the suprarenal glands. Completely adrenalectomized animals can be kept alive indefinitely, and their physiological reactions studied when they are under the influence of various amounts of cortical extract.

A resume of the experimental work of Hartman, Bowen, Thorn, and Greene,[8] follows: Adrenalectomized cats treated with adequate cortin eat well, gain weight, play and fight. One female came in heat and became pregnant. The reduction of extract caused loss of appetite and bloody feces in two animals, and bloody urine in a third. Increasing the dosage of extract caused complete recovery in all cases. Large amounts of extract have not resulted in overdosage phenomena. Cortin is essential for normal growth. Young rats grow slowly or fail to grow at all if both adrenal glands are removed. Operative wounds and other traumata heal slowly if an insufficient amount of cortin is administered to the animal. Cortin is essential for normal heat production; rats produce from ten to twenty-five per cent less heat after adrenalectomy. Cortin raises the resistance of adrenalectomized animals to bacterial toxins, (Hartman and Scott,[9] Perla, and Marmorston-Gottesman[10]).

CASE REPORT

On the afternoon of April 7, 1932, the patient began to have symptoms of general malaise, aching pains throughout the body, headache and slight sore throat. There was no cough or expectoration, nor were there symptoms referable to the central nervous, cardiovascular, gastro-intestinal, or genito-urinary systems. The patient had made a complete recovery three days previously from an attack of acute appendicitis, which had not been operated upon. Physical examination revealed the following pertinent points. Patient was a young white adult female, about 25 years of age, well developed and well nourished. Temperature 99.6, pulse 90, respirations 20. The mucous membrane of the nasal cavity was inflamed and congested, the tongue coated, the pharynx, and tonsils inflamed and the tonsils enlarged. *Neck:* No rigidity, no abnormal pulsations, a few enlarged cervical lymph nodes. *Chest:* Well developed, expansion good and equal, resonance normal throughout, breath sounds normal, no rales. *Heart:* Normal size and position, no thrills or murmurs. *Abdomen:* Soft, no tenderness or rigidity, no masses. *Neuro-muscular:* Reflexes normal, no paralysis. Treatment advised was symptomatic, gargle, salicylates, etc. At 10 P. M. the patient was seen again. At this time the temperature was 104.6, pulse 120, respirations 24. She was extremely toxic. There was inflammation and edema of the pharynx with a beginning membrane formation over the left tonsil. The heart, lungs, and abdomen revealed no pathology to examination. The diagnosis at this time was very evidently acute streptococcic sore throat. The patient was put under the care of a competent trained nurse.

April 8: The patient was extremely toxic, temperature 104, pulse 124, respirations 30. There was an extensive membrane on the left tonsil with deep friable ulcers in the surface of the tonsil. The entire pharynx was edematous and inflamed. The nasal mucous membrane was inflamed and congested. The heart and lungs revealed no pathology. Blood pressure 114 systolic, 76 diastolic. A smear and culture from the nose and throat were negative for diphtheria but showed a heavy growth of streptococci. Blood count: Hb. 70 per cent, R.B.C.'s 3,800,000, W.B.C.'s 23,000, with 97 per cent of polymorphonuclear leucocytes. Urine showed a trace of albumin, no casts, pus, or red blood cells. *April 9:* The patient's condition was practically unchanged. The temperature ranged between 104 and 105.6. Symptomatic treatment. *April 10:* The temperature still remained above 104, the pulse ran from 110 to 126, respirations 26 to 30. The patient still remained extremely toxic. The heart and lungs revealed no pathology. Blood pressure 110 systolic, 70 diastolic. The pharynx was less edematous but the patient was able to swallow with more comfort. The patient had developed an erythematous rash much like that of scarlet fever with petechial hemorrhages scattered over the surface of the body, especially where there were folds or creases

in the skin. She had developed excruciating pain upon movement of almost every joint in the body. Examination of the joints revealed tenderness but no swelling or inflammation. *April 11:* The temperature ran between 101.6 and 103, and the pulse 100 to 110. Blood pressure was 114 systolic, and 78 diastolic. The pharynx, both objectively and subjectively, was very much improved. The joint pains remained about the same while the rash showed signs of improvement. The urine was loaded with albumin, pus, red blood cells, and contained many coarsely granular casts. Blood chemistry: N.P.N. 75 mgs. per 100 c.c of blood, W.B.C.'s 32,000 with 98 per cent of polymorphonuclear leucocytes. *April 12:* The patient's temperature ran between 101 and 102, pulse from 90 to 100. The pharynx and tonsils were very much improved. The rash was fading and the skin was peeling. The pain upon movement of the joints was improved with the exception of the right shoulder. The urine was still loaded with albumin, pus, R.B.C.'s, and coarsely granular casts. There was no edema or shortness of breath. However, the patient complained of being extremely weak, she was nauseated, and had aching pains in the loins. The blood pressure was being watched closely because of the apparent kidney involvement. The morning reading was systolic 65, diastolic 45. *April 13:* The patient was irrational and showed signs of mental depression. She was continually nauseated and the vomiting was profuse. There was extreme exhaustion, she was unable to lift her arm off of the bed, or her head from the pillow. There were severe aching pains in the lower part of the back and the hips. There was no desire for food of any kind. The temperature ran between 98.6 and 99.8. The joint pains had entirely disappeared except for the right shoulder. Tonsils and pharynx were normal to examination. The urine showed a trace of albumin with an occasional hyaline cast, no pus, no red blood cells, and no granular casts. Blood pressure was systolic 55, diastolic 35. The Muirhead treatment for adrenal insufficiency was started. Blood pressure could be brought to 80 systolic immediately after an intravenous hypodermic of adrenalin. *April 14:* Blood pressure readings were between 60 and 80, systolic. Marked anorexia and extreme nausea and vomiting. She was becoming very much dehydrated. Marked exhaustion and mental depression. Severe pain in the loins. Small amounts of highly concentrated urine obtained by catheter. Urinalysis: Specific gravity, 1.042, no albumin, no pus, no R.B.C.'s, and no casts. Dr. Hartman, of the University of Buffalo Medical School of Buffalo, New York, was communicated with in an effort to obtain a supply of cortin for clinical use. *April 15:* The patient's condition was very grave and little hope was held for her recovery from the moribund state which she had reached. Blood pressure could not be brought up above 60 systolic, in spite of seven ampules of 1:1000 adrenalin chloride given hypodermically in addition to the ordinary Muirhead treatment. *April 16:* Condition was practically the same as the day before. Blood pressure 60 systolic, 40 diastolic. The patient could only be roused with difficulty from her lethargic condition. At 10 A. M., seventy c.c. of cortin arrived from Dr. Hartman's laboratory. The patient was given 5 c.c., every six hours for the first twenty-four hours. Following the second dose of cortin the patient's blood pressure had risen to 110 systolic, and 70 diastolic. The patient's mental condition had changed entirely in the course of a few hours. She was hopeful instead of depressed. Nausea had entirely disappeared and she took large amounts of liquids by mouth. She mentioned hunger for the first time in several days. *April 17:* The patient's general condition was improving rapidly. Temperature was normal, pulse 84, blood pressure 100 to 114, systolic. No nausea or vomiting and the appetite was good. Pain in the lower part of the back had entirely disappeared. Cortin 5 c.c. b.i.d. *April 18:* The patient's condition was good, she wanted to get out of bed. Blood pressure 100 to 120 systolic, and 70 to 80 diastolic. *April 20:* Condition was good. The patient was out of bed for a short time. She was gaining strength and ambition. *April 22:* Subjectively and objectively the patient was very much improved. All local signs of infection had disappeared. N.P.N. 32 mgs. per 100 c.c. of blood. Urine showed no albumin, pus or R.B.C.'s, or casts. The last dose of cortin was administered. The patient's condition was sufficiently improved so that she was able to travel by train about 50 miles to her home. Before the development of this illness the patient weighed about 115 pounds. Her estimated weight at the time that she left for her home was approximately 90 pounds. *May 4:* The patient found that she tired easily but that she was gaining strength slowly. Blood pressure 114 systolic, 76 diastolic. Blood count Hb. 85 per cent, W.B.C.'s 7,200, 65 per cent of polys. Urine was negative for albumin, pus, R.B.C.'s or casts. Weight 96 pounds. *June 6:* The patient was still quite weak but had gained sufficient strength to do part time work. Weight 104 pounds. Blood pressure 118 systolic, 76 diastolic. The patient was losing her hair from the scalp in large patches and she was also losing all of her finger nails. Urine was negative for albumin, pus, R.B.C.'s and casts. Hb 90 per cent, W.B.C. 7,500. *June 15:* The patient's general condition was very good. She was doing full time work and able to play tennis and golf. Hair and finger nails were coming in normal. Weight 110 lbs.. Blood pressure 118 systolic, and 87 diastolic. *July 25:* The patient's condition was very good. Weight 112 lbs. Blood pressure 122 systolic, and 84 diastolic.

SUMMARY OF CASE REPORT

A case of acute streptococcic sore throat is reported, with the following complications in the order of their occurrence: First, a severe scarlatiniform toxic rash with many

petechial hemorrhages. Second, severe toxic joint manifestations characterized by severe pain upon movement with no signs of inflammation or swelling. Third, a marked toxic nephrosis characterized by urinary findings of albumin, pus, R.B.C.'s, coarsely granular casts, and a retention of non-protein nitrogen of 75 mgs. per 100 c.c. of blood. Fourth, definite damage to the adrenal cortex as evidenced by the low blood pressure, anorexia, nausea and vomiting, loss of weight (20 lbs.), characteristic pain in the loins, mental depression, definite temporary mental changes, extreme weakness and exhaustion.

DISCUSSION

"Apart from the lesions of Addison's disease and neoplasms, the adrenals are not often the seat of disease of clinical interest." This quotation from Stevens' Practice of Medicine[11], portrays the general concept of the medical profession in relation to the involvement of the adrenal glands as a result of acute infectious diseases. There are three pairs of suprarenal arteries; a superior from the inferior phrenic, a middle from the aorta, and an inferior from the renal. Thus, this small gland weighing about seven grams has three well developed arteries and consequently a very rich blood supply. The kidneys are frequently involved, by way of the blood stream, secondary to acute infectious diseases or foci of infection; both seriously, in the form of acute nephritis which frequently eventuates in chronic nephritis, and less seriously, in the form of acute nephroses. One of the three blood vessels of the adrenal gland is a branch of the renal artery, so that any toxins or bacteria which reach the kidney and cause damage there have an equal opportunity to pass through the adrenal glands. There is no basic reason for believing that the tissue of the adrenal glands is more resistant to infections and toxemias than any other gland in the body. Degenerative changes such as cloudy swelling and fatty degeneration do occur in the adrenal tissue. These considerations make me believe that many of the symptoms such as weakness, exhaustion, pain in the back, gastro-intestinal disturbances, slow convalescence, loss of weight, etc., which often occur in association with acute infectious diseases may be due in part to unrecognized adrenal insufficiencies.

The use of cortin has not been satisfactory in the treatment of typical Addison's disease where there is an extensive and permanent damage to the adrenal glands consequent upon tuberculosis or neoplasm. This is, in a large measure, due to the fact that the therapy is merely replacement in nature, since the pathology involving the gland is permanent and usually progressive.

Rowntree, Green, Ball, Swingle, and Pfiffner,[12] report the results of treating twenty cases of typical Addison's disease with cortin. Their results were as follows: Group I: One case died in spite of apparently adequate treatment. Group II: Consisted of two cases who were in a moribund condition upon arrival at the hospital and died before adequate treatment could be administered to them. Group III: These five cases made a partial response to treatment while they were at the hospital but have required continuous treatment since leaving. Group IV: Consisted of three cases who showed an excellent response to treatment while they were in the hospital but have died since in crises, because of the lack of treatment. Group V: These nine cases are reported as showing satisfactory results, but they have all required some type of weekly treatment. Thus, we have a group of twenty cases treated with six deaths, five reported as unsatisfactory, and nine reported as satisfactory but all of which required some type of continuous treatment. This group of workers also report the results of treating twenty other cases by using cortical extract, suffering from various conditions; all with negative results.

The results of treatment, with cortical extract, of the case reported and those cases of typical Addison's disease, differed in only two respects. First, the blood pressure of the case reported returned to normal limits and has been maintained there. Second, she has required no treatment for over three months and has steadily improved. For these reasons, and because the kidney com-

plications cleared up so promptly, I feel that the damage to the adrenal glands was toxic and temporary, and that no permanent pathology has resulted. However, I believe that the cortin was essential to maintain life during the temporary abatement of the function of the adrenal glands.

What is chronic hypo-adrenia? There is a large group of patients whom I have come to the conclusion are suffering from chronic hypo-adrenia. They complain of a characteristic group of symptoms such as: slightly lowered blood pressure, 90 to 110 systolic, lack of energy and ambition, rapid fatigue on exertion, vague gastro-intestinal symptoms with no pathological background, mental depression, etc. The usual diagnosis in these cases is neurocirculatory asthenia. I have been treating these patients with whole gland adrenal substance with fairly encouraging results.

CONCLUSIONS

1. A case of acute hypo-adrenia as a complication of acute streptococcic sore throat is reported.

2. The results of treatment with cortin in this case were very satisfactory.

3. It is suggested that acute hypo-adrenia may occur more often than we usually believe.

4. If chronic hypo-adrenia is a definite entity, cortical extract may prove of extreme value in combating its distressing symptoms.

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Splenectomies; Report of Four Cases

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The following report of four cases of splenectomy for traumatic rupture of the spleen may be of interest to the readers of the Journal, firstly, because of the rarity, and secondly because of the end results to date.

Case No. 1. January 18, 1929, a boy nine years old, while coasting in one of our natural parks, was thrown violently against a tree. Though severely stunned, he was soon able to walk and was taken by his playmates to a Doctor's office, where, after examination, was allowed to return home, as the examination revealed no disturbance at that time.

About 9 P. M., five hours after the accident, he became restless, slept at short intervals, complained of difficulty in breathing, and pain in the abdomen. I was called about 5:30 A. M., thirteen hours after the accident. The boy appeared very ill, pale, respirations rapid and labored. Temperature 101°, pulse 130. Abdomen rigid and distended. The pa-

tient was taken to St. Elizabeth Hospital, x-ray negative for any fractures, but showed fluid, thought to be blood in abdominal cavity.

Exploratory laparotomy under gas and ether anaesthetic was done, which showed the abdominal cavity to be filled with blood and on further examination this was found to be coming from the spleen. The spleen was found to be ruptured in three places, each penetrated through the entire depth of the gland. A splenectomy was performed, abdomen closed without drainage. Patient returned to bed, was given hypodermoclysis of 1000 c.c. normal saline three times daily the first forty-eight hours. The patient had a very stormy convalescence the first seventy-two hours. Thirty hours after the operation the patient appeared listless, refusing liquids of any kind, low temperature—97.5; pulse rapid—150. He was given spleen extract gr. V, every two hours for four doses, then every three hours. With other stimulation he improved and called for food eight hours after beginning treatment. Made an uneventful recovery and left the hospital on the sixteenth day.

It is three years and nine months since the operation, and the boy is apparently normal in every way. Teacher reports him an average student in his school work.

BLOOD FINDINGS:

Date	1-18-29	1-20-29	1-24-29	1-29-29	2-2-29	8-29-29	9-29	10-3-32
Hemoglobin	80%	70%	70%	70%	70%	60%	65%	85%
Red Cells	3,120,000	2,700,000	2,780,000	3,210,000	3,220,000	3,140,000	3,750,000	4,020,000
White Cells	17,400	14,500	13,100	16,000	9,100	7,300	4,000	13,400
Poly Neutrophil	83%	61%	75%	61%	58%			28%
Eosinophil				1%	2%			6%
Basophil				1%	5%			
S. Lymphocytes	13%	37%	16%	29%	27%			59%
L. Lymphocytes	4%	2%	8%	6%	6%			7%
Mononuclears				2%				
Endothelials			1%					
Color Index	1	1	1	1	1			1

Case No. 2. Boy age seven years brought to me at St. Elizabeth Hospital on May 5, 1929, by one of my colleagues—Dr. Dehne. History of falling from roof of the porch, a height of about ten feet. Patient was in shock, very restless, upper and lower extremities cold. X-ray negative, blood count suggested active hemorrhage. On examination abdomen was slightly distended, marked tenderness and rigidity. The abdomen was explored under gas and ether anaesthetic and was found to contain a large quantity of blood. Further examination showed the blood to be coming from the spleen which was badly ruptured, being almost severed in the center, with two other tears leading out from the center. A splenectomy was done. Abdomen closed without drain. Hypodermoclysis 1000 c.c. twice daily for forty-eight hours. Liquids by mouth freely with 5 grs. of spleen extract as soon as tolerated. Patient made a very good recovery, leaving hospital on the thirteenth day.

I am of the opinion that this boy's rapid recovery was due to the fact that only about five hours elapsed between time of accident and operation, while in case No. 1, fifteen or sixteen hours elapsed between accident and operation.

BLOOD FINDINGS:

	5-29		6-3	6-10	6-19	9-24-32
Date	5:30	6:00				
Hemoglobin	65%	55%	60%		65%	85%
Red Cells	2,550,000	2,800,000	3,180,000	3,240,000	3,080,000	4,160,000
White Cells	13,100	17,700	6,700	6,900	8,100	7,500
Poly Neutrophil	88%	92%	69%	69%	69%	37%
Eosinophil	2%		6%	1%	4%	6%
Basophil	1%					2%
S. Lymphocytes	4%	8%	17%	30%	18%	49%
L. Lymphocytes	5%		7%	1%	9%	6%
Mononuclears			1%	1%		
Color Index	1	.9	.9		1	

Case No. 3. Boy age twelve years. On January 11, 1932, while coasting, struck a tree and was but slightly stunned, walked to his home about fourteen blocks away. Complained of severe pain in his left shoulder which was treated by his mother with home remedies. About twenty-six hours after the accident, the pain in the shoulder became so severe that the boy's general appearance caused his parents to call for medical assistance. I saw the boy at his home twenty-eight hours after the accident. He appeared to be very ill. Examination of shoulder showed no limitation of motion, in fact not any pathology that could be demonstrated by physical examination. The boy's extreme pallor and anxious expression convinced me that the trouble was somewhere else. On being questioned he said that his "belly felt tight." On examination that abdomen was found to be distended, some rigidity and tenderness, but not nearly as marked as in the previous cases. Patient was taken to hospital at once. X-ray showed apparent fluid in the abdominal cavity. Blood count was indicative of an internal hemorrhage. Exploratory laparotomy demonstrated large amount of free blood in abdominal cavity. Exami-

nation showed the source of hemorrhage to be the spleen which was ruptured in a "star" like fashion through the center of the gland, with a very active hemorrhage. Splenectomy was performed. Abdomen closed without drain.

After treatment—hypodermoclysis as required, liquids and spleen extract by mouth as soon as tolerated. Had a very stormy convalescence. For the first 36–48 hours, temperature rising to 105, pulse 160 with delirium. This condition was due in all probability to length of time intervening between accident and operation. However, after forty-eight hours he made a very satisfactory recovery. Was discharged from hospital on the seventeenth day following operation and has been in good health since that time—9½ months ago.

BLOOD FINDINGS:

Date	1-11-32	1-12-32	9-24-32
Hemoglobin	74%	74%	88%
Red Cells	2,940,000	2,820,000	3,860,000
White Cells	11,900	11,500	6,700
Poly Neutrophil	80%	85%	51%
Eosinophil			3%
Basophil			1%
S. Lymphocytes	8%	10%	29%
L. Lymphocytes	12%	5%	16%
Color Index	1	1	1

Case No. 4. Saw boy of thirteen years with Dr. Flanagan of Kaukauna.

History of boy falling from milk wagon, rear wheel of same passing over body above umbilicus, about two hours previous to his entry in hospital. Boy was in extreme pain. Appeared very ill. On examination the abdomen was markedly distended with tenderness and rigidity, very pronounced. Red count 3,100,000. White count 19,000. A tentative diagnosis of ruptured spleen was made. Abdomen was opened and found full of fresh blood, the source of which found to be the spleen. The spleen was found to be almost torn in two. Splenectomy was done by Dr. Flanagan. Abdomen closed without drain.

After treatment—hypodermoclysis, spleen extract with liquids freely. Patient made very satisfactory recovery until fifteenth day when he developed tetany which responded to treatment very nicely.

This case is as yet too "young" to say what the outcome may be, but, judging from the three previous cases, I am very optimistic.

SUMMARY

These cases are of interest due to the fact that the four cases happened within three years and nine months, all of them young boys from eight to thirteen years, two of which were coasting accidents, both late in surgical attention, both had a stormy convalescence; the other two injured in fall, receiving surgical treatment within a short time, both making a rapid recovery. Will be pleased to report the progress in these cases to those interested.

Psittacosis in Madison

By NORMAN THOMAS, M. D. and
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Madison

Several epidemics of psittacosis were reported in the United States in the fall of 1932 with their origin definitely traced to an infected aviary of a zoological garden in southern California. Cases were reported in Kansas City, Portland, New York City, Chicago, Boise, Madison, and various cities in the states of Michigan, Massachusetts, New Jersey, and California, which latter state alone reported fifty-four cases with ten fatalities. A survey of this epidemic disclosed that more women contracted the disease than men, although it is thought that they are not more susceptible but that this predominance among women is accountable to the fact that they usually care for the love birds.

The Madison epidemic consisted of twelve positive and eight suspicious cases, with the source of contagion conclusively proven to have originated from infected parrakeets housed in a local department store. A shipment of twenty-one birds was received in September, 1932, six of which died in the store and the remainder were sold. The virus is very contagious from bird to man, but very few cases have been reported where a man to man infection has occurred. Seven of the cases reported were employees of the store, and one a shopper.

Those afflicted in Madison ranged in age from twenty-five to sixty-five years. Very few cases have been reported where the patient was below the age of ten years.

A federal investigation of the epidemic was made in Madison by Dr. Charles A. Armstrong of the United States Public Health Service upon the request of the city and state health departments, which investigation confirmed, clinically, the diagnosis of

the reported cases. To further substantiate the diagnosis, Dr. Armstrong shipped an ill parrakeet, obtained from the department store in Madison, to Philadelphia where an autopsy was performed by Dr. P. D. Lille. The anatomical findings were in accord with the disease and are as follows:

Lungs: no lesions.
Heart: no lesions.
Ovary: degenerate ova.
Kidney: moderate apparently autolytic, tubular degeneration.
Spleen: 5 mm. in diameter, engorged with laked blood, reticulum cells, swollen and often filled with brown granular pigment, follicles not recognized, scattered, small, fibrin clots.
Liver: Congested, Kupffer cells generally swollen, apparently increased in number, often vacuolated, pigmented and phagocytic. Many small foci of interstitial and perivascular lymphocyte in infiltration. Numerous foci of recent coagulation necrosis composed of coherent, karyolyzed, coagulated, oxyphil, liver cells and swollen, vacuolated, partly karyolyzed Kupffer cells. These necroses lack leucocyte invasion and marginal proliferation. Occasional Kupffer cells contain considerable hemolysis and autolysis.

Dr. K. F. Meyer of the William Hooper Foundation in California, one of the pioneer research workers in psittacosis, was able to determine by mouse injection a positive case of the virus in the sputum of a patient. The virus is not always obtainable from the sputum of a patient as it is not a constant finding. When the virus is found, it is usually obtained within the first seven days of the disease.

The signs and symptoms of psittacosis in the human are very constant in the typical case. The patient is generally taken acutely ill without prodromal symptoms 5–12 days after exposure to the virus. Patient is suddenly seized with chills and fever, the fever being of an atypical type—often going as high as 104.5 Fahrenheit, and runs an irregular course thereafter.

The patient complains of a throbbing, occipital, and frontal headache which is constant and is only relieved slightly as the temperature falls. There are no complaints referable to the eyes, ears, nose, or throat. There is a very persistent and severe cough which is generally only slightly productive. The pulse is slow in proportion to the temperature elevation. The gastro-intestinal tract symptoms consist mainly of anorexia, nausea—with a slight vomiting of only fluid-like substance—, and constipation. The patient complains of marked muscular pains which are constant and occur mostly in the thighs and muscles of the back and neck. The reflexes are unchanged.

On physical examination, the severe case has an anxious expression and appears to be very toxic and is restless. The eyes, ears, nose, and throat show nothing in reference to the clinical disease, except for a coated tongue. On examination of the lungs, the main pathology is based upon the unification of media. There has been no evidence to our knowledge of multiplication of media due to the disease. Medium dry to slightly moist rales may be heard around the eighth day of the disease. These rales generally begin at the right lung base near the posterior, axillary line. The rales are quite constant and may be found other places as well, but the above site appears to be the most common place to be affected first. No heart pathology is detected. The abdomen is distended, but no tenderness or masses are present. Further physical examination is relatively unimportant for positive findings associated with the disease. The blood pressure is normal. Laboratory examination reveals a slight leukocytosis of around twelve thousand, which later may be replaced by normal, white blood count, with a normal differential and may go to a leukopenia. The sputum is very tenacious and rubber-like. The urine examination often reveals an albuminuria. Roentgen ray examinations of the lungs are diagnostic. The findings are those of broncho-pneumonia. but the areas of infiltration in psittacosis are fewer and much more dense than those of broncho-pneumonia.

The disease is self-limited, the ordinary course being about two weeks; the prognosis is considered favorable, if no complications arise,—thrombophlebitis, lung abscess or septicopyemia.

The treatment is symptomatic. Serum has been given, but, as the efficacy of it has not been definitely determined, serum was not used in the Madison cases. As far as its use is concerned, it is thought that it is of value by some research workers, but they have noted that a recurrent attack of the disease is often experienced when such medication has been used. The symptomatic treatment consists of absolute rest in bed, forcing fluids, liquid to soft diet, sedatives, expectorants, cardiac stimulants, if necessary, and bowel elimination. Blood transfusions are indicated if a complication develops which would weaken the patient so that end results would be doubtful. Complications were rare in the cases at Madison with the exception of one case that developed a lung abscess about three by four centimeters. This patient was given continuous oxygen for 12 days and massive doses of cardiac stimulants. Conservative treatment was used with postural drainage and very satisfactory results incurred.

During the clinical course of the disease, the patient is conscious at all times, although extreme toxicity may be present. The diagnosis is not easy to make unless one can establish a history of contact with diseased birds.

It is our opinion, because of mild types of psittacosis, there may be a factor of immunity to be considered. Further, we think that the virus is more virulent at different times and the clinical course depends on this virulence plus the resistance of the patient.

Acute Appendicitis*

By CHARLES E. CONSTANTINE, M. D.
Racine

I have selected acute appendicitis as my subject today because of the increasing number of deaths being charged to diseases of the appendix. The mortality rate in the United States from acute appendicitis is appalling. A great deal of space has been devoted to this topic in the lay press, and something like 500 papers dealing with this subject have appeared in the medical journals during the last two years. I have collected a few statistics at random which might interest you.

The appendicitis death rate in the United States was much higher in 1931 than in 1910—17.4 deaths per 100,000 of population in 1931, and only 13.3 in 1910. The death rate was 50% higher in 1928 than in 1915. Prior to the age of 50, four times as many die from appendicitis as from cancer. Deaths from appendicitis equal all those from salpingitis, pelvic abscess, and surgical diseases of the pancreas, spleen, thyroid, gall stones and gastric and duodenal ulcers. Statistics from foreign countries are a great deal more favorable than ours. Sixty-four foreign cities reported a death rate from appendicitis in 1931 of only 8 per 100,000. I was indeed surprised when I read that Osaka (Japan), and Rio de Janiero (Brazil) had a death rate in 1931 of 4.4 and 4.9 respectively, while the city of Detroit, which is about the size of the cities just mentioned, had a death rate for the same year of 17.8; and even cities like Hongkong, Mexico City, and Moscow can boast of a lower mortality from appendicitis than most of our metropolitan centers.

You all, as well as I, have no doubt been put to the task of explaining to an intelligent layman the reason why our mortality in acute appendicitis is going up instead of down, as one would naturally expect it to in view of the progress that medicine has made in recent years. I do not know how you men answered this question, but as far as I'm concerned I will confess that I found it difficult to explain. As a matter of fact there could only be three possible explanations:

(1) Either the diagnosis of acute appendicitis is not made early enough, and the treatment delayed;

(2) or the treatment used is not as good as it was in the past, or is inferior to the treatment employed by our foreign colleagues;

* Report read at St. Mary's Hospital Staff Meeting, Racine, Wisconsin, March 7, 1933.

(3) or the patients are not seen early enough in the progress of their illness.

There is no doubt that a delayed diagnosis, and delayed and incompetent treatment are contributing causes in the increasing mortality from appendicitis, but in fairness to the medical profession we will have to admit that they are not chief causes. The chief factor of our failure has long been known, namely, the treatment or rather mistreatment that the patients get at home before the physician is called.

Bailey states that over 99% of the fatal cases are those who have been home treated with laxatives, food, and sedatives for several days before medical aid was called. Such death dealing action on the part of the family is not attributable to indifference or intentional neglect, but to ignorance of the actual menace of the disease. Fear of the hospital and of an operation, and economic conditions are no doubt also contributory factors in the delay in summoning medical help.

Knowing the causes, the way to remedy this shameful condition should be clear.

1. Every effort should be made by the medical profession, and other interested agencies, to educate the public against delays and the use of purgatives in all cases of acute abdominal disorders. The situation demands that each family be taught the potential danger of persistent abdominal pain, and that they must promptly place the responsibility of the diagnosis and treatment upon their physician.

2. It is extremely important to make an early diagnosis so that the proper treatment might be instituted at once. Delayed diagnosis may become a fatal professional error.

A few statistics will perhaps make this point more impressive. During the period 1926 to 1932 there were 797 appendectomies performed in this hospital. Of these, there were 670 acute unruptured with 9 fatalities or 1.34%, (Finney reported: 1129 with 16 deaths or 1.42%), and 127 cases of ruptured with peritonitis with 21 deaths or 16.5% (Finney for similar group found the mortality 11%). We must also keep in mind that the ones in the latter group, who did recover, had a much stormier convalescence and were hospitalized for about three times as long as the first group.

It may not be out of place to give a short review of the diagnosis and treatment of acute appendicitis. After ten years in the practice of medicine, I still find the diagnosis of appendicitis quite difficult, and must confess that I still get a great deal of satisfaction and relief when I find an inflamed appendix upon entering the abdomen. You are familiar with cardinal symptoms and signs such as: Pain in the abdomen, of the sustained colic type, generalized at first and later localized in the right lower quadrant, constipation, nausea and vomiting, moderate fever and increase in the pulse rate, muscle spasm and rigidity with point tenderness, high leucocyte count with increased polymorphonuclear differential and so forth. I am certain that no one would ever miss a case of appendicitis if they all presented the above set of symptoms and signs. It is true that all these things are present in a few of the cases, but very few; a few of them are present in the majority of cases, and virtually none of them are present in quite an appreciable number of cases. Here is what Finney says:

"Of all the symptoms and signs, the most constant and useful seem to be localized point tenderness and a relative increase in the polymorphonuclear leucocytes—the latter rather than the white blood count taken as a whole."

This point is worth remembering. Besides this variation in the clinical picture the patient himself often does his best to mislead his physician. He will quite often call you in and tell you that he has a pain in his abdomen, and then proceed at the same time to tell you that he is sure that the pain is caused by an indiscretion in diet, that he ate beans or drank too much beer the night before. And again he may actually try to deceive you and tell you that there is no tenderness at a given point when, were the truth known, the tenderness is quite marked. It is for these various reasons that most of us occasionally overlook a case of appendicitis, and it is really fortunate that not all

of the misdiagnosed cases proceed to rupture, peritonitis and death, otherwise our mortality rate would be even higher. All of us must be continually on guard against these various clinical pictures and deceptions, and always keep in mind what the late Dr. Deaver said, that in all cases of abdominal pain, no matter where it is located, or what its nature is, always consider appendicitis first. You must rule out appendicitis first before you can safely proceed to consider anything else.

DIFFERENTIAL DIAGNOSIS

I will only name here the diseases from which appendicitis must be distinguished.

1. Those in which operation if performed would be useless or harmful: pneumonia, acute gastro-intestinal disorders, typhoid fever, lead colic, gastric crisis of tabes, renal and ureteral stone, pyelitis, ureteral stricture, herpes zoster, and rarely infantile paralysis and acute articular rheumatism at their onset.

2. Those in which operation is in any case demanded: perforated peptic ulcer, acute cholecystitis, acute salpingitis, torsion of an ovarian cyst, extra-uterine pregnancy, mesenteric thrombosis, inflamed Meckel's diverticulum and diverticulitis.

TREATMENT

Having arrived at the diagnosis of appendicitis, the treatment of choice is early surgical intervention. Investigations have repeatedly shown that the reduction of time between the onset of symptoms and the operation will produce a numerically proportional reduction in the death rate from appendicitis. It cannot be denied too that the recovery rate at any stage of the attack depends largely upon the surgical judgment and errorless technic; and that the surgeon, in knowing when to operate, what to do, and what not to do with the late case, will rate a lower mortality. Everyone undertaking to do an appendectomy should be sufficiently trained in surgery to do not only a simple appendectomy, but should also be able to do a bowel resection if the emergency should arise. An appendectomy in most instances is a simple operation, but in an appreciable number of cases it may be far from being simple, and one may meet conditions which will tax the surgical resources of the most experienced operator. While the deaths caused by acute appendicitis are primarily the result of the disease of the appendix itself, secondarily they are the result of peritonitis, and the toxemia which is caused by peritonitis. Over 80% of the deaths are attributed to peritonitis. In the treatment of our cases we must keep this point in mind. Finally, in acute appendicitis, in the presence of peritonitis, the pith of the question is when to operate, and when not to operate, in order to obtain the best results and the minimum mortality. I can give you no better advice than by quoting Dr. Deaver again, "I believe that in the absence of a forbidding peritonitis, all cases with acute appendicitis should be operated on except in the presence of a grave constitutional condition; a cold, pneumonia or eruptive fever. In the absence of contraindications, be the case ever so mild, or the patient apparently on the high road to recovery, to advise waiting for an interval or a second attack shows ignorance of the possible effects of delay and is contributory negligence in case of death."

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MEDICAL RESERVE COURSE

The medico-military course of inactive duty training for Medical Department Reserve officers, which has been held at the Mayo Clinic during the past four years, will again be held this year from October 1st to 14th, both dates, inclusive. The course offers valuable and interesting training for the Medical Department officers of all the components of our national defense. The staff and faculty of the Mayo Clinic have again placed their facilities at the service of their government in the interest of preparedness, and have extended an invitation to all the services to participate.

This short course is equally applicable to general practitioners and specialists. The morning hours are devoted to purely professional subjects selected by the student officers. The afternoon hours pertain solely to medico-military subjects and the evening hours are covered in a lyceum course of general interest.

Application for this course of inactive duty training should be made to the Corps Area Surgeon, Seventh Corps Area, Omaha, Nebraska.

A Method to Counteract the Narcotic and Intoxicating Effect of the Barbituric Acid Drugs*

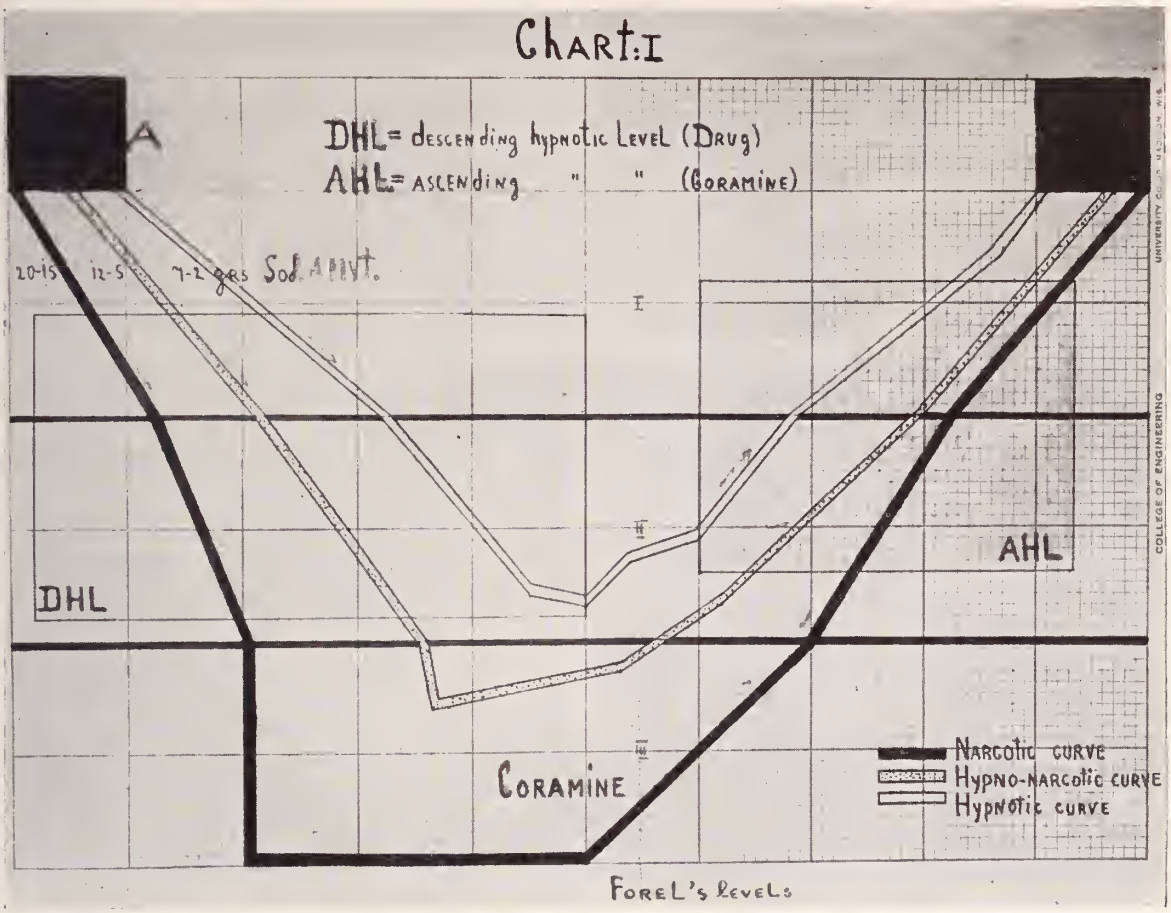
By HANS H. REESE, M. D.
Madison

The clinical differentiation of functional-somatic disturbances from psychic manifestations cannot always be made even if a modern hospital permits an investigation into every branch of medical science and even if the physician is familiar with the anlage constitution, organic and biologic functions as well as the neuropsychism. To obtain fixed psychic data which interferes with association, affection, realization and reactions and upon which often a patient has no influence or control, psychoanalysis and psychotherapy have been the methods of choice. A physician who questions intelligently and listens attentively to the complaints, who examines and understands his patient, will obtain often sufficient insight into the psychic sphere to help and cure. Naturally we encounter sufficient cases for which our personality and our ability as "popular psychoanalysists" is ineffective to elicit conflicts, to explain depression and moods or to make the psychic mental state of mind accessible. The aim of our investigation has been to find pharmacologic agents for this necessary purpose which could substitute and replace psychoanalysis and hypnosis. An active neuropsychiatric department with a large dispensary prohibits the methods of tedious psychoanalysis or laborious hypnosis.

Bleckwenn's[1] investigations have demonstrated that with sodium amytal the mental state of catatonics and various depressions could be made accessible for analysis and for therapeutic suggestions. Lorenz[2], working on situations, conflicts, depressions and moods developed a technic for barbiturates which enables us, using individual dosages, to create the various phases of hypno-narcosis similar to the three depth levels of hypnosis as described by Forel. The results of the latter contribution are the same as obtained by hypnosis. The great advantage lies: first, in the easy, time saving method; second, in the removal of the undesirable rapport situation, and, third, in the advantage of transferring the questioning to others (crimes, confessions).

We are fully aware that these results can be duplicated with the many other derivatives of barbituric acid and are not specific for sodium amytal. Before we could recommend Lorenz's chemical psychoanalysis for its ambulatory use, we had to know a drug to overcome quickly the narcotic effect of sodium amytal so that the patient could leave the office, or the dispensary, safely and clear of mind. Killian[3] has used coramine in cases of prolonged unconsciousness following narcosis with avertin and pernocton. I have used a 25% aqueous solution of coramine = Pyridine-B-Carbonic Acid Diethylamide in the experiments conducted for the quick elimination of sodium amytal hypno-narcosis and intoxications. The range of safety is large even with intravenous administration of coramine. Patients in profound sodium amytal narcosis (12 to 20 grains intravenously) who would ordinarily sleep from ten to fourteen hours, received 5 c. c. of the 25% coramine solution intravenously. Shortly after the administration, the respiration becomes deeper and faster, the blood pressure rises slightly but the pulse rate remains almost constant. In 2 to 5 minutes the patients are awake, yawn, start to talk, at first slowly and slightly dysarthric, but within 5 to 10 minutes they have returned to the norm physically and mentally. Another group of patients received sodium amytal in smaller amounts (2 to 10 grains intravenously), just sufficient to obtain the hypnotic level, then 2 or 3 c. c. of 25% coramine was given intravenously. They were restored to normalcy within 2 to 5 minutes. The quick, awakening results could be obtained by the intramuscular application of coramine (5–8 c. c.) only then the period of restoration is slightly prolonged. This medication with coramine permits also an alteration of the chemical psychoanalysis. If unknown sus-

* From the Wisconsin Psychiatric Institute, University of Wisconsin.



ceptibility to sodium amytal produces even with the small hypnotic dosage (2 to 10 grains), a sudden unexpected narcotic effect and consequently a state of inaccessibility, coramine injections of 2–3–5 c. c. intravenously change the narcotic to the desired hypnotic state which now permits an analysis. (Chart) Patient A receives sodium amytal and is analysed while in an hypno-narcotic state. The emotional or mental fixations (engrams) may color the analytic report and will lead to unsatisfactory interpretations. We, therefore, permit A to descend into the narcotic level inducing profound sleep with complete physical and mental relaxation. After a variable period of narcosis, A receives coramine which stimulates him sufficiently to be aroused. During the phase of controlled wakefulness, again he is questioned. No engrams interfere with this analysis. The descending and the ascending reports are compared and consequently the therapeutic suggestions are instituted. The effect of coramine, exerted upon the respiratory and cardiac centers in drug narcosis and intoxications, is of the utmost importance. A maximal dose of coramine for man is not known. We have given up to 11 c. c. of the 25% aqueous solution intravenously but recommend the use of from 4 to 8 c. c. to avoid excessive respiratory stimulation, overventilation and possible convulsions in cases of latent tetany. Coramine does not resemble camphor in composition, physical properties or action. It surpasses camphor in its action on the blood pressure, on the respiration, in its stimulating effect on the vascular system; it resembles camphor in developing analeptic actions on the psychic and motor regions of the cerebrum and a tonic effect upon the medulla and its vital centers.

It has been shown that coramine can be used for reducing or interrupting narcosis with sodium amytal.

Coramine should be used as the antidote in accidental, experimental, suicidal intoxi-

cations induced by barbituric acid derivatives.

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Spontaneous Pneumothorax in the Apparently Well*

By H. P. BENN, M. D.
Stevens Point

Pneumothorax occurring spontaneously in the apparently well is always of unusual interest. Often so dramatic in its onset, so acute in its symptoms and mystifying in its physical signs, there is about it a stimulation perhaps not equalled by many other medical problems. It is not rare as to occurrence; in fact, the very ordinary practitioner may see several cases in the course of a year. It is, however, a condition perhaps not always recognized; a condition healing as spontaneously almost as it arises and, consequently, yielding to symptomatic treatment.

Spontaneous pneumothorax was first described by Itard[1] in 1803 and has since been a subject for numerous authors. By definition, pneumothorax is a state in which the physiologically negative pressure of the pleural cavity is disturbed by the introduction into it of air, resulting in a partial or total collapse of the lung. Spontaneous pneumothorax more particularly is a division of pneumothorax not occasioned by violence and rupture of the chest wall but associated with pathology of the lung itself in which dissolution of its parenchyma allows interference with intrapleural pressure. Further than this, there is a growing tendency to designate as spontaneous only those pneumothoraces which suddenly develop in the apparently well and usually without demonstrable cause. That a cause does in all cases exist is obvious, but it is a considerable departure from the accepted terminology to class as spontaneous those pneumothoraces occurring secondarily to diseases of great tissue destruction such as massive tuberculosis, gangrene, abscess, bronchiectasis and neoplasms.

* Presented before 91st Anniversary Meeting, State Medical Society of Wisconsin, Milwaukee, September 1932.

ETIOLOGY

Without too much detail, a brief discussion of the mechanics, the physiology, involved in spontaneous pneumothorax would be desirable. The few principles upon which the condition rests are quite important to a clear conception of what actually transpires previous to the onset of pneumothorax. There is the chest which, with the diaphragm and the tracheal structures, compose a closed cavity. This cavity is capable of enlarging and diminishing its size by action of the muscles of respiration. Hung inside this cavity with their interiors communicating with the exterior atmosphere are the two lungs, like two inflated rubber balloons. These balloon-like lungs, however, have the peculiarity to be inflated not by the blowing of air into their interiors, but by the diminishing of the pressure in the closed cavity in which they are suspended, air entering their interiors passively to fill them out so that the negative pressure area is overcome by them.

Between the lungs and the chest wall, then, there is a potential cavity, lined by the parietal and visceral pleura. Potential this cavity remains only so long as no accident occurs to allow the entrance of air or fluid into it, and while the lungs continue to completely fill it. Actual it becomes if any dissolution of lung or chest wall permits interference with its negative pressure. It is further observed that even though air does enter the pleural cavity accidentally, after a time it is absorbed, and again the lung fills out its space[2]. It is interesting that different gases are absorbed at rates considerably at variance with one another. Oxygen is usually present only for a short time; it is absorbed more rapidly than the other con-

stituents of the air. Nitrogen, on the other hand, is probably the last to disappear. The vascular bed of the pleura is accredited with the ability to absorb these gases; they are carried off in the blood stream.

It is evident that this property is very important to the maintenance of a negative pressure in the pleural cavity and in absorbing gases accidentally spilled there. But the mere power of the pleural cavity to absorb gas would not of itself result in negative pressure in the chest cavity. The lungs have a property which is essential, for were they flaccid sacs, the gases would be absorbed, they would move out into the added space and atmospheric pressure would reign. But they are not flaccid; instead, they are very much like the rubber balloons just used in illustration. Were there interference with the negative pressure in the cavity around the balloons, they would quickly collapse. The same occurs when an opening is made into the pleural cavity,—the lung collapses to a small mass, and thus the property of elasticity of lung tissue is demonstrated. It is this recoil, this elasticity of the expanded lung constantly pulling away from the chest wall, that accounts for the negative pressure that prevails.

That such a negative pressure does exist is easily demonstrated. A manometer attached to a cannula which is inserted into the normal chest cavity shows a rather constant negative pressure, a negative pressure of from –4.5 to –7.5 mm. of water[3], varying with the fluctuation or normal intrapulmonic pressure during respiration.

The setting, then, is complete: A chest cavity constantly pumped free of air, lungs not content to be pushed out by atmospheric pressure, a consequent potential cavity with pressure less than in the atmosphere.

MATERIAL CAUSE

In reviewing the present day attitudes as to the material cause of spontaneous pneumothorax, there is to be found, as in other subjects, the most divergent views. A very considerable group are of the opinion that with but few exceptions just as every primary pleurisy with effusion spells tuberculosis, so every spontaneous pneumothorax would mean the same, and while this as an argument is not necessarily conclusive, yet there are many recorded cases that would seem to bear out the concept.

Others most flatly state that incipient tuberculosis, early, symptomless tuberculosis as an etiological factor in spontaneous pneumothorax may be most summarily dispensed with. It is, of course, admitted that tuberculosis causes pneumothorax. Institutions treating tuberculosis see most of the cases, Cabot[2] stating 78% of the deaths from tuberculosis are associated with pneumothorax. But admittedly, while all of these are cases of pneumothorax, there is much question as to the number which may be correctly termed spontaneous pneumothorax according to our definition of the term. Many state that spontaneous pneumothorax is almost never tuberculous, that a pneumothorax occurring in one considered to be in good health is most apt not to be of tuberculous origin. They further reason that even in the afebrile tuberculous individual, pneumothorax is unknown, that always it is the acute, rapidly progressing tuberculosis in which the processes of repair cannot keep pace with those of destruction that pneumothorax occurs, that the unexpected, unheralded, spontaneous pneumothorax is probably rarely if ever tuberculous.

There can be no argument that other conditions causing great lung destruction can not be considered on the same basis as causative agents in spontaneous pneumothorax. Pulmonary abscess with cavities as large as the tuberculous, bronchiectasis with its massive changes, gangrene and its sloughs, destroying new-growths, all furnish pathology too evident for the pneumothorax they cause to be termed spontaneous.

By some, I believe, it is considered possible that a lung without disease, perhaps more fragile or delicate than the average, under severe strain may rupture with consequent symptoms and findings of pneumothorax. This, in a sense, may be comparable with the development of an inguinal or other abdominal hernia. It is, of course, conjecture and very difficult to prove whether

in the ordinary wear and tear of life such strains occur that could produce a pneumothorax.

Frequently minor emphysema is found associated with spontaneous pneumothorax, and it has been observed that emphysematous lungs not infrequently show the development of bullae and subpleural blebs, on the lung surface. These superficial pockets may rupture quite readily under increased intrapulmonic pressure and, having ruptured, furnish the requisite fistula to allow collapse of the lung. The emphysema itself may be quite insignificant and almost impossible to discover.

Non-tuberculous adhesive pleurisy seems frequently to precede spontaneous pneumothorax, with no evidence at the time of the accident of pleurisy ever having been present. Over-active exertion perhaps serves to tear off old adhesions secondary to the pleurisy. This may be the answer to certain of the unexplained pneumothoraces.

A report by Schmincke[8] citing a most interesting case of recurrent pneumothorax describes finding at autopsy numerous air-filled blebs beneath the pleura. These air sacs were limited to the peripheral portions of the lung and were in communication with the bronchial system. Examination revealed them to be incompletely developed terminal bronchi. Schmincke concludes from his findings that these terminal, embryonic bronchi in the peripheral portions of the lung, which are the last portions to complete their embryonic development, did not go on to the formation of air alveoli but later went through a cystic dilatation with consequent rupture through the pleura with a pneumothorax resulting. Similar cases of inhibited development with cystic changes in small areas might also account for some of the spontaneous pneumothorax.

The pathology discovered at autopsy in pneumothorax regardless of cause is such that it is quite possible to decide that the pneumothorax preceded death. Those individuals dying from pneumothorax generally have other pathology that greatly overshadows the pneumothorax, however. But to make an understanding of the physical signs more simple, a brief resume of what is seen at autopsy will be given.

If, before opening the chest, a trocar is introduced into the chest cavity, a rush of air will be heard to come from the trocar. Osler[9] says that frequently this is of sufficient force to extinguish a candle. These chests, then, often have a greatly increased pressure within them, caused by the valve action of the collapsed lung. Air is allowed to enter through the fistula but may not escape, so that great positive pressures may be produced. The pressures are at times so great as to very noticeably distend the interspaces of the chest wall.

As the chest is opened, the mediastinum and pericardium are seen to be pushed away from the affected side. The affected lung is collapsed usually very completely, much more so than in the ordinary postmortem chest. It may be a small mass tightly compressed to the mediastinal structures. In the cavity of the affected lung, serous fluid is usually found to a greater or lesser degree. The pleural surfaces are often highly inflamed. It is not difficult generally to discover the fistula which occasioned the pneumothorax.

CLINICAL PICTURE

As to the clinical picture of spontaneous pneumothorax, I have in my slight experience seen the widest divergence. From the patient cyanotic, fighting for breath, to all appearances in extremis—to the one who nonchalantly awaits his turn in the reception room and then almost apologetically complains that he becomes out of breath easily, both can be pneumothorax giving almost the same physical signs. I remember one urgent call when I climbed to the operator's cupola of a moving picture theatre. There I found a young operator sitting on a four-legged stool, bent over, holding his side, pale, perspiring, dyspneic. He complained severely of a pain low in his left chest. He could not sit erect, but sat humped over, clutching his side. He stated that the attack came suddenly and with no warning—an acute stabbing pain, localized to his lower left chest and radiating over his abdomen.

Another example, this time with physical signs very much more evident, quite casually walked into my office, telling me that lately, but with no definite time of onset, he had noticed that he became out of breath very easily. He was unable to do heavy work or walk fast without breathing hard. He had no pain; his only complaint was dyspnea on exertion.

Of the two examples I have related, probably the first is more the rule: pain, severe dyspnea, anxiety, sometimes cyanosis, represent the picture. Cough frequently is absent at first but develops later. There frequently are signs of shock with cold perspiration, subnormal temperature, weak thready pulse. Some individuals complain of faintness and dizziness. Osler states that some will tell of hearing the snap as the lung ruptures, some will remark about hearing a splashing as they move around.

To one who is mechanically minded or at all interested in the science of physics, the signs elicited in pneumothorax should be very interesting. Certain of them are easily explained, easily understood, but many have about them a certain mystery which often challenges explanation. Of fundamental interest and importance in understanding the mechanism by which many signs are produced in this condition is the fact that there is in pneumothorax a phenomenon which is not met with in any other disease. The pneumothorax chest is a sounding board, a resonance chamber; it might be called an amplifying mechanism. Every sign has added to its own individual characteristics a certain degree of amplification. But few of the signs dealing with percussion or auscultation are not tinctured with this phenomenon. Further, because each individual chest has its own peculiarities as a resonance chamber just like each violin, different effects, different variations may be obtained. Thus, such spectacular findings as the water whistle, metallic tinkle, the coin sound and the beautiful tones of amphoric breathing are produced.

Perhaps inspection alone can be categorically described. Often inspection gives the picture of pleurisy with effusion, but to such a degree as no pleurisy with effusion ever gives. There is obliteration of the interspaces, and, in cases where intrathoracic pressure is high, actual bulging may be present. This probably is an attempt of the chest to fill the affected lung through greater and greater excursions, the air entering the chest cavity, but the collapsed lung allowing only the entrance of air and not its escape. The chest itself seems rather immobile. Not uncommonly edema of the chest wall is present and there may be subcutaneous emphysema.

The vibratory phenomena, tactile fremitus and vocal resonance, are generally found to be greatly diminished or absent over the entire affected side. A small area of increased fremitus is sometimes discovered directly over the compressed lung. Palpation further reveals marked dislocation of the cardiac impulse, which, together with other signs of displacement of organs, are of great significance in the diagnosis of pneumothorax. Percussion of the chest reveals heart displacement, always away from the side of pneumothorax. The liver dullness may be depressed considerably in a right-sided pneumothorax.

The percussion note over the affected chest is often very confusing. A tympanitic or amphoric note is to be expected; often it is so much the reverse that confusion results in endeavoring to decide which is the affected side and which the normal. A hollow note immediately suggests the correct diagnosis, but occasionally a very dull tympany or even hyper-resonance may be found. The explanation of this variety of percussion notes lies in the adjustment of the resonance chamber, the empty pleural cavity. Drum-like, the higher the gas pressure the tighter the pleura and, consequently, the higher the note, so that almost any percussion tone may be elicited. When shifting dullness is encountered, fluid must be present.

Auscultation early in pneumothorax should produce only a total absence of breath sounds. This with absent fremitus and a hyper-resonant percussion note constitute a triad pathognomonic of pneumotho-

rax. Unfortunately, after a few hours have intervened, the sounds heard through the stethoscope are perplexing and multiple. The chest which was at first silent begins to produce a multitude of noises. With the development of positive pressure, the pleural cavity has become an amplifier. Insignificant sounds are magnified; slight breath sounds take on an amphoric quality, sometimes musical, but comparable with tracheal breathing. Where the sounding board quality is well adjusted, beautiful tones are heard. These are like the sound produced by blowing across the mouth of an empty bottle. Marais believes that the quality of this tone depends mostly on the nicety of the relation between gas pressure and the wave lengths of the vibrations set up in the cavity.

Metallic tinkle described by Laennec, a tone distant, bell-like, so beautiful that once heard apt never to be forgotten, is produced during respiration or coughing supposedly by the bursting of bubbles or falling of drops beautifully amplified. Trousseau's coin sound, produced by striking a coin held against one side of the chest while listening with the ear against the other side is again caused by this amplification. The tone is heard, clear, musical, close to the ear. The water-whistle may also be heard. It is a characteristic gurgling which often has a musical or metallic quality, much like a coarse bubbling rale. The production of this tone is probably by the intensification of the sound set up by the stream of bubbles coming from a fistula opening under fluid.

The succussion splash of Hippocrates for its production requires the presence of free fluid. When the ear of the examiner is held next to the chest just over the pneumothorax cavity and the patient is given a quick shake, a definite splashing can be heard.

The x-ray often gives the final assurance that pneumothorax is actually present. Often the first correct diagnosis is made only following its use. It requires little skill as a roentgenologist to locate the lung as a contracted mass toward the midline. The displacement of other structures is also easily made out. The heart shadow pushed away from the affected side, the dome of the diaphragm depressed are readily seen. X-ray is invaluable in following the progress of reinflation of the lung.

PROGNOSIS

The outcome of spontaneous pneumothorax is generally very favorable. About two per cent, according to Fussel and Reisman[10], die immediately. In most cases, however, the condition will entirely disappear after four to six weeks. Twelve per cent are likely to occur again, but the immediate prognosis is excellent. The symptoms after the first few days are seen to become less and less pronounced, the dyspnea leaves, the cough disappears.

The treatment is entirely symptomatic. Rest in bed, morphine for the pain, anxiety and cough cover the indications quite thoroughly. Puncture is done at times to relieve the excessive positive pressures but is said not to be without risk. Strapping may give support to an over distended chest early in the disease; its rationale is questionable.

Here is, then, a condition, not uncommon, of debatable etiology and with a tendency for recovery. It is of uncommon interest to see and diagnose.

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OFFICIAL PUBLICATION OF THE STATE MEDICAL SOCIETY OF WISCONSIN

EDITORIALS

"SHALL MEDICINE BE SOCIALIZED?"

ELSEWHERE in this issue Dr. James C. Sargent, President of the Medical Society of Milwaukee County, has given a distinct contribution to the discussion of this subject. He does not present his subject other than from the viewpoint of his own individual reaction to a study of the vast amount of material that has been issued in the past few years.

We commend this article to your very careful attention both because of its clarity of summarization and because of the thoughtful study the writer has given to a most complicated subject matter.

CANCER CURES

THE physician has studied medicine not alone to know what is known but also to learn the limitations of knowledge. His patients profit equally from his recognition of limitations as from his application of known facts. The quack is neither interested in knowledge nor the limitations of knowledge. Neither is he interested in his patient. He wants the cash; cash at any human cost. He is a freak of nature, being born without a conscience. He, like the cause of many a disease, is a parasite. Like the malignant tumor which grows without purpose at the expense of normal functioning tissue, he grows rich and flourishes at the expense of honest, unsuspecting patients anxious to be restored to a state of health.

Cancer is a disease which offers great possibility for fraud. It is recognized by the public as an incurable disease. The quack promises cure, cure without pain. He bolsters up his claim by high-sounding phrases and imputes the highest authority of science to his activity by designating himself "Chemist" and his industry "Research Laboratory". His advertisements are sonorous with a scientific tone. Thus one alleged cancer treatment is described as follows: "Armstrong's oxycatalyst contains in part the essential elements of metameric protein devoid of its combustible products, together with anionic halogens in solution with alpha particles of radium derived from fifty micrograms of radium element together with its derivatives in a normal saline carrier". Another claims that cancer can be cured by selenium and tellurium; designate their work, "Basic Cancer Research"; their organization, "The Cosmopolitan and Cancer Research Society".

The public is easily taken in by pretense to science. The scientists are responsible for this gullibility. For years popular magazines have been telling their readers about the influence of science upon the changing civilization. The laboratory has been written about as the place where learned chem-

ists and bacteriologists, scientists all, transmute the base into the fine, disease into health. It is no wonder that people credit the reliability of charlatans who make extravagant claims to cure cancer backed by flamboyant pretense to scientific accuracy.

It is *not* nice to be fooled. It is better to know. The physician stands between the public and the quack as the one who knows. It is his responsibility to see that the little knowledge which the public gets about medical sciences is not used to foster fraud. The physician's education enables him to know because of what he does not know. The public's information is not education because it is often only half truth.

The physician is obligated to see that public education in medical sciences is education and not scientific jazz, which simply fertilizes the soil for fraud and quackery. It is not sufficient that the physician stand passively beside the highway of life and pick up the stragglers who drop out of the line of the quack's parade. He must take a positive position and see that the parade is marshalled by those who know.

There is only one way to protect the public against the practice of charlatans; that way is by informing it both of the accomplishments and limitations of medical practice. Medical science does not know the cause of cancer and there is no certain cure. Progress has been made in the treatment of cancer and certain of them can be cured by the use of x-ray, radium, surgery, or a combination of them. The public should be made acquainted with the claims made for cancer cures and the result of investigation of these claims. Nothing is more disillusioning than to see the magician perform his trick and then have the magic explained. Quackery can be debunked quicker by showing the public the trick and then giving it the results of scientific investigation of the fraud. The American Medical Association has published a booklet* which describes the history, the business methods and the claims of thirty-nine cancer cures. It is like taking the velvet off of the magician's table to read this booklet. Every physician should have some of them on the table in the waiting room of his office. He should give them to patients. The patients will find the reading interesting and at the same time immunizing against unwarranted claims to cure cancer. Physicians should assume this as part of their responsibility in the lay educational program for the control of cancer.

W. D. S.

* These pamphlets cost only fifteen cents apiece and can be purchased through the office of the State Medical Society or directly from the American Medical Association.

THE TREATMENT OF PERIPHERAL COLLAPSE (SO-CALLED FAILING HEART) IN INFECTIONS

IN PREVIOUS editorials in this *Journal*, the writer briefly discussed the action of digitalis upon the heart and the mechanism of so-called heart failure in the infections. It was pointed out that digitalis is not a heart stimulant under such conditions. More important was the contention that the heart did not fail but that the peripheral circulation collapsed. If the heart were supplied with sufficient blood to enable it to carry on its specific function of pumping blood into the tissues, the body would be kept going unless overwhelmed by toxemia. In peripheral collapse, which is comparable to what is now called secondary shock, the following conditions have been shown to exist; (1) Decreased blood volume, (2) Insufficient venous return flow, (3) Decrease in the chlorides of the blood, (4) Toxic action of histamine-like substances produced by the particular toxine; causing increased osmotic tension and favoring a loss of fluids from the capillaries into the tissues, (5) Hemoconcentration, (6) Low venous pressure.

When one considers that the heart has a huge reserve capacity, that given oxygen, glucose and insulin it will beat indefinitely, it seems highly improbable that a normal heart in a well person should fail following a few days or even weeks of fever. As a matter of fact it does not fail until the peripheral collapse is so great that venous return flow becomes insufficient to furnish blood to the coronary arteries. The heart then fails from lack of nutrition. This is

the last stage, the dying heart, dilated on account of anoxemia.

Specifically then, our object in treating the failing circulation should be an attempt to keep the heart supplied with sufficient blood to ensure adequate diastolic filling. There are no drugs which surely can increase blood volume. Among those which are said to have this effect are strychnin sulphate, caffein-sodium benzoate, adrenalin, and pituitrin and some of the newer preparations such as Metrazol, ephetonine. If one uses strychnin, which is the writer's preference, it should be given in adequate doses, that is from 1/20 grain to 1/10 grain every two to three hours subcutaneously. There is no danger of strychnin poisoning. In sudden collapse adrenalin or pituitrin intravenously in doses of 1 c.c. for an adult can be used. These drugs may help but only if the fluids and chloride content of the tissues are kept up. It must be borne in mind that the resting, fasting body loses from two to three liters of fluid in a twenty-four hour period. At least that much fluid should be given daily, preferably more. It is doubtful if one can give too much fluid by mouth and by vein. There is no doubt that often too little fluid is given and dehydration of tissues follows. Glucose 10% with normal saline 3–4 liters daily by vein is not excessive. It is recommended that 1 c.c. of adrenalin be added to every transfusion. Blood transfusions of whole or citrated blood may be given every third or fourth day. The colloids of the blood do not pass out of the capillaries as rapidly as water and tend to maintain the blood volume longer than the watery solutions. But blood transfusions should be used with judgment and discrimination. They do not do good because antibodies against infection are introduced, but because they add oxygen carriers and increase the volume of circulating blood. Acacia solution 6% is now available and can be used also to increase blood volume.

If we are treating pneumonia, then at the very first sign of cyanosis of the finger nails the patient should be put in an oxygen tent or room. The heart must have oxygen and glucose to perform its work. It must have sufficient venous return flow. Adherence to these physiological principles now abundantly proved to be true will save to useful life some of the patients severely ill with acute infections. L. M. W.

AN URGENT NEED

DR. E. L. KEYES of New York, writing in the January, 1933, Journal of Social Hygiene, remarks that the infant mortality rate from syphilis has declined 42% in the Birth Registration Area of the United States between the years 1917 and 1929, and that the decline was 47% in urban centers and 33⅓% in rural areas. A review of the Wisconsin State Board of Health statistics shows that 275 deaths were accredited to syphilis in children under one year of age between the years 1911 and 1921 inclusive, or an average of 25 deaths per year. Between the years 1922 and 1932, inclusive, there were 175 deaths from syphilis accredited to children under one year of age, or an average of approximately 16 deaths per year. The percentage of decline was greater than these figures indicate because of increase in population.

Query is sometimes made as to whether or not physicians are attaining any marked results in lessening congenital syphilitic mortality through modern day treatment. The above statistics are the answer to that question. While the deaths from congenital syphilis in Wisconsin are numerically small, as attested by the above figures, the whole story upon congenital syphilis is not told in these statistics.

Every physician has some idea of the potential burden placed upon the family of the congenital syphilitic and ultimately to the community. The lowering statistical mortality implies some lessening in the prevalence of these burdens. The number of syphilitic miscarriages has undoubtedly declined in proportion to the application of syphilitic treatment in Wassermann positive women, especially in the pregnant stage, and in all probability more normal children have been born in the world than would have happened in lack of proper treatment. Because of these interwoven factors, the treatment of the congenital syphilitic and the syphilitic prospective mother has been of greater import than the numerically moderate decline in the death rate implies. The treatment of the syphilitic mother, as early as possible in the pregnant stage, is apparently an urgent need. C. A. H.

THE PRESIDENT'S PAGE

ON MEDICAL ORGANIZATION

OSLER, in his famous lecture, "The Old Humanities and the New Science", concerned himself with the leaven of the old philosophy in modern science and the leaven of science in the old philosophy. Hailed as the well nigh perfect example of the union of science and the humanities, he urged that physicians meet changed conditions as practical men "with the re-enforcement born of hope or the strong resolution of despair." I cite this statement of the beloved modern Galen because today, in a changing world, with the medical profession beset on many sides by difficulties of a complicated political and economic nature, we find some earnest physicians inveighing against the trend toward efficiency of medical organization.

The criticisms which are made pursue one of several directions. Some seem to believe that the medical profession is or may become "unionized", apparently forgetting that the relatively slight approach to the business efficiency of some unions has in no way been accompanied by a surrender of ethical standards. There are certain and essential differences between the ethical standards of the guild of medicine and the practices of business, but this need not stand in the way of efficient organization. There are other individuals who express the feeling that the lay secretary is some how out of place in a medical organization, overlooking the fact that the type of training typified by these men is the ideal complement to the training of the physician in his attempt to serve humanity. There is, too, the attitude of laissez faire found among those who assume that their financial or professional positions are so secure that they will not be affected by any change.

I find it rather difficult to listen patiently to arguments opposing efficient medical organization. The economic and scientific developments which are producing a change in our social system necessitate a re-orientation of our views regarding the position of the medical profession in society. This re-adjustment is no greater than that required of the old scholastic viewpoint by the intrusion of science. I am certain that the medical profession is not sufficiently organized although I do believe that we have too many organizations. The history of the development of workmen's compensation insurance is a case in point. The doctor alone of all the interested parties was not represented, was not consulted, when these laws were framed. If the state societies were inactive, the local county organizations, through which any really effective political pressure would necessarily have been brought, seem to have been almost wholly unconscious of what was happening. Politicians who perform the actual work of legislation are frequently profoundly ignorant either of social or medical science and are not inclined to heed expert advice unsupported by political power. They are opportunists and adepts at adjusting conflicting forces to make a temporary structure.

I believe that the preservation of those traditions in medicine which we prize most highly, its old humanities as well as the new science, our standards of ethical practice, and the best service to mankind depend on efficient medical organization. In the important social changes which are impending, we ourselves must see to it that the physician is not relegated to the role of the "forgotten man".

SOCIETY PROCEEDINGS

COLUMBIA

Dr. H. E. Marsh, Madison, was the principal speaker before a meeting of the Columbia County Medical Society held at the club house at Swan Lake Country Club, Portage, the latter part of June. His subject was "Heart Disease."

A dinner preceded the talk.

MANITOWOC

Over three hundred attended the joint medical-dental-pharmacal and nurses picnic at Rock Falls on July 16th, which was sponsored by the Manitowoc County Medical Society and its Auxiliary.

In the tug-of-war, the dents proved their superiority over both the medics and the pharmics, and they also won the diamond ball contest 19–18. In the bag races Miss Tulaska won for the nurses and Miss Estelle Jung won the 100 yard dash for the nurses.

It is understood that the pharmics came off victorious in the card contest.

It is planned to have this as an annual event in the future. E. C. C.

ROCK AND WALWORTH

Thirty-five physicians and dentists of Rock and Walworth Counties medical societies attended the picnic held at the Lake Lawn hotel, Delavan Lake, on June 21st. The afternoon was spent in playing golf and swimming which was followed by a dinner served at six-thirty o'clock.

THE WOMAN'S AUXILIARY

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WOMAN'S AUXILIARY TO THE AMERICAN MEDICAL ASSOCIATION

To the Woman's Auxiliary,
Wisconsin State Medical Association.
My dear friends:

Those wonderful days at Milwaukee during Convention were so full of happy events and the closing came finally so swiftly, I feel I should further express to you the deep appreciation I have for the many beautiful and lovely things you did for all the visiting women and for me personally.

Mrs. Sleyster was perfect as Convention Chairman, and, together with the marvelous co-operation of her Vice Chairmen and individual Committee workers, your results in every way have been voted as the "best" Convention ever held. We loved you all and fain would have tarried longer.

Beautiful flowers, lovely corsages upon every occasion, every want anticipated, generous hospitality and, above all, the friendliness exhibited everywhere have won us all completely and we thank you all from our hearts.

For me, as presiding officer, you make everything perfect and I want you to know I feel it deeply. Thanks to you all.

Sincerely yours,
EDNA B. PERCY, (Mrs. James F.)

The Woman's Auxiliary to the State Medical Society of Wisconsin is honored this year with having three of its members on the National Board. Mrs. Rock Sleyster was elected Director for two years and Mrs. Robert Fitzgerald was elected Press and Publicity Chairman. The National Auxiliary publishes a news letter every month in which the many important activities of state auxiliaries are reported. Mrs. Fitzgerald will edit this news letter. The president of each state auxiliary is a member of the National Board for her term of office. Mrs. Eben J. Carey will represent Wisconsin.

We take this opportunity to express our appreciation to the members of the Advisory Council: Drs. C. A. Harper; A. W. Rogers; Reginald H. Jackson; Jesse P. Allen and Mr. J. George Crownhart, for their ever ready help and untiring efforts during the past year.

The Woman's Auxiliary to the State Medical Society of Wisconsin offer their congratulations and best wishes to Miss Ruth Buellesbach, executive secretary to the Woman's Auxiliary of the state of Wisconsin, who was married to Mr. Wallace R. Naset on Saturday, June 24th, at the Victory Memorial Chapel, St. John's Military Academy, Delafield, Wisconsin. Miss Buellesbach has been invaluable to the Auxiliary. She has gone out into the State and helped organize new auxiliaries and has been a wonderful help to all of the executive officers.

WINNEBAGO COUNTY

On April 24th, the Auxiliary held a luncheon meeting at Stein's shop, Oshkosh,—26 members being present. Mrs. Fred A. Nause, Sheboygan, was guest speaker.

On May 3rd, twelve members of the Winnebago Auxiliary motored to Plymouth, where they were delightfully entertained by the Sheboygan County Auxiliary.

WAUKESHA COUNTY

The Woman's Auxiliary to the Waukesha County Medical Society was entertained at the home of the president, Mrs. H. G. B. Nixon, Hartland, on Wednesday afternoon, May 17th. An address of welcome was given by Mrs. Nixon, and Mrs. Peters of Oconomowoc gave a reading on "The Duties of the Auxiliary". Mrs. Byron M. Caples gave a brief address on the theme "Methods of Spreading Sunshine Among the Sick". Tea was served later in the afternoon.

ROCK COUNTY

Dr. Eben J. Carey, Milwaukee, gave a lecture at the Woman's Club, Janesville, at eight o'clock on June 30th, under the auspices of the Rock County Medical Society Auxiliary. Dr. Carey discussed "A Century of Progress in Medicine" illustrated with lantern slides, emphasizing in particular the work of Wisconsin physicians in the field of scientific medicine. The public was invited to attend.

Dr. Carey was accompanied by Mrs. Carey, president of the State Auxiliary.

SHEBOYGAN COUNTY

A very pleasant picnic on June 21st climaxed the Sheboygan County Auxiliary's activities for this season. The picnic took place at the H. C. Prange cottage on Elkhart Lake. Swimming, bridge, and cool refreshments provided the entertainment. The next meeting of the Auxiliary will be held in the fall.

NEWS ITEMS AND PERSONALS

The next examinations by the Wisconsin State Board of Examiners in the Basic Sciences will be held on September 23, 1933, 8 until 5, at the Hotel Loraine, Madison.

—△—

Dr. and Mrs. J. B. Wear of Madison returned the latter part of June from Texas, where they were house guests of Mrs. Wear's parents at Holland, Texas.

—△—

Dr. F. J. Woodhead of Waukesha was the principal speaker before a meeting of the Kiwanis Club of Waukesha in June.

—△—

The State Medical Society of Wisconsin broadcasts on Tuesday, Wednesday, and Thursday of each week over stations WHA, Madison, and WLBL, Stevens Point. The subjects for July were as follows:

July 3—Independence Day Indiscretions.
July 5—"He Stoops to Conquer."
July 6—If We Had Only Known.
July 11—Defective Speech in Children.
July 12—Temper Tantrums.
July 13—Posture.
July 18—Rabies.
July 19—Fatigue in Summer.
July 20—Exercise and Play for the Normal Child.
July 25—Improving the Complexion.
July 26—The Superior Child.
July 27—Some Common Diseases of the Skin.

—△—

Dr. E. L. Schroeder of Shawano and his daughter, Betty, 13, sailed on July 12th on the S. S. Bremen for a three months' tour of Europe. Their itinerary will include Holland, Switzerland, Germany, Austria, Italy and France, and at the University of Vienna Dr. Schroeder will take a postgraduate course in surgery.

—△—

Dr. and Mrs. A. M. Rosenheimer returned to Beaver Dam in June from a motor trip through the south.

—△—

Dr. Homer M. Carter, Madison, on July 13th announced the association of Dr. T. A. Leonard, formerly of the staff of St. Mary's Hospital, Madison.

—△—

Dr. Gideon Benson of Richland Center was elected president of the board of education at the annual school meeting held recently.

—△—

Out-of-town visitors at the offices of the State Medical Society during July included the following: Dr. Gilbert E. Seaman, Milwaukee; Dr. J. F. Wilkinson, Oconomowoc; Dr. J. F. Mauermann, Monroe; Dr. T. E. Blong of Milwaukee, and Dr. J. E. Newton of Hudson.

—△—

Dr. D. L. Williams, Madison, has opened an office for the general practice of medicine and surgery in the Gay Building. For the past two years, Dr. Williams has been a member of the Jackson Clinic staff and is a graduate of the University of Wisconsin Medical School in 1930.

—△—

A program commemorating the ninth anniversary of the opening of Burlington Memorial Hospital at

Burlington was held in July on the hospital grounds with Mr. George Waller, chairman of the hospital board, acting as chairman of the meeting. Among the principal speakers were Dr. F. R. Janney of Milwaukee; Dr. M. G. Peterman, also of Milwaukee; Mr. Oliver O'Boyle, assistant corporation counsel of the city of Milwaukee, and Miss Elizabeth Casey, superintendent of the hospital.

—△—

Dr. Arnold H. Barr of Port Washington has recovered from injuries received in an automobile crash near Port Washington.

—△—

MILWAUKEE

Dr. Gordon J. Schulz, formerly a resident physician at the Johnston Emergency Hospital, left Milwaukee on July 1st, to enter private practice at Union Grove, Wisconsin.

—△—

Dr. J. R. McDill, for many years associated with the United States Veterans' Bureau at Waukesha, is now residing at Cornwall-on-Hudson, New York.

—△—

At a session of the American Medical Association, held on June 16th, Dr. John P. Koehler was chosen vice-chairman of the scientific session on Preventive Medicine and Public Health; Dr. Walter M. Kearns was named vice-chairman of the section on Urology, and Dr. F. W. Madison was elected vice-chairman of the section on the Practice of Medicine.

—△—

Many Milwaukee physicians are enjoying outings at nearby lakes and resorts, some of them commuting daily to their offices, returning to their summer homes in the evening.

Dr. and Mrs. H. A. Sifton are vacationing at their summer home at Sister Bay. Dr. and Mrs. C. A. Evans have opened their summer residence nearby, at Egg Harbor, and Dr. and Mrs. Arthur T. Holbrook are established in their country home at Brule.

Dr. and Mrs. J. A. Froelich left early in July for a summer outing at Eagle River.

Dr. George H. Fellman joined Dr. and Mrs. Claude S. Beebe and daughters in New York on June 23rd for a several weeks' trip abroad.

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Mr. and Mrs. Theodore Wiprud and daughter, Dorothy, and son, Grant, returned on July 9th from a short vacation spent at Washington Island.

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Removals of offices:

Dr. Edward D. Schwade from 2675 N. Holton Street to 425 E. Wisconsin Avenue.

Dr. Charles R. Marquardt from 324 E. Wisconsin Avenue to 152 W. Wisconsin Avenue.

Dr. A. L. Bork from 1930 W. Mitchell Street to 2176 S. 91st Street, West Allis.

Dr. Charles S. Schneider from 2229 N. Third Street to 152 W. Wisconsin Avenue.

Announcement has been made of the marriage of Miss Betty Churchill, daughter of Dr. and Mrs. Bernard P. Churchill, to Mr. Malcolm J. Proudfoot of Chicago, which took place on June the 9th.

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Dr. J. J. Seelman was elected vice-president of the American Society of Clinical Pathologists at their annual meeting, held in Milwaukee June 9, 10, 11, and 12.

—△—

Dr. and Mrs. W. W. Hume and son, Robert, returned early in July from a two weeks' motor trip to Port Arthur, Canada.

—△—

The American Hospital Association will hold its anual meeting in Milwaukee from September 11th to 15th. In conjunction with this convention, meetings of the American Protestant Hospital Association, The American Occupational Therapy Association, American Association of Hospital Social Workers, National Association of Nurse Anesthetists, Children's Hospital Association of America, and Hospital Dietitians will be held at the same time.

A program is being prepared by the American Hospital Association to cover the various phases of health work, especially as they relate to hospital activities. All sessions will be open to the public.

—△—

The health council of The Medical Society of Milwaukee County has completed its plans for continuing its program in preventive medicine during the month of August. Clinics for the immunization and vaccination of the indigent of Milwaukee County, such as were in operation during the month of May, will again be established in various Milwaukee hospitals. This program is sponsored jointly by the Milwaukee Department of Health and the Medical Society, the Health Department assuming the responsibility for giving the first injections, the second to be given at the clinics set up by the Medical Society.

Dr. Frank E. Drew, who served as director of the recent Course in the Newer Methods of Immunization and Vaccination, will be in charge of the clinics.

—△—

Dr. Rock Sleyster, Wauwatosa, enjoyed an outing at Lost Lake near Sayner, Wisconsin, during July.

—△—

Dr. E. L. Miloslavich, formerly associate professor of pathological anatomy at the University of Vienna, Austria, and later professor of pathology and director of the department of pathology and bacteriology at Marquette University, Milwaukee, was nominated by His Majesty King Alexander I of Jugoslavia as professor of legal medicine and director of the medico-legal institute at the Royal University, Zagreb, Jugoslavia, for which position he is soon departing from America.

The first session of the newly enlarged Special Committee on the Distribution of Medical Service of the Medical Society of Milwaukee County was held at the City Club on Tuesday, July 18th. This committee was appointed by the president to consider further the economic situation of physicians of Milwaukee County and if possible to develop a plan for better distribution of medical services and costs. At the first meeting the following topics were presented by members of the committee:

"The Status of Industry in Relation to Medical Care" by Dr. E. W. Miller.

"The Problems of the Private Hospital" by Dr. H. B. Podlasky and Dr. A. J. Patek.

"The Problems of the Private Practitioner" by Dr. Dexter Witte.

"Responsibility of Organized Medicine for Leadership" by Dr. C. C. Schneider.

"Trends in Medical Economics" by Dr. C. J. Coffey.

The members appointed to the committee are:

Drs. James C. Sargent, Chairman; Edith McCann; Ralph P. Sproule; O. R. Lillie; Stanley J. Seeger; H. B. Podlasky; E. L. Tharinger; T. S. O'Malley; H. J. Gramling; William A. Ryan; H. E. Webb; Gilbert E. Seaman; George W. Neilson; Charles Fidler; Frank E. Drew; Carl W. Eberbach; Dexter H. Witte; A. J. Patek; E. O. Gertenbach; R. W. Blumenthal; D. E. W. Wenstrand; C. J. Coffey; John F. Blair; E. W. Miller; N. E. McBeath; J. W. Powers; C. C. Schneider; and J. O. Dieterle.

It is planned that the membership of the Society be invited to subsequent conferences of this committee. The next conference will be held on Tuesday, August 1st.

—△—

The Common Council recently passed an ordinance requiring that all dispensers of beer be examined before employment. In compliance with this new ordinance, the Health Department, in cooperation with the Medical Society of Milwaukee County, developed a medical examination form for food and beverage dispensers. This form was adopted and its use is required in the examination of each applicant for employment as beer dispensers. This is another phase of the cooperative program being developed by the Medical Society and the Health Department.

—△—

A group of Milwaukee physicians attended the Kappa Sigma day at the Century of Progress Exposition on July 22nd. They included: Drs. S. G. Higgins, A. C. Kissling, Victor S. Falk, W. B. Ford, and Herbert Schmidt.

—△—

Mrs. Elizabeth Bardes, wife of Dr. Albert Bardes, Milwaukee physician, died at her home after an illness of some three months. Mrs. Bardes was a lifelong resident of Milwaukee and a member of the Milwaukee-Downer College Endowment Association and the City Club.

—△—

Continuing its program in preventive medicine, the Health Council of the Medical Society of Milwaukee County will open its clinics for the immunization of all children in Milwaukee, who cannot afford to pay for this service, in the following hospitals: Deaconess, Milwaukee, St. Joseph's, Milwaukee Maternity General, Mount Sinai and St. Luke's.

This program has been developed in cooperation with the Milwaukee Health Department. The Health Department put on its drive in July and the Society campaign follows in August. Pediatricians who participated in the recent course as instructors will be in charge of each clinic, members of the Society volunteering to serve under their direction in the various clinics that month.

In addition to these clinics a campaign is being put on to urge families, who can pay, to have their children immunized by private physicians in their offices.

—△—

Dr. Albert Popp and family left for a ten-day motor trip on July 14th. Their destination is Lake Leelanaw, Michigan.

—△—

Dr. Joseph J. Gramling, who was seriously injured on June 29th in an automobile accident, is rapidly improving at St. Luke's Hospital. Dr. Gramling fractured his right hip and right arm and suffered severe bruises.

—△—

Dr. Gilbert J. Rich, staff psychiatrist of the Chicago Institute for Juvenile Research, has been appointed as director of the Milwaukee County Mental Hygiene Clinic. He succeeds Dr. R. E. Bushong who resigned last January to become director of the Ohio State Hospital for the Criminal Insane.

—△—

Dr. Robert I. Hiller has announced the removal of his office from 647 Bankers Building to 1153 Bankers Building.

—△—

Dr. E. A. Brzezinski spent several weeks at Camp Douglas during the month of July.

—△—

Dr. Sidney Tarachow of New York has been visiting at the home of his mother, Mrs. Stella Tarachow of Milwaukee. Dr. Tarachow is a graduate of Marquette University and has been specializing in psychiatry and neurology at the New York State Psychiatric Institute, a part of the Columbia Medical Center.

—△—

Dr. E. L. Miloslavich addressed the twelfth annual meeting of the American Society of Clinical Pathologists, on June 9th, on the subject of "Pathological Anatomy of Death by Drowning." Dr. Miloslavich was recently elected to Fellowship in the American Public Health Association.

—△—

Dr. Ralph T. Rank announces that he is now located at the University Clinics, Billings Hospital, of the University of Chicago where he is pursuing the study of the diseases of the nose, throat and ear, in which he will specialize on his return.

ENGAGEMENTS

The engagement of Dr. Bruno Warschauer and Miss Myra J. Polacheck, daughter of Mr. and Mrs. David Polacheck of Milwaukee, was announced early in July.

The engagement of Dr. Oscar H. Hanson and Miss Helen Jean Young, daughter of Dr. and Mrs. Will Young of Fort Atkinson was announced in July. The wedding will take place in September. Dr. Hanson is associated with Dr. Young.

MARRIAGES

Dr. Norman DeNosaquo, son of Dr. and Mrs. Samuel DeNosaquo, Milwaukee, to Miss Anita Cohen on June 25th.

Dr. Carlyle R. Pearson, Madison, to Miss Edith Hope Smith, on July 8th at Madison. Dr. Pearson is assistant physician in the department of student health, University of Wisconsin.

Dr. Raymond R. Richards, Blair, Wisconsin to Miss Alice D. Thwing of Augusta on June 10th. Dr. and Mrs. Richards left immediately for Milwaukee to attend the American Medical Association and the Century of Progress.

Dr. Roland J. Schacht, Racine, to Miss Helen L. Allman of Marshfield on June 29th at Racine.

Dr. L. F. Kaiser of New Holstein to Miss Hattie May Jury of Woodlawn, Ill., on June 26th at North Lake, Wisconsin.

Dr. W. A. Sannes, Soldiers Grove, to Miss Eda Nederloe of Mount Sterling on July 10th.

Dr. David Lando, Milwaukee, to Miss Janet Cohn, daughter of Dr. and Mrs. Arthur H. Cohn, Milwaukee, on June 28th.

BIRTHS

A daughter to Dr. and Mrs. S. F. Wasielewski, Milwaukee, on June 21st.

DEATHS

Dr. F. R. Wright, West Allis, died on June 22nd, following a short illness.

Dr. Wright was born in Merton, Wisconsin, May 8, 1863. He was a graduate of the class of 1885, Rush Medical College, of which he was president. He had practiced in West Allis for more than forty years.

He was a member of the Medical Society of Milwaukee County, the State Medical Society, and the American Medical Association.

Surviving Dr. Wright are his widow, one son and one daughter.

Dr. Henry A. Schmidt, a physician in Milwaukee for forty years, died Friday, July 14th.

Dr. Schmidt was sixty-eight years of age. He came to Milwaukee in 1892 from Germany and was graduated from the Independent Medical College, Chicago, in 1896. Surviving are his wife, Mary; a daughter, Helen; and two sons, Carl and Fred; a brother and three sisters.

Harper Honored by Associates; Portrait Presented to State

A portrait of Dr. Cornelius A. Harper, now in his thirtieth year as state health officer of Wisconsin, and senior public health official in the United States in point of unbroken fulltime service, was presented on July 1 to the State Board of Health.

Informality characterized the presentation, which took place in the hearing room of the state capitol. The painting was unveiled and presented to the Board membership by Dr. W. D. Stovall, director of the State Laboratory of Hygiene, and the acceptance was voiced by Dr. Gustave Windesheim, Kenosha, the Board president. Dr. Joseph Dean, Madison, vice president of the body, presided.

Other Board members present at the occasion were Dr. Mina B. Glasier, Bloomington; Dr. Stephen Cahana and Dr. J. J. Seelman, Milwaukee, and Dr. H. H. Ainsworth, Birchwood.

The portrait, a 24-by-30 inch canvas attractively framed, is the work of Merton Grenhagen, a Madison artist, and was subscribed for by a large number of friends and admirers of Dr. Harper, many of whom were in attendance at the presentation.

By direction of the Board members, the portrait has been hung in the administrative office of the state health department.

"When Dr. Harper took over the duties of state health officer on April 1, 1904, scientific knowledge pertaining to the public health was surprisingly limited, as considered in the light of today," declared Dr. Stovall in making the presentation.

"Miasmas were then believed responsible for certain diseases which afflicted Wisconsin communities in epidemic form, and the safeguarding of water supplies of the state was in its infancy, giving typhoid fever almost free rein. Under Dr. Harper's able executive

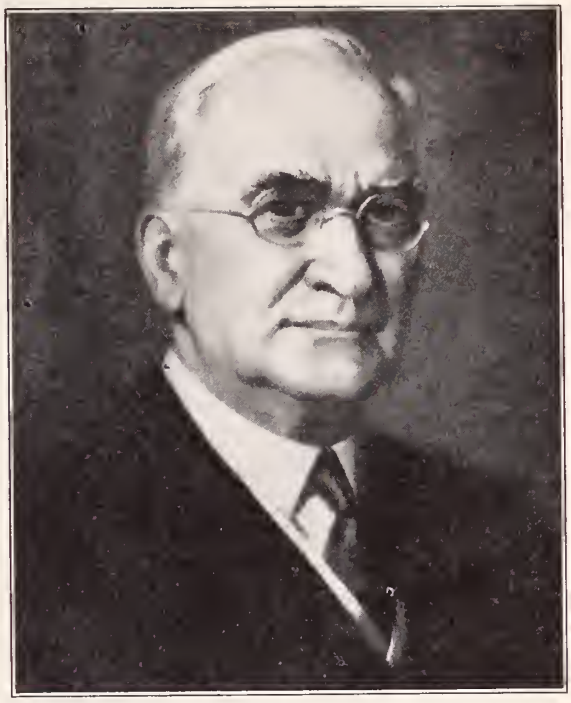
direction, Wisconsin has progressed in the field of public health to a point where we need defer to few if any states of the nation.

"We point with pride to the fact that, although the State Board of Health is now in its 57th year of organization, Dr. Harper is only the third state health officer appointed by the body," Dr. Stovall said.

Dr. Harper, called upon by Dr. Dean, commented in humorous vein upon the situation of the man who is invited to speak on the subject of his own portrait. The existence of the portrait, he declared, will not prevent his carrying on in the flesh.

State annals reveal that Dr. Harper's career in state service has not been distinctive in length alone. From an administrative personnel consisting of himself and a clerk at the outset of his tenure of office, Dr. Harper has guided the state health department into its present organization of fifteen bureaus.

During his service he has seen Wisconsin's infant mortality rate decrease 54 percent, the typhoid fever death rate decrease 93 percent, the diphtheria death rate decrease 83 percent, and the tuberculosis death rate decrease 53 percent, along with substantial savings in life among many other less menacing death causes.



Portrait of Dr. C. A. Harper by Merton Grenhagen of Madison.

In 1930 Dr. Harper was presented with the gold seal of the State Medical Society of Wisconsin for outstanding service in the fields of medicine and public health, and he became president of the Society at the same annual meeting.

Shall Medicine Be Socialized ?*

By JAMES C. SARGENT, M. D.
Milwaukee

I have been invited to present this absorbing and complex subject to you this afternoon and, in the doing, to give full consideration both to its pros and to its cons. Even were this to be nothing more than a compilation of the ideas of others, it would be quite a difficult task, but representing, as it does, one's personal opinions and deductions, it becomes a real labor. Let us be clear with each other from the very beginning as to just what is meant by "socialization" of medicine. If our question is to mean that the time honored system of private medical practice together with its private physicians is to be thrown into the discard and replaced by a type of physician chosen through civil service, hired and fired by the state, paid in wages, and dispensing medical care on a chain-belt system for eight hours a day with time and a half for overtime, I am prepared to present in no uncertain terms the "con" to the question. If, however, we mean by socialization of medicine, certain changes in the purely economic aspects of the care of sickness which experience elsewhere has seemed to justify, and if we are giving cool and conservative thought to the need of certain changes in medical practice made necessary by the changing times, I am prepared to

* Presented before the annual meeting of The Waukesha County Council for Child Welfare at Waukesha, April 21, 1933.

go a long way in presenting the "pro" to the question.

The rapid expansion of industry, the growth and thickening of our centers of population, and the modern industrial age that they have engendered, have created entirely new and distressing economic problems in our American life. A surprisingly large element of our population have come to the point where their labors bring an income that is barely sufficient to meet the ordinary necessities of daily life. Especially in the large industrial centers of the world, the wages of the masses are so low that individual resources are wholly inadequate to meet any unexpected expenses, such as those of sickness. A large part of our citizens are no longer able to buy proper medical care and the fact that this inability is, at bottom, a matter of inadequate wages must be recognized as basic. Adequate wages would immediately shift back to the individual the responsibility of meeting those sickness costs that society has come to have to assume for him.

With this acute problem of a generally inadequate wage has come the equally modern installment method of living. Except for the relatively few with abundant incomes, the American people have been coaxed and cajoled into a system of living where their income dollar is budgeted into bits and completely spent even before it is earned. Under such a scheme of living, the payment of unexpected sickness bills has become difficult and often utterly impossible even among those whose income is somewhat above bare maintenance levels. No better illustration of this can be found than that many of our patients having to go to public institutions for medical and surgical care, drive there in automobiles and wear fur coats.

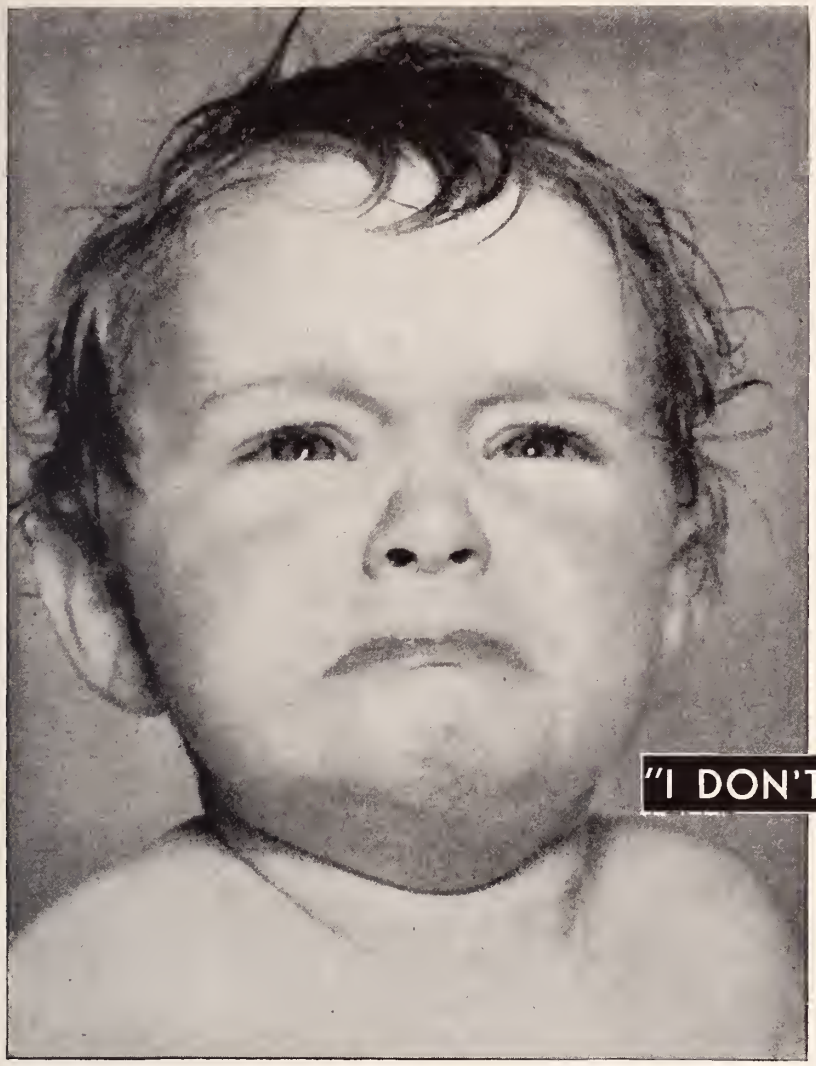
To complicate this whole picture, the rapid advance in medical science has brought many new and quite costly procedures into the practice of medicine, so that the costs incident to sickness have been steadily increasing. While it is true that both public and profession indulge too freely in these costly adjuncts of medical practice, it is only human to lean on the side of extravagance when it comes to health and life. Entirely apart from these extravagances, however, in modern medical practice, many costly procedures have come to be indispensable. X-rays are certainly costly, but no one would suggest getting along without them or even trying to skimp in their use. Hospital bills and surgical fees, while matters of considerable expense, have come to be unavoidable costs in connection with the modern care of appendicitis. These are but two of the many instances in which sickness costs have increased by leaps and bounds, only because modern medicine has developed more effective means of combating disease.

A conondrum confronts us. The average citizen living in the present industrial age finds himself less able to withstand the unexpected expenses of sickness, yet he is confronted with a substantial increase in the costs that modern medical care involves. This economic problem of modern medicine appears as the one outstanding challenge to the profession today. Even if the profession would, it cannot escape it, because the other interested party—the public—is demanding a solution and is preparing itself to offer one of its own if none is forthcoming from us.

BASIC ECONOMIC FACTS

In giving consideration to the problem of medical economics, certain incontrovertible facts stand out as a basis upon which to proceed.

Prominent among these, and yet, curiously enough, hardly recognized by many of us, this problem of the disturbed economics of medicine is not borne of the present depression. True it is that the depression has magnified and distorted the picture to a considerable degree, but the problem was already acute when General Motors common was soaring up in the 400's. The much publicised Committee on the Costs of Medical Care was hard at its task back in the prosperous days of 1927. England had adopted its Health Insurance Act in 1909, and even a half century ago we find Bismarck giving state medicine to the German nation. *The need for a better means of distribution of the costs of medical care has no fundamental relation to the present world wide depression.*



It takes more severity than many mothers can command to force spinach upon a tearful child. Yet careful menu-planning is needed to make up the 12 mg. of iron required daily. Leichsenring and Flor, as an example, found that children's diets planned to contain 5 and 8.5 mg. iron actually supplied only 3.25 and 6.5 mg., respectively, although the diet was designed to provide a high iron intake and included such foods as raisins, carrots, graham bread, prunes, lettuce, beef, and egg.[1]

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[1-3] *Bibliography on request.*

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Even in the quite prosperous times of 1929, investigation proved that a surprising amount of sickness, especially among the lower income groups, went untreated and neglected. To some extent this was due to poor geographical distribution of hospitals and physicians and to some extent it was due to ignorance or to cult prejudice, but in the main it simply represented an inability to purchase and pay for medical care. *Conservative estimates place the total amount of sickness in America that is allowed to go untreated at 30%.*[a] That cold, but stimulating, fact stands second among the several that are basic to a study of medical economics.

The third is a corollary to the second. *This inability of so many people to pay for adequate medical care is not due to exorbitant medical fees and extravagant hospital charges, and the national bill for medical care is not disproportionate to national income or beyond the means of the nation.*

It has come to be a popular pastime for writers and speakers to hurl epithets at our profession for its arrogant and extravagant charges. There should be interesting reading for such as these in the final report of The Committee on the Costs of Medical Care. Certainly, no one has accused that august body of acting the role of apologist for our profession, yet its findings justified the conclusion that physicians are decidedly underpaid. One can readily believe this, too, when he learns that the average estate left by those doctors dying in Wisconsin between 1920 and 1930 was less than $15,000—and that, by the way, included the doctor's insurance![b]

The total bill of the American people for each and every kind of service having to do with the prevention and care of disease amounts to about 4% of the total national income. Those who would claim that the costs of sickness are exorbitant and entirely beyond the public's pocketbook, should be surprised to learn that the same public spends a sum six times that amount for articles or services classed as luxuries and comforts. Chewing gum, candy, cosmetics, entertainment and similar items take four dollars of national income for every dollar that is spent for national health.[a]

The fact that total national income is more than ample to buy excellent medical care for everyone is of little comfort, however, to the patient who is faced with the individual problem of paying his medical bills. This leads us to the fourth economic fact, basic to our problem. *The one outstanding reason why so many people are forced to skim along on thoroughly inadequate medical care or to forego it entirely, is that sickness and its costs fall so very unevenly among them.* Here lies the real heart of the whole problem. If sickness fell evenly among us all, and in regular average amounts each year, the problem of paying the bills would be relatively simple for everyone. A sum not far from $30 would be ample to pay one's entire health bill for a year if sickness came in average doses. Unfortunately, this average does not prevail. Nine families escape with minor sickness costs while the tenth has to pay a bill slightly less than one-half of the entire costs for the group. Experience has actually proved that 10% of our American families pay 41% of the annual sickness bill of the nation.[a]

And finally, it is a basic economic fact that *there is no arbitrary income level below which adequate medical care cannot be purchased on the usual fee-for-service basis and above which it can.* Frequently it has been proposed that some form of a supplied medical care be arranged for people whose income is below a certain level, leaving those whose income is higher to shift for themselves. This presupposes that sickness costs are the same for everyone and nothing could be farther from the truth. Experience proves that many people of incomes hardly life sustaining need no medical service whatever during a given year. Conversely, we all know of families of substantial income who have been bankrupt through serious sickness. The amount of sickness costs that can be conveniently borne by any patient, of course, varies with income. There is a point, however, above which sickness costs can be-

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[a] Committee on the Costs of Medical Care.

[b] Reported by the Secretary of the State Medical Society of Wisconsin.

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come a catastrophe to anyone. When sickness costs rise above that critical point, anyone, be he poor or of moderate income, finds himself in a financial dilemma.

BASIC PROFESSIONAL CONSIDERATIONS

Entirely apart from these five fundamental economic facts, a consideration of the subject of medical economics would be lopsided and incomplete without giving due weight to certain basic professional considerations.

There is a definite oversupply of physicians. Even in normal times there is an unwanted and unnecessary idleness of physicians that represents about one-third of their potential working time. In a time of depression such as the present, this is accentuated to a disturbing degree. Already, this surplus of physicians is prompting much discussion, and plans are being suggested to restrict the number of matriculates to the profession. Any such artificial economic modification of the fundamental economic law of supply and demand can prove effective only to the extent to which it is possible to keep it under rigid control. Even were it possible to control such human factors as the ambition of youth and the desire to serve and to sacrifice, such a proposal is open to considerable question on purely moral and ethical grounds. Restrictions that insure *better* physicians need no defense, but restrictions solely for the purpose of making *fewer* doctors can hardly be claimed to be for the public good.

There is another way to meet the problem of any surplus. To expand its market accomplishes exactly the same end as to curtail its production. It has been said that thirty per cent of all sickness in America now goes untreated. Any program that will extend medical service to those now going untreated would wipe out at once the present surplus of available medical care. Such a program would have the added large virtue of performing a great public service.

Our generation has seen the development of medical knowledge and scientific curative procedures that have been astounding. It has come to be a physical impossibility for any one physician to encompass within his abilities more than a small part of the whole. Already we have seen the sharp delineation of a dozen or more specialties. It is not surprising that there has been considerable confusion in all of this. The public has gone specialist crazy, ignoring completely the fact that the vast majority of cases of sickness are well within the capabilities of the physician in general practice. Physicians as a class are not blameless, either. Altogether too many of us blindly resent and oppose the idea of true specialization. Worse still, however, there has been entirely too much of pretending to specialization among physicians. *There is a real lack of coordination between general practitioners and specialists; a lack of adequate supervision and control over the quality of some types of medical care; and especially is there a lack of effective control over specialization.*

CHANGE IS INEVITABLE

And finally, basic to any consideration of medical economics, there remains the one great fact that civilization always moves and change is ever in the air. Truly, he is blind who will not see. While Pasteur was groping among his beer vats and pickle barrels for a clue to the meaning of his new microbes, people were already banding together in little groups to find some means of mutual help when the dread specter of disease came. While it was not possible to average sickness among them all, it was possible to divide the costs of sickness between each other so that no one would have more than his share. Health insurance found its earliest expression in the *Krankenkassen, Mutualites,* and *Approved Societies* of the Old World. Community bargaining for medical care had begun. Bismarck saw the great political power that health insurance held, and fifty years ago the social democrat movement in Germany was lulled to sleep for a generation by a new panacea: medical care was given free to the working man at the taxpayer's expense. The rise of state medicine in Europe and its spread around the globe has been too steady and encompassing not to mean to all but those who will not see that, in

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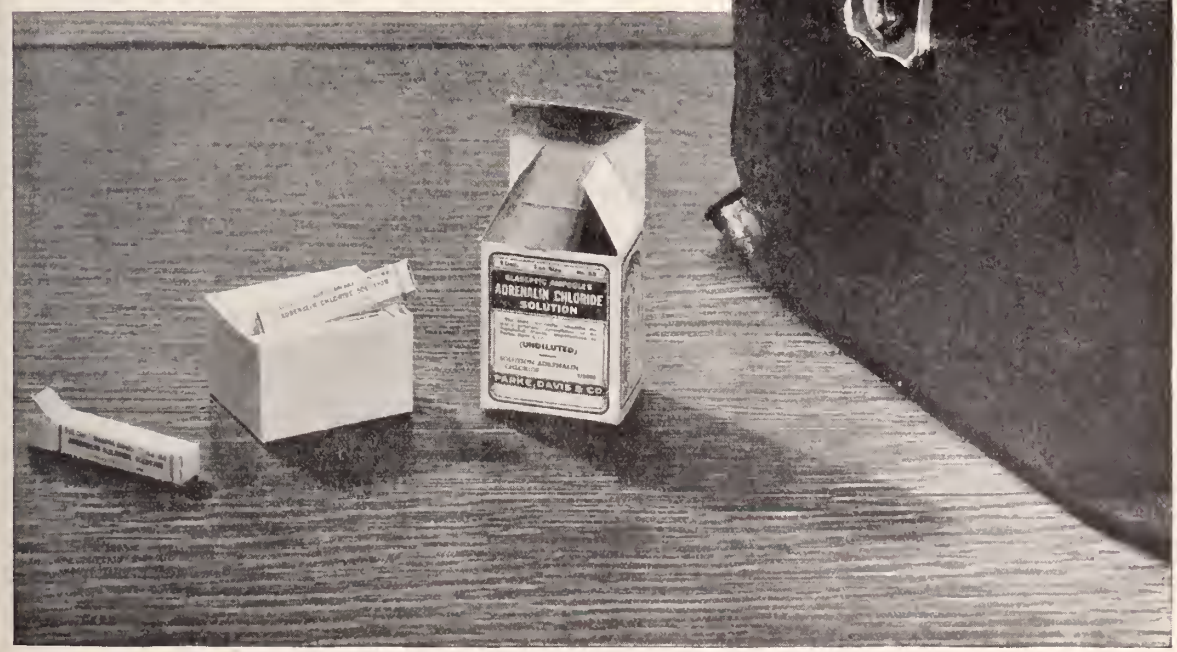

America, the fee-for-service system of private medical practice is headed for some certain and substantial change.

When one stands too close, the forest is hidden by its trees. Living as we do in a time and place where the individual fee-for-service method of medical practice is still in quite general use, it is difficult to see and grasp the force of the move toward the socialization of our profession. The length to which medical care already has grown away from that fee-for-service basis is far from being fully appreciated. Even now, the entire field of preventive medicine is essentially under government control. Most mental diseases, nearly all of the care of smallpox, and much of the care of the crippled child, of tuberculosis, and of the venereal diseases, are provided through taxation and government control.

The average American is a firm believer in the principle of insurance as a means of protection against catastrophe. In fact, that insurance principle is already deeply rooted in many phases of our medical practice. One needs only mention the fact that practically every state in the union compels its industries to carry insurance to provide medical care for the injured working man. It may be startling, but it is a fact that over half of the physicians in Milwaukee County are in some form of panel or contract practice, practically all of which represents some form of application of the insurance principle to medical care.

Except in the more sparcely populated districts, counties have come to supply medical care not only to the poor but to the low wage earner as well. In Wisconsin, as elsewhere, we are now in the midst of a veritable epidemic of agreements between county supervising boards and county medical societies for the medical care of the county's poor on a group payment basis. Except for the fact that it is limited to the pauper or those of extremely low income, there could be no purer type of state medicine than this, and the surprise lies in the fact that these deals are being consummated at the request of the profession!

State medicine, as practiced in our State Hospital, and United States medicine, as practiced in our veterans hospitals, are but others of the endless indications of the inevitability of change. They, with the rest, serve to illustrate the rapidly growing trend in America toward group medical practice and away from the individualistic fee-for-service system. Truly, socialization of medicine seems at our very door.

Nor is the public as disinterested in all of this as the profession sometimes seems to be. The high cost of medical care is a topic of daily discussion in numbers of lay publications. A dozen or so large philanthropic funds and foundations pooled their resources to the extent of $1,000,000 to pay for the five-year study of the Committee on the Costs of Medical Care. Several of these foundations continue to spend much effort and money toward arousing further the public demand for a new deal in medicine.[c] Whether we like it or not, the practice of medicine is in for more, rather than less, public analysis and, unless the profession begins to take an active interest in the matter, it seems more than likely that the age-old and proven individualism in medical practice is to be swept away with the tide. If we are not to suffer the fate of our European brothers, American physicians must lift their heads out of the sand, take careful bearings, and then develop some intelligent program that will take into account the crying need for some fair adjustment of the economics of medicine to the changing times. In no other way can the public and the profession be spared the tragedy that is inevitable if those adjustments are to be left to the pettiness of politicians, to the greed of the great insurance corporations, and to the silly sentimentalism of the professional reformer.

WHAT IS THE SOLUTION?

Out of all the volumes that have been written on what is wrong with medical practice and what can be done to correct it, surprisingly few possibilities present themselves:

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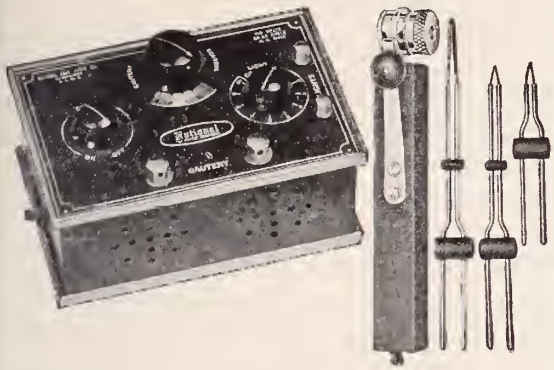
[c] Mar. 17, '33, New York Times quotes the Milbank Memorial Fund as actively favoring compulsory health insurance under state control.



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First. Medical practice might be preserved *Status Quo.*

Second. Medical practice might be wholly socialized and medical service rendered by state physicians hired through taxation, much as is now the case in the profession of school teaching.

Third. Medical practice might be developed under some system sponsored and controlled by insurance companies.

Fourth. Medical practice might be developed along a line comprising the good in all of the other three, at the same time attempting to avoid their defects.

Even were all physicians agreed that the present clamour about medical economics was but the mouthings of misguided enthusiasts and that medical practice should remain in *status quo,* there is every indication that change would continue in spite of their protestations. A tide cannot be swept back by a broom. Politicians know the value of espousing the cause of the sick and disabled and they have no intention of leaving it alone. Insurance corporations[d] see new and fertile fields in sickness insurance and they manifest anything but an apathy towards its possibilities. Industries have learned that it pays to keep the workingman well and, incidentally, that medical care can be had much cheaper and often better if they themselves pick the doctors and then drive their bargain. Public health agencies have long since turned from water purification and quarantine to vaccination, then to immunization, and now to the care of the school child and periodic health examinations, with nothing at all to indicate that matters are to rest there. The various county and state poor relief agencies have long since determined upon medical care as the very first aid to bring in as income drops to lower levels and they vie with the social agencies in the liberality of their interpretations of the particular income level at which that relief becomes necessary. With these and a multitude of other pertinent facts, there is every promise that the "status" is not to remain "quo."

Even though medical practice might be preserved exactly as it is, there is considerable doubt that we would have it so. What were, in times gone by, honorable virtues of our profession have now turned to vices through changes in our civilization and its economic structure. The contract surgeon once had a legitimate and necessary place among the mines and in the railroad camps, but contract practice as it now prevails in industry robs the employee of his legitimate right to the choice of his physician, stifles free competition among physicians, and, more often than not, serves the interest of the employer and his insurer rather than the patient himself. Panel practice was originally developed as a means of insuring good medical care and, insofar as it preserves that as its sole purpose, it remains a laudable enough development but, when employed as a means of beating down professional fees and of obtaining testimony against the patient and in favor of the insurance carriers, it assumes a quite different flavor.

Time was, and not so long ago, when it was a privilege and an honor for physicians to lend their helping hand to the poor and unfortunate. The modern chain-belt system of dispensing medical charity to the poor, however, has come to be a purely paternalistic program of society, and the beaurocratic system under which the doctor now has to serve, robs him completely of the pleasure and the glory that a more merciful and dignified type of charity had to offer.

Pure socialization of medical practice has been seriously suggested as a means out of present medico-economic difficulties. Were it not for the fact that purely socialized medicine already has a strong foothold throughout the world, it would seem hardly to merit consideration. It can and should be said, however, that, despite all the lovely things that are held for socialism by its disciples, wherever and whenever it has been applied to the practice of medicine, experience has proven that it takes from the profession that spark of individual incentive and ambition that has sired our remarkable progress

[d] Metropolitan Life Ins. Co. financed and carried out extensive studies of health insurance abroad supplementary to the work of the Committee on the Costs of Medical Care.

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through the past. Pure socialism has been supplying medical care to most of Europe for a generation. There is more than passing meaning to the fact that American physicians no longer find it necessary to study in the clinics of Europe to reach their competency. On the contrary, European physicians today are looking to their American brothers to bear up the banner of medical progress which was blown from their very hands by the economic whirlwind that struck them with the coming of socialized medicine.

In spite of its many faults, however, the pure socialization of medicine through state compulsion has proven itself capable of accomplishing two worthy things. It has been one means of compelling the public to anticipate and assume in advance the responsibility of providing for its own medical care and it has offered at least a possible, if not the best, method of distribution of the costs of sickness throughout the population.

Except where the state supplies the medical care and pays for it through taxation, there is no alternative method of even distribution of the costs of sickness other than through some application of the insurance principle. Even this possibility is far from new or novel. Much experience is already at hand to judge its possibilities and its drawbacks. Roughly, we find the principle of insurance applied in three rather different ways.

INSURANCE METHODS

There is the truly voluntary type of sickness insurance where, for a stated premium, one is indemnified in cash for any sickness costs that he may suffer. The trouble with an insurance that is purely voluntary is that it is not human nature for anyone to assume the bother and costs of such a program when he is young and healthy, especially if meeting the premiums amounts to a sacrifice to him. Exorbitant sales costs are, therefore, necessary to such a program if it is to reach any substantial cross section of the population. Purely voluntary health insurance never has been put into general operation. Before leaving it, however, its experience has demonstrated one factor worthy of comment. Most people who carry a purely voluntary sickness insurance choose to take a type of policy that contains a waiver whereby the insured agrees to cover his own sickness costs through a certain preliminary period before the insurance indemnity applies. And it is not hard to find the reason why. The minor and short time sicknesses are not especially costly and the average individual does not need that protection. More significant still, the sum of all of these minor sickness costs makes up by far the greatest part of the total sickness costs of any group of people, so if the insured individuals are willing to forego claims for these minor charges, the insurance rates can be reduced to an astonishing degree. While voluntary insurance has proven impractical as a means of general distribution of sickness costs, it has served to point out the fact that insurance, limited only to the catastrophic costs of sickness, is not only cheap but is all that the individual subscriber wants or really needs.

Then there is the semi-compulsory type of health insurance in which a man has to take the insurance if he wants to be a member of his lodge or religious society. While there is considerable difference in the degree of compulsion, the sickness insurance now prevalent in industry in the form of the employees mutual benefit associations also falls in this category. The type of medical care that is supplied to this group of people depends entirely upon the degree of honesty and intelligence of the management. One can readily point to illustrations, especially among the fraternal types, where the insurance is a first-class and typical American racket with a type of medical care that beggars description. At the same time one can point to illustrations, particularly in the larger industrial types, where the management not only makes every effort to supply an excellent type of medical care but even adds its own funds to accomplish that purpose.

In this semi-compulsory type of health insurance, as well as in the purely compulsory type mentioned later, one serious defect invariably prevails. Nowhere are we able to find a type of insurance that serves

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the single purpose of supplying medical care to the sick. Always there is added the supply of certain cash benefits to make up for wages that are lost during the sickness. This matter of cash disability benefits complicates terribly the whole picture of health insurance. This is particularly true because the system demands that the doctor not only supply the medical service but, in addition, he must be the judge of how long the patient is sick and how much cash disability benefits he is entitled to.

While it may be possible for any lodge or benefit association to be magnanimous enough to have no care for how large the cash benefit is going to be, it is simply natural that there should be great concern that the cash disability benefits are not too great. The doctor, if he is to continue to remain on the panel, has to become the agent of the organization and not the agent of the patient. This is a new role for the physician and whether or not it creates an intentional effort on his part to be unfair, the tendency is all that way. Panel and contract medical practice owe their existence to this matter of cash disability benefits and, all solemn and holy protestations to the contrary notwithstanding, the panel and contract physician is bound by the very system itself, to be placed in a more or less compromising position.

Any broad view of this whole group of semi-compulsory systems of health insurance must recognize that its major faults lie in the facts:

(a) that it carries the dangers that are inherent in contract and panel practice;

(b) that it includes the bad feature of a combination between medical care and cash disability benefits;

(c) that is lacks supervision adequate to insure its legitimacy; and

(d) that it has no feature to make it generally applicable to all of those of the community who have difficulties in meeting their sickness costs.

While this group of semi-compulsory systems of health insurance has all the virtues that are entailed in the application of the insurance principle to sickness costs, it is distinctive in pointing out the fact that insurance can be made essentially compulsory without recourse to law. At least this is true for that class that needs some method of distribution of sickness costs the most—the laborer.

And finally, we come to insurance made obligatory by law. So far in America this system has been limited in its application to those sicknesses directly the result of industrial hazards. While it is perfectly true that the industrial compensation laws of our various states have brought very substantial benefits to the laboring man, it does not follow that this type of health insurance is without serious fault. Here, as in the previous group, we meet the problem of the cash disability benefit and its corollary, the panel and contract physician. While it has the large advantage of effectively generalizing a system of supplied medical care for that large group of citizens who most need it, it makes no provision for sickness not connected with industry, and it leaves the laborer's family entirely to their own resources when sickness comes. Over and above all of this, however, it contains the serious threat to public and profession alike that is inherent in any system which leaves the control of the care of the sick either to the great insurance corporations or to the State itself.

SUMMARY

A broad and unbiased view of the entire subject of the economics of medicine, therefore, inevitably leaves one with the realization that there is considerable ground for the growing public unrest over present day conditions; that there is ample proof of the fact that neither the interests of the public nor those of the profession are being adequately served; that health insurance in its present very limited and disconnected forms is thoroughly inadequate and charged with many factors harmful to profession and public alike; that pure socialization of medicine as proposed through state medicine is a very visionary scheme already proven to be thoroughly inadequate and impractical; and finally, that medical care supplied by the large insurance corporations under compul-

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sion of the State has proven itself not to be free from many inherent factors that are of such a harmful nature as to minimize seriously, if not actually overbalance, all the good that it contains.

The Apostle Paul, in preaching to the Thessalonians two thousand years ago, said: "Prove all things; hold fast that which is good." If we are to find a proper path for future progress in medicine, that path must have full regard for its old and proven landmarks.

The private physician taking care of his private patient is an element in the practice of medicine too well tried and too long proven not rightfully to have earned the position of the heart of any program of medical practice for the future. Any scheme that does not preserve this individualism in our profession is completely without the benefit of justifying experience.

The fee-for-service system of providing for the costs of sickness is fundamentally sound and entirely practical in the vast majority of sicknesses.

Only a relatively small proportion of sickness is of such a nature that adequate care entails costs completely beyond the abilities of the individual to bear under the present fee-for-service system. Some scheme must be developed whereby the financial risk of these occasional catastrophic sicknesses may be evenly distributed throughout the population.

Taxation as a possible means to this end involves governmental control and can never be freed of the dangers inherent in such a program.

There is but one alternative and that lies in insurance. If and when health insurance comes to be generally adopted, and if it is to avoid the pitfalls and dangers that present efforts along that line have been demonstrated to entail,

1. It must be an insurance only to supply medical care and divorced completely from cash disability benefits.

2. It must be a form of insurance that provides only for the catastrophic costs of sickness, leaving entirely alone all that there is of medical care that can be purchased conveniently by the individual on a fee-for-service basis: A health insurance covering the catastrophic sickness costs of everyone not one that supplies complete medical care for any particular low income group.

3. It must cover all types of medical care hospital and nursing as well as professional services.

4. It must provide freedom on the part of the patient in the choice of his doctor his hospital, and his nurse.

5. It must be made general by some form of compulsion. Experience indicates that this might be accomplished through cooperation of the industrialist. If this does not succeed, it may be necessary and wise for it to be made compulsory by law.

6. It must be operated and controlled by that medical organization representing the profession of the community—not by the public and not by competing groups within the profession.

7. It must justify complete public confidence by including experienced lay representation and by providing for better control of the quality of medical service given, especially as regards the more intricate and highly specialized parts of medical practice.

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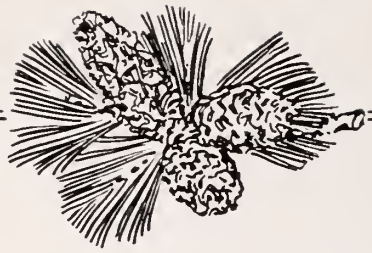

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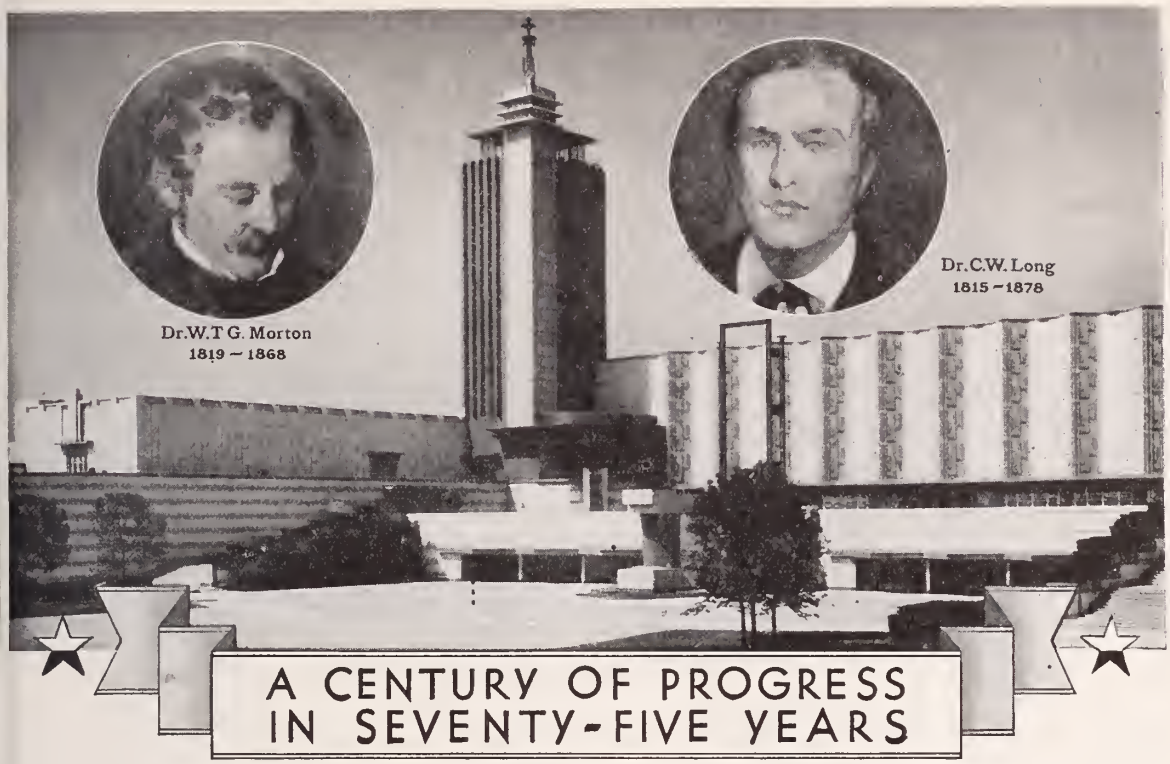

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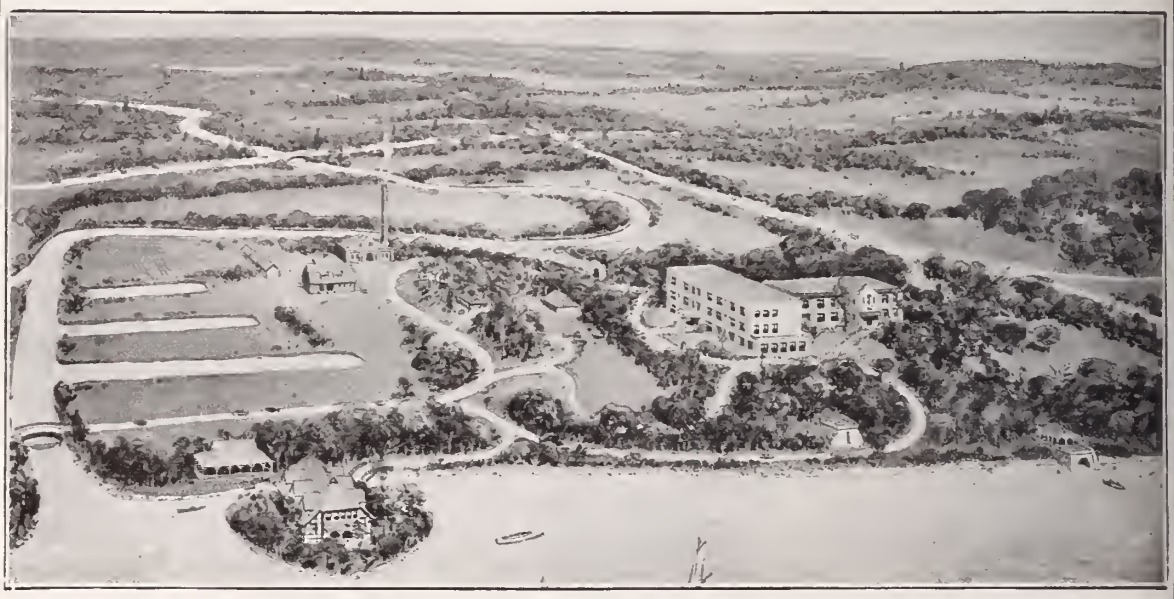

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The Wisconsin Medical Journal

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Physiotherapy an Essential Specialty in Medicine

By J. E. RUETH, M. D.
Milwaukee

This subject is so large that it will be impossible to cover the entire field. All I can do in the limited time allowed me is to give a brief outline of the modalities used and their clinical application.

The first point I wish to stress is that physiotherapy has been misused and for this reason has not been accepted, as it rightfully should be, by the medical profession.

The high-pressure salesmanship used by the manufacturers of physiotherapy equipment during the years 1922–1925 made the medical profession physiotherapy conscious, but it failed to give the medical profession an adequate knowledge of its use and indications. Manufacturers sent out physicians and even laymen on tour over the United States giving courses on physiotherapy lasting from three to five days. From my own experience, in attending a number of these classes, I must say that there were only two physicians who had the qualifications necessary to lecture intelligently on physiotherapy. Unfortunately these lecture courses lasted only five days and could afford the physicians a hazy knowledge at best of the benefits of physiotherapy.

Obviously, the object of these manufacturers was not to give the physician a proper training in physiotherapy modalities, but to sell their equipment. They did not have foresight enough to insure business for the future, nor did they realize that the medical profession would not adopt this new form of therapy unless the clinical results were as anticipated. Nor did they care to what use the doctor put his high frequency machine, lamps, or other modalities after he purchased them. Most commercial lecturers would only give a superficial idea of the proper technic, yet would promise wonderful cures from applying a couple of electrodes or subjecting the patient to the rays of a lamp. The physics and physiological effects of the various currents and rays, the pathological conditions it would be logical to expect these measures would correct, were scarcely mentioned.

SPECIAL TRAINING NEEDED

When the physiotherapy apparatus was installed in the doctor's office, the salesman, with no medical training, would spend a few hours demonstrating the machine. Now the physician was supposed to be a physiotherapist and was expected to cure all the ills of his community. The honest, conscientious physician became very much disappointed when he found that he could not obtain the results promised him. He discontinued using physical measures, and told his professional friends that physiotherapy had no merit. Other physicians, not practising physiotherapy, upon encountering disgruntled patients who told them of receiving poor results from physiotherapy, naturally concluded that it had no value in the medical field.

Insurance companies noticed that physiotherapy treatments not only greatly increased their medical expense but gave very poor results, owing to the inadequate preparation of the practitioner. Therefore, many insurance companies issued orders to physicians not to use physiotherapy upon any insurance patient. Their policy is perfectly justifiable in view of the fact that physiotherapy is still a misunderstood field in medicine. And yet, these insurance companies and these physicians should realize that this failure of physiotherapy was due only to the unscientific application of inefficient modalities and to poor judgment in the selection of cases.

Many of our large hospitals and sanitariums have a so-called Physiotherapy Department with a technician only in charge. Cases are referred to the Physiotherapy Department and the technician decides what treatment to give the patient. Physiotherapy is important enough and covers a large enough field to demand that a specially trained physician be in charge and that he be qualified to prescribe and direct correct treatments.

We cannot expect that physiotherapy will be recognized as a special field in medicine until the members of the medical profession, as a body, realize that physiotherapy requires a special training, the same as any other specialty in medicine. Our medical schools should give physiotherapy a more prominent place in their teaching curriculum.

Physiotherapy has a large enough field to choose cases from, where surgery and specific drug therapy will not yield results. I wonder if the medical profession realizes why the chiropractor, napropath, Christian Scientist, and other cultists have obtained such a strong hold in this country. I believe the reason is that patients who have consulted a number of reputable physicians and have not been relieved have, as a last resort, gone to one these cultists. I feel certain that a great majority of these patients would not have drifted away from the medical profession if they had been given scientific physiotherapy. The class of patients I am mainly referring to is the chronic and neurotic. These patients have many complaints, and yet no definite pathology can be found. These patients are suffering and demand help. If the medical profession does not furnish a means of relief, they will condemn the physicians and seek help from one of the various cultists.

INVENTORY NEEDED

I think it is time that the medical profession took an inventory of itself and ceased to be so self-satisfied. It should recognize that there is a percentage of patients who are not receiving the best the profession has to offer.

Wonderful progress has been made in the medical field during the past twenty years. This scientific advancement has been made possible by tedious research, and even now millions are being spent and untiring workers are devoting their lives for the advancement of medical science. But the most outstanding advances made in any science have been made in electricity, and I believe that the use of electricity upon the human body will be more thoroughly understood and its value more greatly appreciated as time goes on. Look back over fifteen years and see what a marvelous, almost unbelievable, advance has been made in electricity. But to this important, unknown, invisible agent, capable of accomplishing so many wonderful things, there has not been given the time and thought to develop fully its uses in its application to disease. We have advanced in electrotherapy, but not as rapidly and successfully as we should, owing to the fact that there are too few research workers conscious of the possibilities or the importance of electricity as applied to medicine. I believe electrotherapy is in its infancy and that its possibilities are unlimited. It has a distinct, definite place in medicine, and should be recognized by the medical profession as a specialized field in therapy.

Time does not permit me to go into detail in describing all of the modalities used in physiotherapy, with their indications and technic of application. I will endeavor to give a brief description of my idea of the proper equipment indispensable to a physiotherapist in order to obtain satisfactory results.

ULTRAVIOLET RAY

The ultraviolet ray is perhaps the oldest and most generally used and understood physical modality. Simplicity of technic and good results have made it popular with the profession.

The *dosage* is divided into:

1. Mild tonic skin dose, in which we do not desire to give any skin reaction.
2. First degree—erythema, faint redness, disappearing in twenty-four hours.
3. Second degree—mild sunburn, followed by fine desquamation.

4. Third degree—marked reddening, slight edema, peeling of the skin, marked pigmentation.

5. Fourth degree—marked blistering, deep pigmentation.

Physiological effects are:

1. Activation of ergosterol into autogenous vitamin D, with increase of calcium, phosphorus, and iron.

2. Increase in red cells, hemoglobin, blood platelets, lymphocytes and blood alkalinity.

3. Increase in bactericidal power of blood and serums increasing the defense mechanism of the body.

4. Nervous system: (a) analgesic effect in painful areas, (b) increased feeling of well-being and buoyancy.

Clinical application:

Ultraviolet irradiation is indicated in all cases of clacium deficiency, as rickets, etc. Demineralization incident to pregnancy is prevented and overcome by its use.

It is an adjunct to other recognized therapy in anemia, extrapulmonary tuberculous lesions, as of bones, joints, glands, pleura, peritoneum; in infections of the respiratory system, and is a tonic for general debility cases. A series of exposures taken when well will keep up the body resistance and prevent many infections that are common during the winter months.

The various degrees of erythema are most commonly used in erysipelas, eczema, acne, ringworm, alopecia, boils, herpes zoster, impetigo, lupus vulgaris, lichen planus, pruritus, psoriasis, Vincent's angina, skin ulcers, etc.

It is the common thing to decry ultraviolet therapy because of its wide application by those understanding its use, yet the laboratory admits its value as a bactericidal agent and as a specific in the calcium deficiency diseases. Is it then so strange that ultraviolet radiation is an important factor in the treatment of such conditions?

INFRA-RED RADIATION

While considerable investigation is under way concerning the possibility of undiscovered effects of infra-red radiation, the present state of knowledge permits the conclusion that heat production, more or less deeply in the tissues, is the outstanding result.

The relative efficiency of radiation from an efficient infra-red generator as compared to the use of the hot wet compress or hot water bottle may be judged when it is noted that at a temperature above 115 to 120 F. the heat production from these sources becomes unbearable, while a temperature of 170 to 180 F. at the skin surface without discomfort is recorded when an efficient infra-red generator is used. The greater penetration, free exposure to the atmosphere, free evaporation from the skin surface, free circulation of blood and lymph, due to the absence of any pressure, are all factors in permitting the greatly increased efficiency of infra-red radiation.

Effects of infra-red radiation are:

Vasodilatation with reddening of the skin, local increase in red corpuscles, increased temperature and stimulation of the physicochemical activity of the affected area.

The use of an efficient infra-red generator to keep hot moist dressings hot, as compared with the hot compress or hot water bottle, spells the difference between constant, effective heat, without pain and impaired circulation due to weight and pressure, with the infra-red generator, and the constantly changing, comparatively ineffective heat, with frequent disturbance of the patient, pain and impaired circulation due to pressure, and the careful, constant supervision required, when the hot water bottle or the hot compress is used.

Infra-red radiation is indicated when you desire the above physiological effects in infections, cellulitis, lymphangitis and in other conditions where benefit may be expected from external heat.

LOW VOLTAGE

The galvanic and sinusoidal currents were among the earliest forms of electricity used in physical medicine. With improvement in the apparatus for generating these

currents, their use has increased, and today they are employed in every division of medical practice.

The low voltage currents commonly used at the present time are the alternating (sine wave or sinusoidal), galvanic and pulsating direct, singly or in combination.

While these currents have been used for many years, their therapeutic value was not recognized until the more recent acceptance and development of physical medicine. A simple and effective means for producing mechanical, physical and chemical changes in living tissue is provided by these low voltage currents.

The mechanical, stimulating sinusoidal current is frequently used when muscular stimulation and action are desired for the treatment of atrophied or relaxed muscles, as following paralysis, and intestinal stasis. It is valuable in electro-diagnosis of nerve and muscle injuries.

The galvanic current finds its place where thermal and chemical effects are desired. The positive pole is astringent, repels alkalies, attracts acids and oxygen, hardens and contracts tissue, is a vasoconstrictor, thus tending to stop hemorrhage, diminishes congestion, is sedative, produces a hard firm scar. It relieves pain in acute conditions because it reduces congestion.

The negative pole acts in the opposite manner, dilating blood vessels, softening and relaxing tissues, is a vaso-dilator, thus tending to increase hemorrhage, increases congestion, is stimulating and irritating, produces a soft pliable scar, relieves pain in chronic conditions because it softens scar tissue, thus frequently relieving pressure.

It is used in the treatment of strictures, infections, and contractures.

DIATHERMY

Electricity offers a practical means whereby heat can be generated in the body tissues. The heat-generating property of an electrical current depends on the fact that considerable energy must be expended to force a current through high resistance circuits, such as the body tissues. Electrical energy so expended manifests itself in the form of heat, and the heat generated by a current that passes through tissues can be said to be conversive heat.

Ordinary commercial currents of low frequency, such as the commonly used 60 cycle current, or direct currents, cannot be used on human beings, because of the violent neuromuscular contraction caused, which results in severe electrical shock. It has been found that if the oscillation frequency of an alternating current can be made high enough, such a current can be passed through living tissues without any disagreeable effects. Owing to the mechanical inertia of the muscles and nerves, they will not have time to respond to the rapid charges or reversal in the direction of flow of a high frequency current of the order of from one million to several million or more cycles per second. In spite of these rapid reversals or oscillations in a high frequency current, the current does get through the circuit because it flows at the rate of 186,000 miles per second. This point is brought out because sometimes it is asked how a high frequency current will have time to complete its circuit through a patient and back to the machine if the current is changing at such a rapid rate as not to affect the nerves and muscles.

Owing to the peculiar characteristics of high frequency currents, the ordinary electrical laws that apply to direct or low frequency currents do not apply to high frequency. For instance, while in direct currents volts times amperes equals watts, and in 60 cycle alternating current volts times amperes equals approximate watts, it will be found in high frequency currents that apparent volts times amperes delivered from the machine will be nowhere near the actual wattage being delivered from the machine. For this reason, much higher voltages are necessary for effective diathermy than is usually realized. Clinical experience shows that apparatus delivering the highest apparent voltages are the best for therapeutic purposes.

Unfortunately, the greater percentage of the high frequency machines in use are of the low voltage type, the current of which will not traverse highly resistant tissues, and only produce superficial heat. Hot applica-

tions or lamps, etc., will produce about the same effects. It is perfectly simple and logical that in order to pass a high frequency current of one to three million alternations per second through tissues of high resistance (as through two arthritic knees), we must have as high voltage (electrical pressure) as in an x-ray. No roentgenologist would attempt to photograph a knee with an x-ray of only 5,000 to 15,000 volts, as his picture would be of no value. It is just as necessary to have high voltage in a high frequency diathermy as in an x-ray. The inefficacy of low voltage in x-ray work is very easily proven by the picture, the inefficacy of low voltage diathermy is proven by the poor clinical results. In order to convert an ordinary street current into a high frequency, high voltage current, it is necessary to have a properly constructed diathermy machine.

It requires only a vague knowledge of electricity to appreciate the fact that, in order to produce a sedative, high frequency, high voltage current, it is essential to have a large diathermy machine capable of producing a current through highly resistant tissue and not around highly resistant tissue. A current must have voltage in order to pass through areas of high resistance. To produce voltage you must have a large, oil-immersed transformer. There is not an air cooled transformer made which will give enough voltage to enable a current to go through highly resistant tissue. The use of air cooled transformers therefore defeats the purpose and intent of diathermy and accounts for the disappointing results.

I realize that I am undiplomatic in making the foregoing logical, honest statements. I realize that manufacturers and users of low voltage diathermy will criticize me. I am basing my opinion on logical reasoning and clinical results. Subjecting myself to disapproval is done only for the betterment of physiotherapy.

The physiological effects of diathermy are:

1. The rapid production of an intense (arterial) hyperemia.
2. The reduction of pain caused by ischemia.
3. The increase of local metabolism.
4. The increased number of phagocytes brought by both the increase in blood supply and the local heat.
5. The increased general metabolism following the radiation of heat through the blood stream.
6. The softening effect of heat from inflammatory exudates in the tissues lying within the effective path of the high frequency current.

The *contra-indications to diathermy* are, broadly speaking, two:

1. Danger of hemorrhage.
2. Undrained areas of pus, which, under the influence of diathermy, may be absorbed and cause a septicemia or metastatic abscess.

STATIC ELECTRICITY

Static electricity is an undirectional current of an exceedingly high voltage and small amperage, self-charging condenser discharge, generated on the surface of revolving, circular, glass plates. The addition of properly connected Leyden jars increases the capacity of the static machine and also gives you an absolute control of the frequency of the discharge of waves, which is usually 60 to 90 per minute.

The current is composed of discharges or interruptions across a gap between two brass ball terminals. The gap can be opened from one to fifteen inches, according to the strength of the muscular contraction you wish the patient to have. For instance, in the treatment of optic neuritis a very small contraction or muscular vibration is desired, and in case of lumbago or sciatica it is necessary to give a more violent massage, which is endured in perfect comfort.

In giving a static treatment, one places the patient on a convertible chair or table on an insulated platform. An electrode of size and shape applicable to the part to be treated is placed over the area involved and attached to the positive pole of the static machine. When the static current is applied, the only effect felt by the patient is a local rhythmical muscular contraction and relaxation—positively painless, if properly given.

I usually give ten to fifteen minutes of static massage to the tissues in need of such

treatment, which gives the patient 900 to 1200 contractions and relaxations per treatment. After having that particular part of the human anatomy diathermized from forty to sixty minutes, and following then with this deep, painless, soothing massage, I think it is very easy to appreciate the beneficial therapeutic effects. Diathermy alone does help in many acute and chronic inflammations, but the addition of static massage will result in much more rapid benefit. In the more chronic types associated with a dense fibrosis, I believe the static to be the more essential, because by its addition I have converted many of my previous failures into successes. In order to appreciate the value of the static massage, you must see a patient under treatment or have the treatment applied to yourself.

The static wave is far superior to manual massage as a follow-up after diathermy. The most delicate and finely trained human manipulation is decidely traumatic in character when compared to the massage of a condenser discharge over the area involved. Properly applied, it can be used with benefit where any other kind of massage would only add "insult to injury." By means of this massage the acute and chronic inflammatory exudate and the pathological changes resulting therefrom are removed.

Whether a change in chemical polarity takes place in the cells of the human body from the application of this static current, I am not in a position to state. It is one's desire and aim, when passing the high frequency current and following with static massage, to correct the function of that part of the human anatomy that is being treated. From clinical experience, I feel certain that that is what is being accomplished.

Clinical applications:

Diathermy followed by static massage is used in acute and chronic inflammations. Both of these types of inflammation are characterized by the pressure of new tissue and inflammatory products, the removal of which is the aim of the treatment—in other words, the conversion of pathological tissue into normal tissue.

Excellent results are obtained in the following conditions, in which I believe it is reasonable to expect that a histological change in the tissue takes place: traumatic inflammation of bones, joints, tendons, ligaments, muscles, either acute or chronic; restoration of function after fractures; arthritis, excluding proliferative and deformans; neuritis of all types; inflammatory conditions of the female pelvis, prostate, liver, gallbladder; inflammatory abdominal adhesions; deficient arterial circulation of extremeties; selected cases of hypertension.

High voltage diathermy without static gives good results in pneumonia, angina pectoris, and chronic myocarditis.

Artificial fever produced with diathermy is still in its infancy. From recent reports, it appears to have wonderful possibilities.

By physical means it is possible to correct or restore to normal many pathological conditions, assuming that the pathology caused by focal infection is eliminated. There is still a divided opinion as to the importance of the elimination of focal infection. The evidence produced by Hastings, Billings, and Rosenow should be conclusive enough and leave no doubt as to the necessity of detoxication or deseptization.

CONCLUSIONS

1. Physiotherapy has been abused and misused owing to inefficient equipment and unscientific application.

2. Physicians using physiotherapy should thoroughly understand its application and indications and should have a complete equipment.

3. High voltage diathermy, followed with static massage, is very important for good clinical results in the majority of cases in which it is indicated.

4. Proper diagnosis, elimination of focal infection, and selection of cases are essential.

5. Undergraduate and postgraduate medical schools should devote more time to the teaching of physiotherapy.

6. The medical profession should realize the valuable aid that physiotherapy offers to almost all the special branches of medicine, and that it is a specialized field in therapy.

Transurethral Resection in Prostatic Obstruction*

By JAMES C. SARGENT, M. D.
Milwaukee

To believe that the ultimate has been reached is a common human frailty. The history of the development of surgery abounds with illustrations. A full century before Leeuwenhoek had polished off his crude lenses to look, for the first time, upon the mysterious world of microbes, we find no less an one than the father of French surgery, Ambroise Paré, proclaiming that he and his time had seen the full development of the art of surgery. Still progress continued and always will. Surgery of the prostate gland has been and will continue, no exception.

At the opening of this century we find the purely technical side of prostatectomy, both suprapubic and perineal fully developed, and little has occurred since to improve upon that technique. Remarkable advance, however, has been made in the development of a better understanding of the importance of preliminary and postoperative care to the end that prostatectomy has been transformed from a frightfully dangerous procedure of last resort to one of comparatively safe election.

While there is no disposition to belittle in any way the remarkable progress that has been made in prostatic surgery nor any desire to magnify its dangers, the fact remains that, at its very best, prostatectomy, either perineal or suprapubic, is a surgical procedure of the very first magnitude and one full of all sorts of formidable hazards. While there have been reports from time to time of substantial series of cases with a mortality of one or two per cent, it is apparent to all that an analysis of prostatectomies in general, as done by the average capable surgeon and without case selection, would show the danger of the operation to be very considerably greater than such figures would imply.

An appreciation of the formidability of prostatectomy has, for a century, attracted the efforts of occasional surgeons toward a more simple method of relief of urinary obstruction. As early as 1830, Guthrie recognized that prostatic tissue growing bar-like across the bladder neck would cause severe obstruction and he devised a method of severing this bar by a type of cutting knife passed through the urethra. Bottini, in 1874, introduced his urethral cautery incisor. Little real progress along this line occurred, however, until 1909 when Young presented his urethral punch with which he could remove, bit by bit, certain types of hypertrophy in which a small bar of tissue at the bladder neck produced severe obstruction. His punch, however, could accomplish nothing toward removal of large prostatic lobes, and, like its predecessors, it made no provision for the control of bleeding. In spite of these limitations, the Young punch operation has remained a comparatively safe procedure and certainly one productive of very gratifying results when its limitations were properly considered.

Much of the credit for the development of present-day transurethral resection belongs to Caulk of St. Louis, who was able to remove sizable amounts of tissue, and that with fair hemostatic control, by means of his cautery knife punch. While his instrument was in itself a great achievement, his persistence to an ideal against ten years of violent criticism seems even more to his credit.

Finally, in 1926, Collins reported the cystoscopic use of the high frequency current, cutting an unlimited amount of tissue with good hemostasis and under complete vision. Improvements rapidly developed until now, with any one of several instruments, it is possible to cut away piecemeal any desired part of an offending gland, closing each bleeder by electro-coagulation and seeing easily and clearly the entire procedure.

NEW PROCEDURE

In giving a brief summary of the cases upon which this presentation has been

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based it is only fair to call attention to the fact that transurethral resection is an extremely new procedure. There are many factors of a fundamental nature that will remain controversial until time and experience have settled them. What, if any, selection of cases is advisable? What patients should have preliminary cystotomy drainage, or preliminary catheter drainage, and what patients may be resected safely without drainage? What is the best anesthetic for the procedure? How much tissue need be removed for a successful result? What length of postoperative drainage is necessary for safety? Until more experience is at hand the answers to these questions can only be surmised.

Aside from these fundamental questions, the purely technical factors of the procedure are strange, and it is inevitable that anyone undertaking to perfect this method must necessarily have unfortunate mishaps that experience would certainly obviate. Alcock, one of the very early pioneers in this work, reports eight deaths in his first series of twenty-five cases, whereas his fifth and sixth series of twenty-five cases each were done without mortality. He is but one of a large number of leading urologists throughout the country who have proven that transurethral resection can, with experience, be made to be practically free from mortality and certainly infinitely less severe and disabling than any other form of surgical removal.

Twenty-five cases, resected since the middle of June, 1932, form the basis for this presentation. All patients suffering from chronic urinary obstruction, the result of prostatic enlargement, both benign and malignant, were resected without any attempt at case selection. All were men of advanced years and with the usual amount of secondary renal pathology so frequently complicating such a condition. All were given the usual preliminary preparation as circumstances warranted. Six were resected without preliminary treatment, thirteen were drained by indwelling catheters for an average of seven days, and six had preliminary cystostomy. All were considered properly prepared before operation.

Fig. No. 1. Autopsy specimen showing the bladder and three lobed prostatic hypertrophy with a high obstructing shelf.

Because of technical factors having to do with anesthesia, section of the vas was not done on the first fifteen cases. Four of these cases developed epididymitis, so that since then vasection has been instituted as routine in the procedure in order to obviate this bothersome complication.

There were two distinctly operative deaths in this series. One patient developed paralytic ileus and died on the fifth day. Autopsy disclosed the presence of a large diverticulum, the postoperative infection of which had, without rupture, produced a localized peritonitis. This case serves to illustrate the fact that, while simple urethral catheter drainage may suffice for the usual uncomplicated case, the added safety of cystotomy drainage is imperative in those cases which are at all complicated.

The second death was the result of delayed hemorrhage. At the time of operation the blood pressure had dropped considerably, the result of the anesthetic. Bleeding appeared to be well controlled at

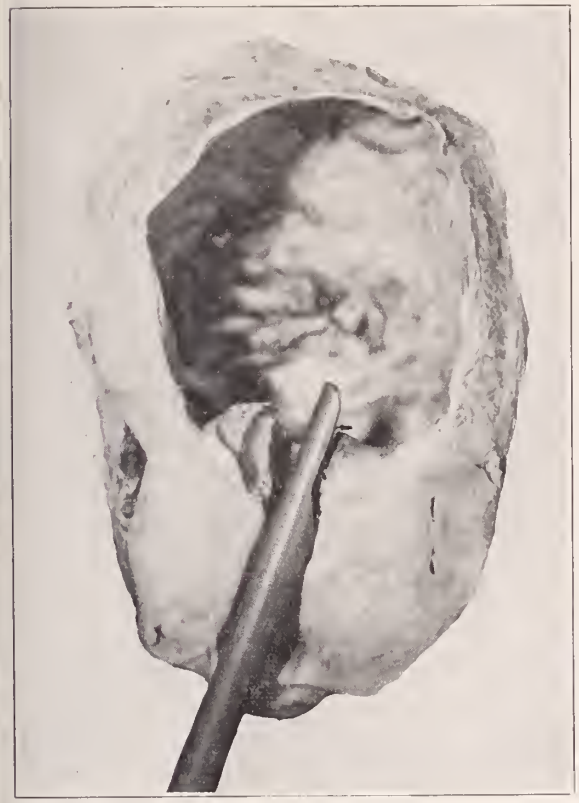


Fig. No. 2. Resectoscope introduced and the obstructing shelf being whittled down with a cutting wire loop.

Fig. No. 3. Operation completed. Obstructing part of the gland removed. Resected fragments are washed out of the bladder.

the time, but upon subsequent recovery of normal blood pressure fatal hemorrhage occurred. This case serves to emphasize the fact that sharp lowering of blood pressure during operation should be avoided, if possible, and, when present, unusually careful search for bleeders must be made.

ADVANTAGES

While this series of cases, like the early cases of all other urologists undertaking this work, has not proven especially impressive from the standpoint of lowered mortality, when it comes to the question of morbidity, even in these early cases resection is seen to have an enormous advantage over prostatectomy. The postoperative period of convalescence in the hospital in this series of cases averaged eleven days. The shortest was 3 days, the longest 31 days. In every instance at the time of discharge the patient was voiding freely with but slight frequency, and, with the exception of two cases, emptying the bladder completely. In these two cases the residual urine, which was over 200 cc. at the time of discharge, disappeared completely within three weeks.

Possibly the most interesting feature of transurethral resection is that it introduces the factor of preventive surgery in that large group of men whose years are numbered by the inevitable and lasting damage that a growing prostate produces upon the vital function of renal excretion. Prostatectomy, even at its best, has been too much of a procedure to warrant its performance except in those in whom severe obstruction already has occurred. If time and experience prove that transurethral resection is the safe and simple procedure that its many proponents think it to be, it will inevitably come to be employed much earlier and before those secondary renal changes can have occurred.

DISCUSSION

Dr. Joseph F. Smith (Wausau): I would like to ask Dr. Sargent whether or not he has had any trouble with secondary hemorrhages?

Dr. Sargent: To avoid too long a presentation, I did not give the entire history of one death I reported from hemorrhage. It was really a secondary hemorrhage. He left the operating room and continued for thirty-six hours practically without blood stain in his urine at all, and as his pressure came up he bled violently, had a bladder full of blood clots.

I did the very foolish thing of thinking if it is easy to stop bleeding at the time you are doing this, it would be easy at any other time. I gave him gas for a minute or two, sucked out all the clots, looked around for a bleeder and could not find it. By that time he had stopped bleeding. When his pressure came up again he bled violently again, and he never recovered. I presume you would call that a secondary hemorrhage.

This is a guess or an estimate—I imagine a third of these men do, somewhere around the sixth to the tenth day, have some show of blood, but I have seen no case in which there was any bleeding of any consequence at all at that time. I presume when the crust and scab of the burn comes away there is a little bleeding.

Dr. C. G. Richards (Kenosha): What form of spinal anesthesia is used?

Dr. Sargent: Having had some experience with spinal anesthesia at the County Hospital for the past several years, and not being well impressed by the reaction that many of these patients underwent in the beginning of this, I was a little afraid to use spinal anesthesia, anticipating this type of situation of hemorrhage that I got into, and so when we were at Iowa City I was convinced at the time that a caudal nerve block would be the proper type of anesthesia particularly because, in my mind at least, it did not have the possibility of seriously reducing blood pressure such as some of you often see in spinal anesthesia.

That is why we started it in our series. I imagine the first fifteen or more we did with the caudal block.

Then I came to two cases in which we got just as violent drop in blood pressure from caudal as I had ever seen from a spinal. Since then we have switched around and are using a very small dose spinal with a little ephedrine in front of it.

I think the anesthetic is one of the biggest problems in this whole work, because blood pressure certainly changes the entire picture as far as hemorrhage is concerned. You are limited in ether or ethylene because of the length of the procedure.

I do not know what is going to prove to be the best method, but I rather suspect a small dose spinal anesthesia.

Question: How much danger is there in using the urethroscope?

Dr. Sargent: I do not believe there is any because it is so thoroughly under control. You see exactly what you are doing, how much whitening of tissue is produced, and the potential power of the machine; at least the cutting current is such that it does not coagulate at all. If you were to take a piece of raw beef and run that loop through it and take a corresponding section out of that raw beef and then cut the beef through the point of burning, you would find the beef whitened down less than the thickness of a thin piece of cardboard. It is an entirely different current than the coagulating current.

Question: Is there much danger of cutting into the bladder wall?

Dr. Sargent: I have not felt there was with the possible exception of this one man who died. I had cystoscoped him before and did not see the opening of his diverticulum. I did not know he had a diverticulum. In that instance I think probably; in fact the autopsy specimen showed, in cutting out this shelf of tissue, I had cut across the neck of that diverticulum—not enough to go through the bladder wall by any means. One can see so clearly I do not think there is any danger of going through the bladder wall at all.

Question: Doesn't your procedure last too long to use spinal in all cases?

Dr. Sargent: I have not found it so. My biggest trouble so far as anesthesia is concerned is where I attempted the caudal block and where I did not get a good anesthesia. Since we have been using spinal we have had plenty of time to finish the procedure in every one of them, and we use a very small dose. I think in the last few cases only seventy-five milligrams of novocain in the spinal canal, which is a third of the ordinary surgical spinal anesthesia.

Question: What is your average operating time where you want to remove about fifteen grams?

Dr. Sargent: I do not think it ought to take over twenty or thirty minutes at the outside, after everything is ready and you are going. Of course there is a lot of fussing around where you are giving spinal anesthesias, but when you are ready to go, I think you can take fifteen or twenty grams of tissue out carefully and control the hemorrhage in thirty minutes.

Question: Have you any figures on the incidence of pre-postoperative hemorrhage with resection and prostatectomies?

Dr. Sargent: No.

Dr. E. A. Fletcher (Milwaukee): At the urological meeting in Toronto this spring the subject was up for discussion during one of the morning sessions. Dr. Young acted as chairman of the meeting, and Dr. Alcock, among others, read his paper. I think I never was in a medical meeting where a man received so much applause as Dr. Alcock did, and in closing the discussion on his paper he said that he did not see any reason why a man who had simply told the truth, in so far as he was able to tell nothing but the truth, should have received any such applause as he received. I thought it was a commentary on something that some doctors say, or write. Unfortunately, we do not always tell the truth. Sometimes it is a difficult matter to tell the truth. But not always.

This is a very important matter, I think. All must recognize that fact. It is in an experimental stage. A large amount of work must be done before we can evaluate the procedure. Whether or not these glands will grow again and cause obstruction in a few years, we do not know. These patients may be subjected to the same procedure again. We do know that it is an occasional happening that when a prostate has been completely removed, that prostate will subsequently develop adenomata. That, of course, is an infrequent occurrence, but it does happen.

Certainly this work should be continued by those who are qualified to do it.

In regard to anesthesia, we have used spinal anesthesia for some years and think very highly of it. But recently two cases have come to our attention where it has been used with most unfortunate results; both patients have suffered probably from toxic degeneration of some of the spinal nerve cells, and I am inclined to think have been permanently injured by the use of spinal anesthesia. I might say that these cases were operated on, one of them in the city and one of them outside of the city, and it has been now some six or eight months since anesthetic was used, and they are still crippled.

At the present time we are using avertin solution with a great deal of satisfaction. We can get along with a small amount of avertin and gas and oxygen, without the use of any ether whatever. Recently I had occasion to use it in a case of renal colic where the patient was made violently sick by morphine and vomited for twelve hours after his hypodermic of morphine. He said he would rather have chloroform than another hypodermic. We gave him some avertin. He went to sleep and had no further trouble. I believe it is a comparatively safe anesthetic if used in minimum amounts, providing there is no serious degeneration of the liver. I think that is the chief consideration.

Dr. Sargent: Dr. Fletcher raised a point that I think is vastly important in this work. It is revolutionary. There is no question about that, and it has got to be honestly weighed. At our state urological meeting within a month, I propose to read a paper on the dangers and difficulties of this thing,—a thing I thought probably would be over-technical for the interest in our state meeting here.

There are many difficulties that have appeared in the short series that I have had that are not included in this paper, not through any intention on my part to hide them at all. Your question brings it up.

At the time that our state urological meeting met in Iowa I raised a question with a couple of men who had been doing this work about the need of doing vasosection. I had come to do it routinely in prostatic surgery. They assured me there was very little difficulty about it. So on that assurance I went through this first series of cases not doing it, because it is a bothersome thing to have to do. If you are doing work with local anesthesia you have to anesthetize an entirely different field to do your vasosection. Due to the bother, I did not do it in these first fifteen cases, and, as I reported in the paper, there are four cases who have epididymitis. One of those men was probably the most unsatisfactory man I resected and who lived. He is not well yet, and it was two and a half months ago I did this, because he developed an epididymitis. He is up and around now, and is going to recover. But I feel that the advent of that epididymitis was the beginning of a long chain of urinary tract complications that might have been obviated had vasosection been done at the time. I think it ought to be done, and there is more reason for doing it in this procedure than in ordinary prostatic surgery.

Question: In microscopic examinations made routinely of the tissue removed, did such removed tissue show malignancy, and if so what is the procedure? Do you go ahead with a radical prostatectomy?

You know, a great many adenomas of the prostate become malignant. I am just wondering how many of these cases are going to be overlooked by this procedure. It is too early of course to draw any conclusions, but I would like to know if any conclusions have been drawn up to this time.

Dr. Sargent: Dr. Christensen raises a very interesting point. I am not certain but I think there were four or five that were clear primary carcinomas of the prostate and for the first time with this equipment we are able to do anything substantial to relieve the last year or two of the life of an old carcinoma of the prostate. You can, with this procedure, reopen the bladder neck so they can void freely. In those cases there has been no attempt to do anything more than to open the tissue to allow voidance.

The occasional island of a beginning malignancy in an otherwise normal prostate I believe is going to be overlooked in 100 per cent. You do not take out the entire gland, and in the second place the pathologist tells me it is almost impossible to make satisfactory examination of these chunks of tissue because they have been polarized from the cutting current. He says it is a very, very unsatisfactory tissue to work with from a diagnostic standpoint.

Therefore, I think from the standpoint of your question, we will have to do here as in ordinary prostatectomy—go through an occasional experience wherein we have done our procedure in the thought we are dealing with a benign hypertrophy, and two or three years later find our individual now has cancer of the prostate.

. . . There was no further discussion . . .

HEALTH OFFICER LIABLE

Private property may not be destroyed by a health officer on the grounds that it constitutes a nuisance or menace or cause of sickness dangerous to public health, if such property is not in fact a menace or danger, according to the attorney general. The judgment or discretion vested in such an officer is no protection and damages may be recovered from such officer if private property was erroneously destroyed.

Finding Tuberculosis in Apparently Healthy Youth*

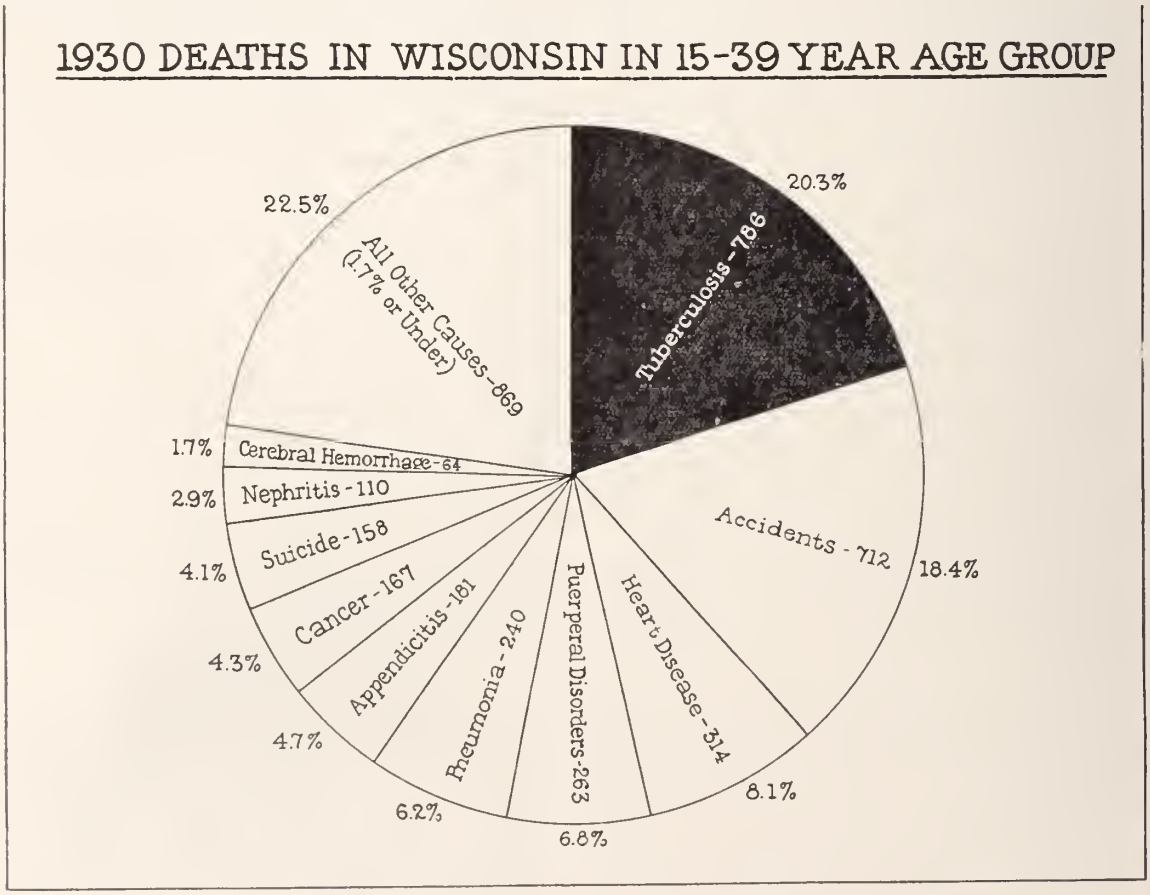
By A. A. PLEYTE, M. D.
Milwaukee

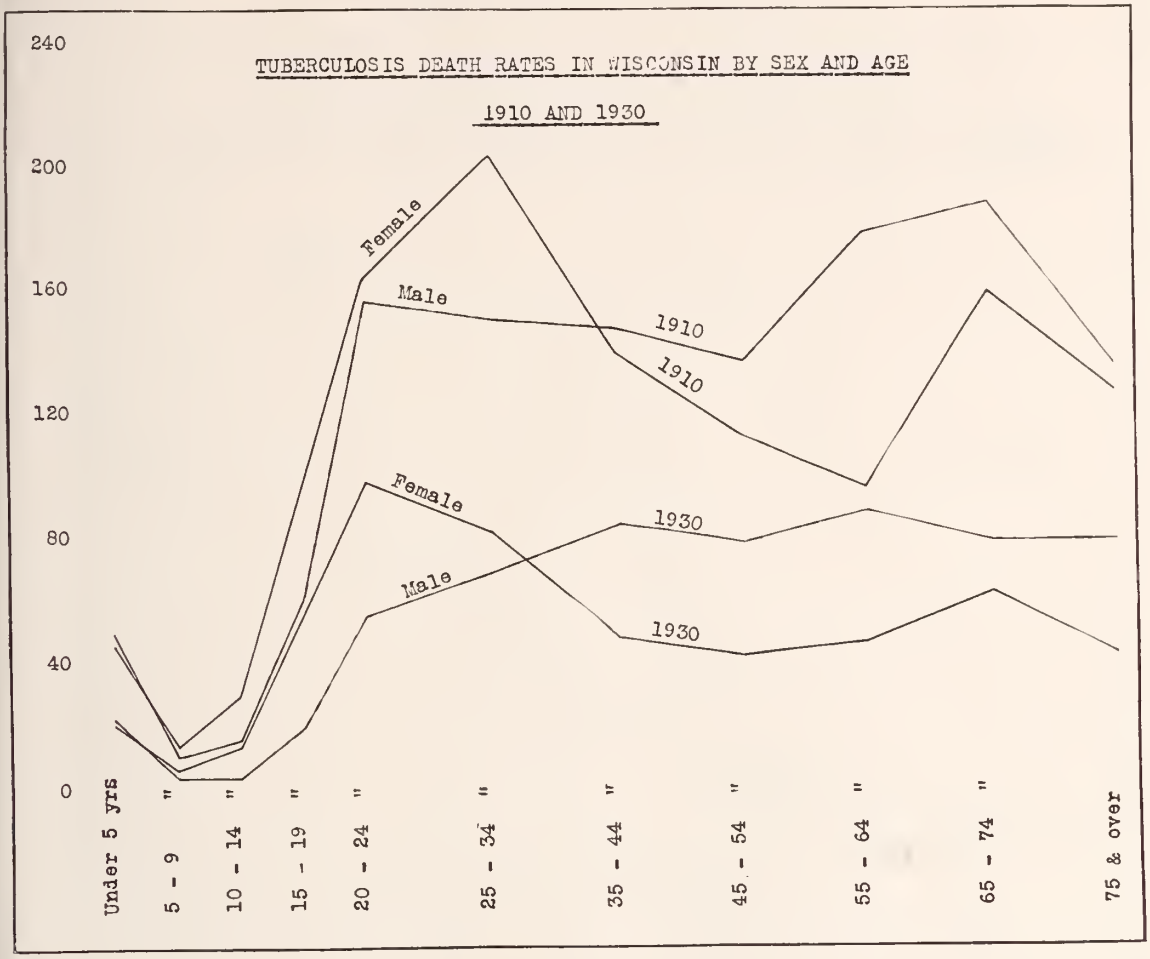
Frankly, the discussion in this paper is aimed at changing the viewpoint of the private physician toward some aspects of the discovery and handling of tuberculosis as an individual and social problem. I am led to make this effort, not because I think the private physician's attitude is wrong and my own right, but because the medical profession is challenged by a situation which offers little promise of being satisfactorily met by the conventional diagnostic procedures applicable to 9 out of 10 consecutive office consultations. Our profession, it seems to me, must adopt a new attitude toward the potential victims of tuberculosis and a technique of discovering them among the apparently healthy, from whom they do not differ sufficiently in their own sensations or appearance to attract their own serious attention, or that of their families and friends, to the smouldering infections that may or may not light up a deadly form of the disease.

Tuberculosis is unlike the mine-run of diseases and accidents physicians are called upon to treat. Ordinarily it does not seek out the doctor until it is too late. Therefore, the doctor must seek tuberculosis if it is to be found in time. But we cannot ask that it be sought everywhere because such seeking is wasteful of time and energy. We have come now, however, to a time when a scientific mode of systematic procedure is available to us and one that offers promise of reasonable compensation to faithful workers.

In spite of the fact that Wisconsin's tuberculosis death rate has been reduced 55% in

* Presented before 91st Anniversary Meeting, State Medical Society of Wisconsin, Milwaukee, September 1932. Revised to publication date.





II

the last quarter of a century, tuberculosis is still the leading cause of death between the ages of 15 and 40 years, causing about one-fifth of all deaths in this age group. (Graphs I and II).** Saving the lives of these young people depends in large measure upon early detection of early tuberculosis—in discovering the potential victims of tuberculosis among the apparently healthy.

The procedure by which this can be done has as its first step the tuberculin test. Logically, if boys and girls in their teens are to be saved from tuberculosis, the doctor must begin his search for early evidences of infection among a still younger age group. The detection of tuberculosis in children under 15 years of age is an entirely different problem than it is in children over 15 years of age. Thorough chest examination alone does *not* reveal this disease in children, especially when it is of the childhood type. Other procedures indicated in the following outline are of much greater value.

LOGICAL PROCEDURE

(1) Tuberculosis Infection. (Tuberculin tests of children—coarse screening process whereby non-reactors are eliminated from further immediate study).

(2) Tuberculous Disease. (Further screening process of reactors whereby those children with tuberculous disease are separated from those with tuberculous infection). This study to include:

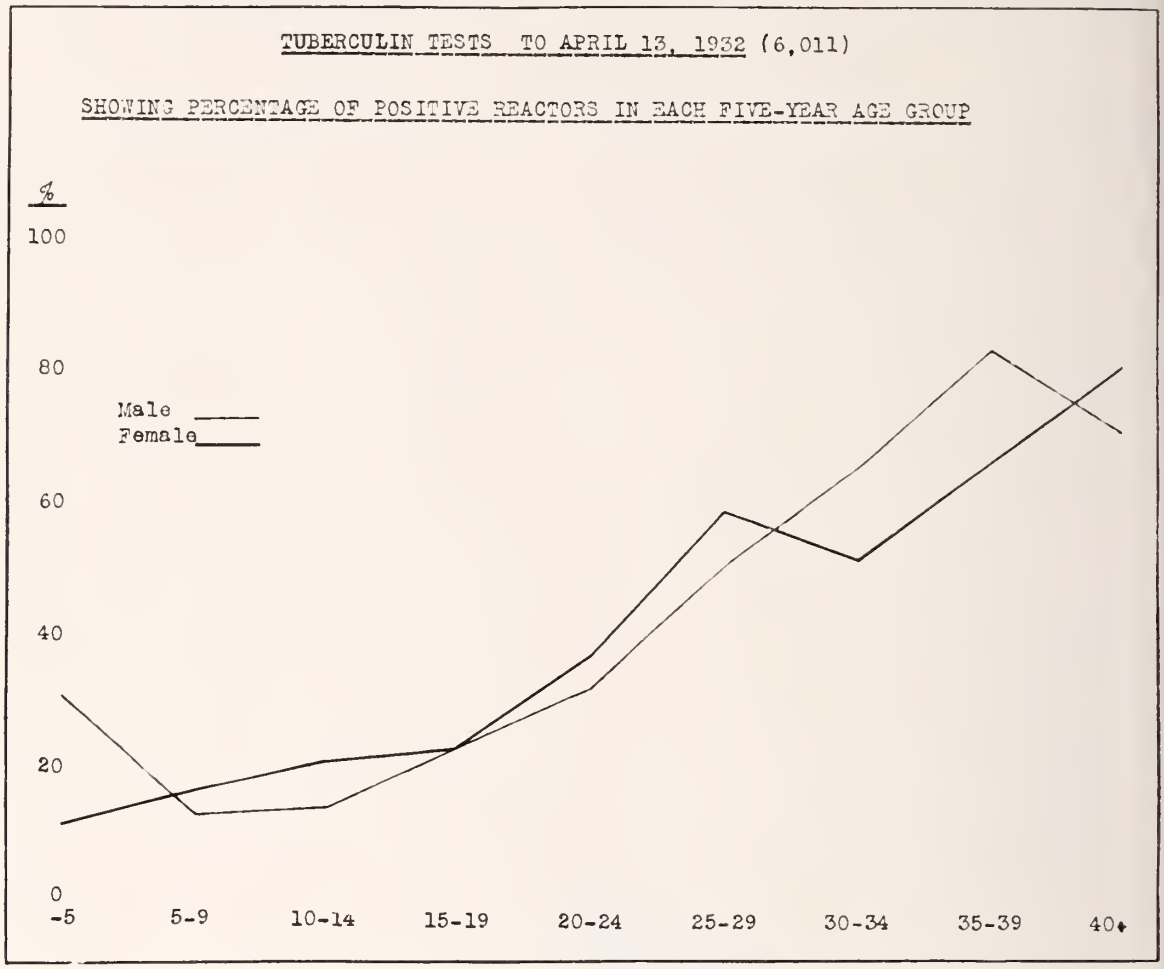
a. Questionnaire history.

b. Chest examination.

c. Fluoroscopic examination or single x-ray film (sometimes both).

d. Sputum examinations (if possible).

** Prepared by the Statistical Dept. of the Wisconsin Anti-Tuberculosis Ass'n.



III

(3) Determination of Activity. (Fine screening process whereby those with active tuberculous disease are separated from those with inactive or latent tuberculous disease).

Consider and intelligently use:

a. Detailed history.

b. Temperature and pulse observations.

c. Search for tubercle bacilli (throat swabs and gastric contents).

d. Stereoscopic x-ray films. (Occasionally the coarser screening processes will have suggested "stereos" of the chest).

e. Re-examination of the chest.

f. Search for extra-pulmonary tuberculosis.

g. Search for other infections outside of the chest.

h. Blood examination. (Repeated differential leucocyte counts and sedimentation tests).

i. "Follow-up" as indicated.

(4) Non-reactors to be tuberculin tested annually, and above procedure to be followed with new reactors.

TUBERCULIN TEST

In connection with studies of tuberculosis in the younger age groups made by the Medical Department of the Wisconsin Anti-Tuberculosis Association, 6,011 tuberculin tests have been made. Of these, 95% were intradermal or Mantoux tests. The results are shown in Graph III.

Of these 6,011 tuberculin tests, 70% were done on children between 5 and 20 years of age. About one-fifth of these reacted to tu-

FINDING TUBERCULOSIS IN APPARENTLY HEALTHY YOUTH--14 STUDIES

STUDY NO.	SCHOOL	AGE YEARS 84%--18 yrs. or under	NO. HISTORIES	TUBERCULIN TESTS NO. TESTED	REACTORS NO.	REACTORS %	NO. EXAMS	NO. XRAYED	SUSPICIOUS TUBERCULOSIS CASES TOTAL NO.	TOTAL %	CHILDHOOD TYPE ACTIVE	CHILDHOOD TYPE LATENT	CHILDHOOD & PARENCHYMAL TYPES ACTIVE	CHILDHOOD & PARENCHYMAL TYPES LATENT
1.	S.P.H.S.	13-24	938	915	188	20.5	296	66	64	6.8	1	56	5	2
2.	S.P.S.T.C.	16-44	436	396	155	39.1	142	41	27	6.0	0	13	5	9
3.	L.X.S.M.O.	2-19	151	151	37	24.5	151	24	11	7.2	2	6	3	0
4.	G.B.S.J.O.	3-17	214	218	17	7.8	214	21	8	3.7	1	7	0	0
5.	N.F.	6-20	97	97	31	32.0	97	18	13	13.4	0	9	2	2
6.	O.S.T.C.	16-31	52	51	10	19.6	52	11	3	5.7	0	2	0	1
7.	W.I.S.G.	11-21	211	194	84	43.3	211	89	62	29.3	3	47	8	4
8.	M.H.S.S.	16-21	248	147	23	15.6	72	13	7	2.8	1	5	1	0
9.	S.H.S.	10-19	389	356	18	5.0	179	11	6	1.5	0	6	0	0
10.	E.G.G.A.H.	6-21	38	38	16	42.0	38	16	15	39.0	1	12	2	0
11.	D.H.S.	12-19	264	145	37	25.5	235	11	11	4.0	3	5	2	1
12.	R.V.S.	14-39	198	184	57	31.0	198	10	10	5.0	1	6	1	2
13.	M.S.T.C.	16-36	42	40	2	5.0	42	0	0	0	0	0	0	0
14.	G.I.S.	5-17	127	123	6	4.9	127	5	4	3.1	0	3	1	0
	TOTAL	2-44	3405	3055	720	23.5	2054	336	241	7.0	13	177	30	21

Suspicious Tuberculosis Findings

190 (79%) -- Childhood type
51 (21%) -- Parenchymal type

43 (17.8%) are susp. active
198 (82.2%) are latent or inactive

1.2% of 3405 students "questioned" were classed as suspicious active cases of tuberculosis.

IV

berculin. Of 1,003 students at the University of Wisconsin who were given the test, 31.6% reacted. The studies included several orphanage and school groups, teachers, as well as the boys and girls, being tested. Between the ages of 20 and 24, less than 40% reacted, whereas by 30 years of age nearly 60% reacted.

The tuberculin test is a specific test (coarse screen) to pick out persons who have been infected with tubercle bacilli and inversely to rule out the large percentage of those who do not need further immediate study.

Reaction to tuberculin indicates infection with tubercle bacilli. Skin sensitiveness to the specific tuberculo-protein occurs *only* after there has been invasion of the body by tubercle bacilli and resulting tubercle formation. Tuberculous infection is not synonymous with tuberculous disease. We must not confuse these two terms. In the studies tabulated in Figs. IV, V and VI, we found three times as many young persons with tu-

TUBERCULOUS INFECTION AND TUBERCULOUS DISEASE

Total No. Studied.....(3405)

Total No. Tuberculin Tested...(3055)

TUBERCULOUS INFECTION (720)....23.5%

TUBERCULOUS DISEASE

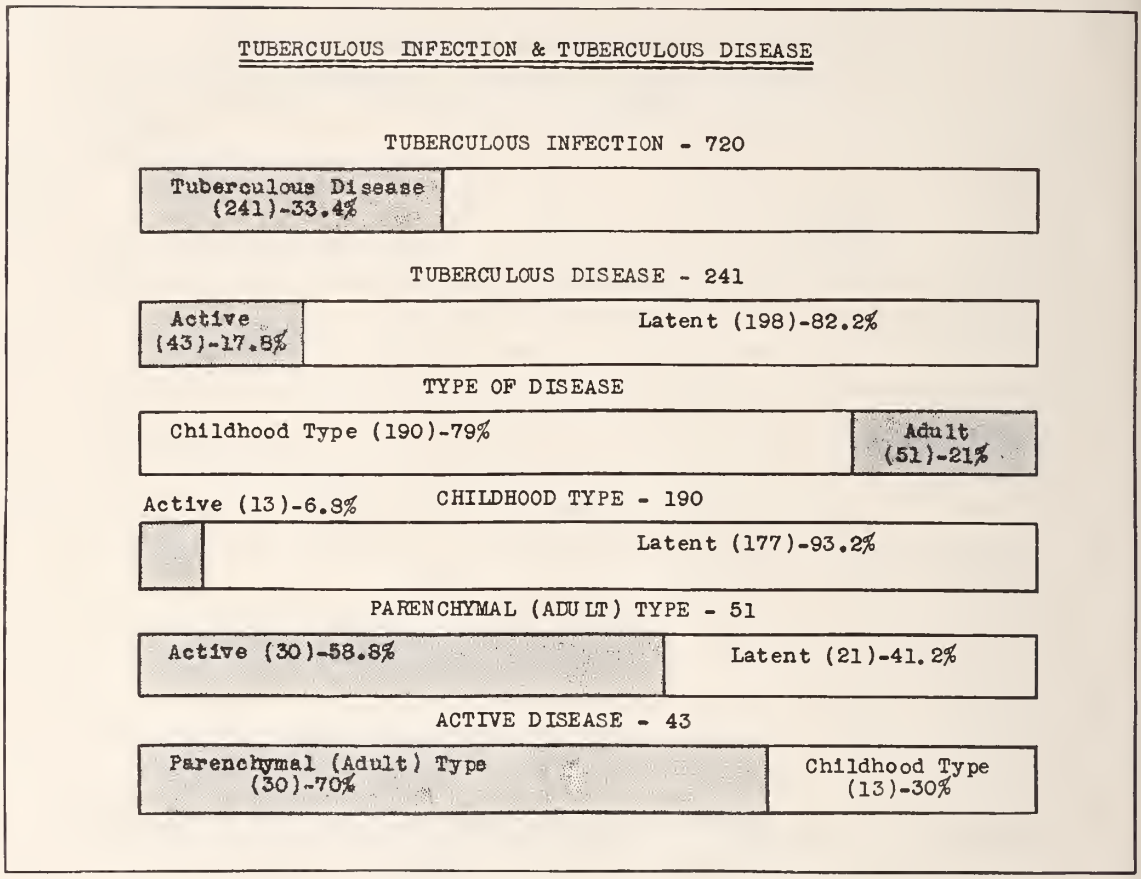
Suspicious Active (43)..... 5.9%

Suspicious latent (198).....27.5%

TOTAL TUBERCULOUS DISEASE.....(241).....33.4%

(or 7% of total number (3405) studied)

V



VI

berculous infection as we found with tuberculous disease. Pathologically, both terms indicate invasion with tubercle bacilli; but tuberculous infection refers *only* to the entrance of the organism into the host; while tuberculous disease refers to infection *plus* a present or previous manifestation of illness by symptoms, signs, or definite changes in some part of the anatomical structure of the host. Tuberculous disease, then, occurs after tuberculous infection and it is recognized by the altered function or structure of some part of the body.

THE QUESTIONNAIRE HISTORY

The next logical step in finding tuberculosis is a carefully taken history. Such a history usually can be depended upon to furnish between 40 and 60% of the information needed for a diagnosis of the more chronic types of disease. So, too much emphasis cannot be given to the value of a good history in making a diagnosis.

In our search for tuberculosis among large groups of apparently healthy young people, it soon became apparent to us that, while we wanted the best type of medical and social history obtainable, its cost was prohibitive. To Dr. Hoyt E. Dearholt belongs the credit of conceiving the idea of a socio-medical questionnaire—a new method of history-taking in which, so far as we know, the Wisconsin Anti-Tuberculosis Association is the pioneer.

The following points in history-taking are included in the questionnaire: The health of immediate associates; contact with tuberculosis; personal health in childhood; factors which determine one's mode of life; personal history, including previous illness, former suspicious symptoms of tuberculosis, operations, and previous diagnosis; present health, including the individual's own words of explanation of how he feels, symptoms, and chief complaint; extra subjects at school, competitive athletics, work, indoor and out-

of-door recreation; and such other facts which may not have been asked for but which help the physician to understand the person questioned.

In the younger age groups it is suggested that the questionnaire be taken home and each question answered accurately with the aid of the parents. In school studies, each question is read and explained at assembly and very definite information is imparted in simple words by the physician conducting the study. Other physicians, nurses or social workers aiding in the study assist the individual student in answering questions which may not be quite clear to him.

Used in this way, the questionnaire history can be filled out in an hour or an hour and a half. Large groups of 100 to 1,000 histories can be obtained in this time. Histories taken in this manner are not only procured economically, but the form itself serves as a useful teaching outline. Each student learns, for example, that every case of tuberculosis comes from some pre-existing case. He is taught the importance of sufficient rest, fresh air, balanced diet, reasonable exercise, and the formation of good health habits. Last, and by no means least important, he is urged to have periodic health examinations.

CHEST EXAMINATION

In searching for tuberculosis in apparently healthy youth, chest examinations are not necessary for 70 to 85% of the group being studied. This large percentage of young people do not react to tuberculin and do not have a history of "contact". So the search for tuberculosis need be made only among the reactors and among the contacts. These two groups should be given a painstaking bare chest examination.

The next steps used in the detection of tuberculous disease are laboratory procedures.

X-RAY EXAMINATION

No diagnostic aid is as valuable in the "further screening" process for the detection of tuberculosis in apparently healthy youth as the fluoroscopic examination of the chest and a well taken and carefully read x-ray film. The x-ray aids in showing the presence, location and extent of pathological processes. While the fluoroscopic findings are not always conclusive and while many of the films are difficult to interpret, a correlation of these x-ray findings with the other available information is sufficient for a tentative diagnosis.

SPUTUM EXAMINATION

Search for tubercle bacilli should always be made repeatedly in any case where it is possible to obtain a sample. Unfortunately, in the examination of apparently healthy young people, we have found very few who could furnish a satisfactory sputum specimen.

ACTIVE AND LATENT DISEASE

Now that we have separated our cases of tuberculosis from the larger group showing tuberculous infection, the "fine screening" process comes into play. Whether or not a case of tuberculosis is active is determined by:

(1) *Detailed History.* An exhaustive inquiry to supplement the "questionnaire history" may bring to light information which has a very definite bearing on the tentative diagnosis.

(2) *Temperature and Pulse Studies* are usually made at four-hour intervals for at least two weeks.

(3) *Search for Tubercle Bacilli.* Sometimes properly stained slides from throat swabs show tubercle bacilli. At other times a careful analysis of the gastric contents in a suspicious case may reveal this microorganism. Guinea pig inoculations of material obtained from the throat, sputum or gastric contents may be necessary to show the presence of bacilli.

(4) *Stereoscopic X-ray Films.* When indicated.

(5) *Re-examinations of the Chest.*

(6) *Search for Extra-pulmonary Tuberculosis.* Enlarged glands in other parts of the body, possible bone and joint disease, skin diseases such as erythema nodosum and erythema multiforme, and fistula in ano are

many times evidence of tuberculosis in some other part of the body.

(7) *Search for Other Infections.* Other infections such as nasal sinus disease, tonsillitis, and carious teeth must be recognized and ruled out as possible contributing factors in the picture before a definite conclusion is drawn.

(8) *Blood Examination.* A comparison of serial differential leucocyte counts and blood sedimentation tests are sometimes of aid in completing the picture of active or inactive tuberculosis.

(9) *"Follow-up" as Indicated.* To us, this follow-up study has meant obtaining, in any way, additional information which may be pertinent to the case. It has meant much social service work. It has included the study carried out by the family physician, and it has necessitated much correspondence.

In reaching a diagnosis, impressions are first recorded from the x-ray film alone. Then a clinical summary is made from the tuberculin test, the questionnaire history, and the physical examination. Findings resulting from the "fine screening" process are carefully considered, the last step being a final impression gained from all these diagnostic procedures.

RESULTS OF STUDIES—TUBERCULOUS INFECTION NOTED—TUBERCULOUS DISEASE DISCOVERED

Following this procedure, Figs. IV, V and VI show the tuberculous findings in a group of studies made by the Medical Department of the Wisconsin Anti-Tuberculosis Association. A total of 3,405 students filled out questionnaires and 3,055 (89.7%) received tuberculin tests.

The ages ranged from 2 years to 44 years, with 84% eighteen years or under. Those included in the higher age groups were some of the students in the state teachers colleges and a few students of a vocational school.

720, or 23.5%, of 3,055 tuberculin tested in these fourteen studies were reactors. This series of tests is included in the 6,011 tuberculin tests charted in Fig. III. The percentage of reactors in the different studies varies from 4.9% to 43.3%. The higher percentages occur for the most part in the studies where the higher ages are represented or where we believe there has been greater opportunity for exposure to tuberculosis.

2,054 bare chest examinations were made. In most of these studies we were asked to examine all the students. In five studies, only those screened out by the questionnaire and the tuberculin test were examined.

336, or 9.8%, of the students reported on in this brief review were x-rayed. Over 80% of these received stereoscopic x-ray films. We realize now that more students should have been x-rayed, but much of this work was done in an experimental way before our more definite ideas on "method of procedure" were formulated.

As will be noted in Figs. IV, V and VI, 241, or 7.1%, of the 3,405 students filling out questionnaires (or 33.4% of those 720 with tuberculous infection) were found with suspicious tuberculous disease. 190 of these 241 cases, or 79.2%, were of the childhood type only, and 51, or 20.8%, were of the parenchymal type (some of these also showed evidence of the childhood type).

Grouping the 43 suspicious active cases (17.8% of the tuberculous group), 13 (5.3%) were of the suspicious childhood type, and 30 (12.5%) were of the suspicious parenchymal type. In other words, the cases of suspicious active disease were found to be of the parenchymal type more than twice as often as of the childhood type. Only 13 out of the 190 placed in the childhood type group (6.8%) were classed suspicious active, while 30 out of the 51 placed in the parenchymal type group (58.8%) were classed suspicious active. The 43 suspicious active cases of tuberculosis represent 1.2% of the 3,405 students who filled out questionnaires or 5.9% of the students with tuberculous infection.

198 (82.2%) of the 241 with suspicious tuberculous disease were classed as clinically inactive, latent, or probably healed.

Family physicians were sent copies of the physical examination record and the x-ray record of all cases placed in our tuberculosis classification. These students frequently

need the further study, observation and care of the family physician. A few need sanatorium treatment.

The parents of each child placed in the tuberculosis classification were written to and the findings explained in each instance. We urged that the child be taken to the family physician for further observation and study.

These studies of apparently healthy youth have convinced us that tuberculosis can be discovered economically by the "screening" method.

CONCLUSIONS

1. Tuberculosis is still the greatest foe of youth.

2. Young people should be tuberculin tested. The reactors may have:

a. Only tuberculous infection.

b. Childhood type of tuberculosis—active or apparently healed.

c. Parenchymal (lung) tuberculosis—active or apparently healed.

d. Tuberculosis of the extra-pulmonary type—active or apparently healed.

3. Epidemiologically, every case of tuberculosis comes from another. Close associates of a reactor, including family and friends, may be innocent "seed spreaders". All close associates should be studied.

4. The questionnaire type of history is advantageous and should be more generally used in surveys of this kind.

5. All known methods of study must be intelligently applied to reactors to find and differentiate the different kinds and stages of the disease.

6. The knowledge on the part of the physician, community nurse, parents and child that tuberculosis is present in a given case should lead to proper guidance and protection against further infection, particularly massive infection.

Etiology and Pathology of Renal Infection* (So-called Surgical Kidney)

By WILLIAM J. CARSON, M. D.
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"Infections may reach the urogenital tract through the blood stream, from foci elsewhere in the body, or directly from the outside by introduction through the natural channels, by extension or ulceration from neighboring organs, or by a traumatic opening, as a surgical incision or a wound within the tract itself. However, infection may spread from one region to another by the lymphatics, through the intermediary of the general blood circulation, by direct extension or through the lumina of the various ducts." H. H. Young[1].

HEMATOGENOUS INFECTIONS

In infectious diseases, the organism causing the disease was first found in the urine by A. G. Nichols[2] in 1899, in 28 of 32 cases; usually with signs of kidney infection, staphylococci and streptococci were found in the urine of cases of acute endocarditis by Young.

Rosenow[3] reported the production of various urogenital infections in animals by the intravenous injection of organisms obtained from dental abscesses, tonsils and nasal sinuses, of patients with urogenital infections.

Hinman[4], after injecting a rabbit intravenously with streptococci grown from an excised area of interstitial cystitis, observed a similar lesion in the rabbit's bladder.

ASCENDING INFECTIONS

(1) May spread by the lumen; when there is obstruction, dilatation and reflex. (2) By direct extension through the wall of the ureter. (3) By the lymphatics; since there is a free communication between the lymphatics of the muscular coat of the bladder and that of the ureter. The lymph current of both the bladder and the ureter is from the mucous toward the fibrous coat. The perivascular lymphatics communicate with each other in a transverse as well as a longitudinal direction by means of the vertical and

* Presented before the 91st Anniversary Meeting, State Medical Society of Wisconsin, Milwaukee, September 1932. Revised to publication date.

oblique branches. The lymphatics of the upper part of the ureter communicate with the lymphatics of the kidney which accompany the blood vessels forming a capillary network in the cortex, surrounding all tubules like the blood capillaries. The lymphatics of the cortex communicate with those of the capsule. Sweet and Stewart[5] in 1914, and Eisendrath and Kahn[6] in 1915 experimentally produced ascending infection of the kidney through the lymphatics. David[7] in 1916 and Helmholz[8] in 1922 experimentally produced ascending Bacillus coli infection of the lumen of the ureter. Hertzler[9] in 1925 concluded that ascending infection of the kidney has not been proven. Carson[10] in 1925 demonstrated cancer cells in the perivascular lymphatics of the ureter, secondary to primary carcinoma of the bladder, prostate and cervix uteri, and in the perivascular lymphatics of the renal pelvis from primary carcinoma of the prostate, and in 1930 experimentally produced infection in the wall of a ureter (distal end) or bladder and demonstrated that the organism passed upwards through the perivascular lymphatics to the kidney, and in a few instances found the organisms in the submucosa, in attempting to produce ascending infection, by injecting a culture of paratyphoid B. into the lumen of the ureter 1 cm. above the bladder in 6 rabbits, histological examination failed to show evidence of the organism in the ureteral wall or the kidney.

PATHOLOGY

Pyelitis, pyelonephritis, pyonephrosis, and suppurative nephritis, are arbitrary divisions. The kidney is usually swollen with the capsule thickened; on section the capsule is removed with increased resistance leaving a rough surface. If abscesses are located in the cortex the removal of the capsule may open them and greenish yellow pus exude. In the cortex, small round abscesses are seen surrounded by a hemorrhagic zone. In the medulla, elongated striped abscesses (conducting tubules) are seen. Sometimes there is a wedge-shaped septic infarction, and the necrotic tissue is surrounded by a broad zone of leucocytes. When a metastatic staphylococcus infection appears in the kidney after a furuncle, not in the form of multiple foci but as a tumor-like infection progressive in character, it is called a renal carbuncle. The calices and pelvis show the mucosa to be swollen, red and covered with exudate. Microscopically, Brewer[11] looks upon them as embolic in origin and therefore starting from the neighborhood of the plugged arteriole or glomerulus. Exudate is found between the capsule of Bowman and the glomerular tuft, with bacteria and debris in the lumen of the tubules with the interstitial tissue showing a definite infiltration of leucocytes and bacteria, with liquefaction necrosis in areas. The calices and pelvis show a cellular infiltration in the submucosa with the mucosa covered with fibrin, leucocytes and necrotic material.

REPORT OF CASES

This report is based on a study of 122 consecutive cases in private practice admitted to Columbia or St. Luke's Hospitals during 1926 and 1931 inclusive. Eighty-six or 70.4% were referred by their attending physician or obstetrician. The cultures were examined from 98 cases at Columbia Hospital by Miss Janet H. Hirshberg and from 24 cases at St. Luke's Hospital by Dr. E. L. Tharinger.

Symptoms: The symptoms in chronological order as found to the 122 cases: (1) In acute renal infection, fever, (remittent type) chills, pain in the kidney region, prostration, bacteriuria, pyuria, hematuria, hiccough, renal colic, delirium and coma. (2) In the more chronic form, frequency, burning, pain in the kidney region, fever and pyuria.

There are 91 females varying in age from 1 to 80 years with the majority of cases occurring between 20 and 50 years of age, viz., 1 to 10 years, cases 1; 10 to 20—2; 20 to 30—32; 30 to 40—25; 40 to 50—13; 50 to 60—12; 60 to 70—5; 70 to 80—1.

In the 91 females, 43 gave a history of pregnancy, five of which were pregnant when first seen.—Para. 1—17; Para. 2—15; Para. 3—5; Para. 4—4; Para. 5—1; Para. 12—1.

TABLE I

BACTERIOLOGICAL FINDINGS IN 91 FEMALES

Culture positive, bilateral 40, right 31, left 20.		
Pure culture of B. coli	Right	28
	Left	31
Pure culture of staphylococcus	Right (albus 11; aureus 1)	12
	Left (albus 10; aureus 1)	11
Pure culture of streptococcus	Right	2
	Left	2
Cultures showing B. coli and streptococcus	Right	3
	Left	2
Cultures showing B. coli and staphylococcus	Right	11
	Left	3
Cultures showing B. coli, streptococcus and staphylococcus	Right	3
	Left	3
Cultures showing pure culture of B. proteus	Right	3
	Left	1
Cultures showing B. proteus and staphylococcus	Right	2
	Left	1
Cultures showing B. proteus, staphylococcus and streptococcus	Right	1
	Left	1
Smears for T. B.	Right	1
	Left	1

TABLE II A

CLINICAL DIAGNOSIS IN 91 FEMALES

Pyelonephritis	48
Pyelonephritis in pregnancy	5
Pyelonephritis after pregnancy	38
Pelvic inflammation	1
Acute appendicitis	3
Chronic appendicitis	5
Acute salpingitis	5
Endocervicitis, chronic	12
Uterine fibroid	1
Cystic ovary	4
Diverticuli of the bladder	3
Papillary carcinoma of the bladder	1
Ureteral stricture (5 bilateral)	11
Stricture—Utero-pelvic junction	2
Anomalous vessel to lower pole of kidney obstructing ureter	3
Ureterocele	2
Ureteral calculi	6
Ptosis of kidney (4 bilateral)	13
Renal calculi	6
Tuberculosis (active) of kidney	2
Tumor of the kidney	1

TABLE II B

Congenital absence of right kidney (age 38)	1
Ulcerative colitis	1
Adeno-carcinoma of sigmoid	1
Exophthalmic thyroid	1
Tonsillitis, chronic	5
Abscess of teeth	2
History of tonsillectomy	7
History of abscessed teeth extraction	6

TABLE III

TREATMENT

Appendectomy	5
Salpingectomy—bilateral	1
Supra-vaginal hysterectomy, including tubes and ovaries	5
Oophorectomy (cystic)	1
Resection of bladder tumor	1
Resection of bladder diverticuli and transplantation of ureters	1
Ureterotomy	3
Nephrotomy	1
Nephropexy—one bilateral	7
Nephrectomy	10
Thyroidectomy	1
Colostomy	1
Operative cystoscopy for treatment	80

Referred to colleagues for tonsillectomy 5; sinus drainage 1; teeth extraction 1.

Results: 67 or 73.6% clinically cured. Two died from cancer which did not involve the urinary tract.

There were 31 males varying in age from 1 to 80 years with the majority between 30 and 60 years of age, viz., 1 to 10 years, cases 1; 10 to 20—1; 20 to 30—2; 30 to 40—10; 40 to 50—9; 50 to 60—4; 60 to 70—2; 70 to 80—1.

TABLE IV

BACTERIOLOGICAL FINDINGS IN 31 MALES

Cultures positive, bilateral 16, right 9, left 6.		
Pure culture of B. coli	Right	1
	Left	2
Pure culture of staphylococcus	Right (albus 13; aureus 2)	15
	Left (albus 10; aureus 2)	12
Pure culture of streptococcus	Right	2
	Left	2
Culture of B. coli and staphylococcus	Right	2
	Left	3
Culture of B. coli and streptococcus	Right	1
	Left	1

Cultures of staphylococci and streptococci	Right	3
	Left	1
Cultures of B. coli, staphylococci and streptococci	Right	1
	Left	1

TABLE V

CLINICAL DIAGNOSIS IN 31 MALES

Urethral stricture	1
Acute epididymitis—non-specific	2
Prostate	
A. Prostatitis—non-specific	4
B. Adenoma of the prostate	3
Vesicle calculi	1
Papillary carcinoma of the bladder	1
Ureteral stricture (1 bilateral)	7
Ureteral calculi (1 above stricture)	3
Stricture—Uretero-pelvic junction	2
Renal calculi (3 above obst. at uretero-pelvic junction)	5
Perirenal abscess	1
Renal ptosis without urinary stasis	1
Renal ptosis with renal stasis	4
Acute appendicitis	2
Cholecystitis	2
Abscessed teeth	5
Tonsillitis	4
History of tonsillectomy	6
History of abscessed teeth extracted	4

TABLE VI

TREATMENT IN 31 MALES

Appendectomies	2
Cholecystectomies	2
Suprapubic cystotomy	1
Resection of papillary carcinoma of bladder	1
Ureterotomy	1
Nephrotomy	5
Nephro-ureterectomy	1
Epididymotomy	2
Operative cystoscopy for treatment	44

Referred to colleagues for tonsillectomy—4; extraction of teeth 5.

Results: 21 or 67.7% clinically cured.

There were two surgical deaths: (1) A male, age 38, staphylococcus, pyonephrosis, uremic coma. Operation: nephrotomy. (2) A male, age 79, staphylococcus and streptococcus pyonephrosis. Operation: nephrotomy.

One died of carcinoma of the pancreas. In 122 cases or 1.6%.

TREATMENT

The surgical treatment in general consists of removal of all foci of infection: drainage-bladder, ureter, kidney, lavage of renal pelvis in conjunction with fluids, hexamethylenamin, acid sodium phosphate; saline laxatives; vaccines; etc.

CONCLUSIONS

Surgical treatment of infection in the kidney is indicated in all cases that do not respond to medical treatment in a reasonable length of time.

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Extemporaneous Laboratory Aid

By V. A. CHAPMAN, M. D.,
Milwaukee

Proper heat for fixing or staining smears for microscopical examination is sometimes not immediately available.

My office has found a very satisfactory method in the use of an opal drinking glass as a container; an aluminum "S. M. A.-1" measuring cup as a fire pedestal, (such a cup is found in each can of S. M. A. infant food powder) and a compressed tablet of Hexmethylenamine for fuel.

The aluminum cup is placed inside of the drinking glass open side down on the bottom of the glass. The fuel tablet is placed upon the upraised surface of the aluminum

cup, a lighted match held in forceps and applied to the tablet sets it to burning. The glass slide holding the specimen smear to be stained is placed across the open top of the drinking glass and remains there for a suitable period of time.

A five grain tablet of "Urotropin" burns with a yellow flame of rather intense steady heat for 2½ minutes when so placed and ignited. Additional tablets may be placed against the burning tablet by a pair of forceps if it is desired to continue the heat longer.

This method is so satisfactory, indeed, that it is often preferred to the use of the Bunsen burner for stains which require a constant steady source of heat; for example, the Ziehl-Neelsen method of acid-fast staining.

Chronic Prostatitis*

By CYRIL G. RICHARDS, M. D.
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In all parts of the body free drainage is essential for the cure of infection. Two factors seem to inhibit this in the prostate —its complex glandular structure and its location. Hence infection tends to be chronic after it has once become involved. The gland becomes infected in three ways: (1) Descending infections from the upper urinary tract, (2) infection through the urethra, and (3) by the hematogenous route. We divide chronic prostatitis clinically into two general classes: The specific, due to infection by the gonococcus, and non-specific, due to organisms such as staphylococcus, streptococcus, and others of this group. Occasionally we find the trichomonas vaginalis responsible for the infection, a few such cases having been reported in the literature. As you know, the trichomonas vaginalis is a frequent finding in the vaginal discharge of women, and is considered nonpathogenic, but often responsible for severe vaginitis and can be transmitted to the male. I have had two such cases of prostatic infection. The gonococcus accounts for the larger percentage of infection. Von Lockum[1], in his large series of cases, reports that 74% gave a previous history of specific infection and 26% belonged in the non-specific group, the etiology of which was either focal or hematogenous infection. His work agrees closely with that of Cecil[2], Corbus[3], and Redwill[4], who have shown the importance of focal infection, especially in the non-specific group. Redwill[5] and his co-workers have called attention to the colon as a site of focal infection in chronic pyelitis, cystitis and prostatitis, and reports 22 such cases which had had persistent urologic treatment over long periods without any appreciable improvement, and that after regulation of the diet and changing of the intestinal flora by the giving of acidophilous milk, cures were produced after other means had failed. Franke[6] has called attention to the relationship of the lymph channels of the right kidney capsule with the appendix and cecum and believes infection of the right kidney comes about by this lymphatic arrangement. The finding of the same type of organism in the teeth and tonsils as found in the prostate, without a previous history of gonorrhea, bears out the theory of infection by the hematogenous route. The clinical entities usually found associated with chronic prostatitis, aside from the genito-urinary symptoms, are the several types of arthritis, calcaneal spurs, sciatica, muscular pains, eye conditions such as iridocyclitis, various dermatoses, back-ache, low abdominal pain, and functional gastric complaints.

SYMPTOMS

The commonest symptom is the presence of a morning urethral discharge, which may be constant or intermittent. It resembles the white of an uncooked egg and usually disappears after the first urination. If the patient has previously indulged in the use of alcohol or in sexual intercourse, then it will be constant for a few days, associated

* Presented before 91st Anniversary Meeting State Medical Society of Wisconsin, Milwaukee September 1932. Revised to publication date.

with burning urination and a sensation of heaviness or dragging in the perineum. Back-ache and various joint and muscular pains are next in order of prevalence and vary in intensity from the slight lumbar ache to the more severe pain of sciatica. Eye conditions and dermatoses occur and are attributed to the prostate only after other focal points give negative evidence and the prostate shows some degree of infection. Sexual derangements, such as weakened sexual power, are often concomitant symptoms of a protracted prostatic infection and a type of patient most difficult to treat successfully.

DIAGNOSIS

The urine does not always give evidence of prostatic infection. Von Lockum[7] has shown that 33% of his cases of nonspecific prostatitis had a clear and microscopically negative urine, 56% very slight urinary changes, and only 10% showed what might be called a pyuria. It is therefore necessary to examine the prostatic secretion microscopically for pus and often provocative measures resorted to before the true picture of prostatic infection can be estimated. Horowitz[8] has shown that 53% of his cases demonstrated pathological changes in the prostate only after repeated examinations following provocative treatment. The size of the gland does not give any information as to the degree of infection. Frequently the small gland shows the highest degree of infection. We encounter two types of glands—the small, firm gland and the soft, atonic gland, the former indicating infection of longer duration with subsequent fibrotic changes. This type of gland, as a result of contraction, compresses the prostatic urethra, causing urinary obstruction by contraction of the vesicle orifice, simulating the obstruction of hypertrophy. In the examination of the prostatic fluid by massage, the fluid should be examined fresh, first under the low power of the microscope, which gives us an idea as to whether the pus is evenly distributed throughout the specimen or in clumps. If we see a large number of clumps, it is an indication of a poorly draining gland. We consider 1 to 5 pus cells per high power field as within normal limits. Anything beyond this must be considered pathological.

TREATMENT

The object of the treatment of the infected prostate by manipulation is to improve its circulation and promote drainage. When to do this is a matter of clinical judgment and experience. The acutely inflamed prostate should never be massaged because of the danger of abscess formation and of the breaking down of resistant barriers; and so, also, the nodular prostate, until tuberculosis or malignancy can be definitely excluded. The treatment by prostatic massage should be done in a gentle manner, because rough treatment is more harmful than beneficial. Stroking the gland from above downward in lines parallel with the urethra, the amount of pressure exerted should not be painful. Massage should be carried out about every 5 to 10 days for a period of six weeks and then a rest period should follow in order that the gland be given a chance to recuperate. Continued massage over a longer period is detrimental rather than helpful. In conjunction with massage, the passing of sounds occasionally and deep instillations of one of the mild silver proteins in the prostatic urethra is helpful. Cases which do not show improvement after a period of massage should be cysto-urethroscoped for possible complications in the prostatic urethra. The use of foreign proteins is of some value and should be used in cases that do not respond readily to the accepted forms of treatment. Removal of focal infection, especially in the teeth and tonsils, should be done whenever found, and constipation should be regulated by diet. the diet should consist of easily digested food with the avoidance of the condiments, tomatoes and asparagus. All alcoholic and carbonated drinks should be strictly prohibited for a long period after the symptoms have subsided. I know of no agent which is more responsible for recurrent attacks than alcohol. Diathermy has been recommended by several writers. I have used this method

in a large number of cases but found it of value only in the acute infections of the prostate.

SUMMARY

1. Approximately 25% of cases of chronic infection of the prostate is non-gonorrheal, the cause of which can be either of focal or hematogenous origin.

2. The teeth and tonsils should be examined in all cases of chronic prostatitis for latent infection, and also the colon considered as a possible factor in its etiology.

3. Repeated examinations of the prostatic fluid should be made before a true estimate of the degree of infection is known.

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DISCUSSION

Dr. E. A. Fletcher (Milwaukee): I might say in regard to chronic infection of the prostate that I think the source of infection, which not infrequently is overlooked, lies in the rectum, or in the sigmoid. We see in the course of a year a great many cases with chronically infected prostates which have as the primary source of their trouble some pathology in the rectum, and it is entirely useless to treat these cases until their rectal condition has been relieved.

Another primary focus of infection in secondary urinary infections, which is of considerable importance, I think, is found in diverticulitis, or diverticulosis of the sigmoid. In that past year we have seen a number of such cases associated with both lower and upper urinary infections.

Dr. C. G. Richards (Kenosha): I would like to ask Dr. Fletcher if he has used any acidophilous milk.

Dr. Fletcher: Yes, we have used acidophilous milk for a considerable length of time. We have also used the tablets.

We always use it in conjunction with lactodextrin. We believe it has been demonstrated that the acidophilous bacillus grows much better where lactodextrin is given to the patient than where the acidophilous milk or bacilli alone are used. I think that is the thing that should be borne in mind.

We also, especially in those cases of chronic prostatitis that are associated with pain, have found patients were relieved more by hot rectal irrigations than any other one form of treatment which we have used. We are in the habit of using a Chetwood rectal irrigating tube, and we tell these men to use hot rectal irrigation for a period of twenty minutes or half an hour about five times out of a week. We believe that is a procedure of very decided benefit in these chronic cases associated with pain. In cases of acute prostatic also, we believe that the hot rectal irrigations are of very decided value.

Dr. Richards: What has been your experience with the dye antiseptics pyridium, serenium, and mallophene-

Dr. Fletcher: In infections of the prostate we have not found, I think, that they are of any particular value.

I believe that in gonorrhea pyridium is perhaps the most valuable internal remedy we have. We think very highly of that in acute gonorrheas, but in chronic infection of the prostate, I have not found it of much service.

Dr. Bourne is here, perhaps he will make a statement.

Dr. N. W. Bourne (Milwaukee): I have not found it of service in prostatic infections.

CURE OF TYPHOID CARRIERS

During the past few years, George H. Bigelow and Gaylord W. Anderson, Boston (*Journal A. M. A.*, July 29, 1933), followed carefully a series of twelve permanent typhoid carriers who have submitted to removal of the gallbladder. Nine of these were operated on in order to be cured of their carrier condition. The other three came to operation primarily because of the clinical condition of the gallbladder. With a single exception, the dates of infection ranged from four to thirty years prior to operation. Medical measures for the cure of typhoid carriers have not been effective. In these twelve cases, cure of the carrier condition has apparently been effected through removal of the gallbladder. In all of these instances, stones were found and the symptoms associated with the gallbladder were cured. Prior to operation the bile should be shown to contain typhoid bacilli, as it is important to make certain that the infection is located in the biliary tract. All carriers whose gallbladders are so removed should be followed after operation for at least a year by monthly examinations of specimens and not definitely released until a negative bile culture has been obtained. The payment of cost of operation is a justifiable public health expenditure, which is cheaper and more effective than subsidy.

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EDITORIALS

RAGWEED ERADICATION

The medical profession of Wisconsin should ever be on the lookout so that it may perform its full duty in furthering the health of the people of the State. Few people realize the extent to which Wisconsin lakes are used as summer resorts, and her woods and streams as hunting and fishing grounds. In a banner year 6,000,000,000 such visitors pass in and out of the State. The average length of stay of each car load being sixteen days. These people leave behind them nearly $150,000,000 distributed among merchants, land holders and the State itself. Doctors profit through the usual misfortunes that overtake tourists and sportsmen, but this is of less moment than the indirect profit through the handing along of some of the larger amount in regular channels of professional work.

There is one thing which drives hundreds of people out of the State and keeps other hundreds from coming into the State during the best part of the summer season, August and September. This is ragweed. To this, of course, might be added a considerable list of other noxious weeds, but none of them are as vitally important as ragweed.

During the last session of the legislature a bill was introduced making ragweed a noxious weed and calling for its extermination. The bill never came to a vote, I believe mostly because of other more pressing business. Perhaps it was poorly drawn.

Cannot and should not the medical profession take some active part in proposing and furthering some rational legislation to help control this summer plague? The eradication of ragweed is not simple, neither is the eradication of the mosquito. This however is done and has transformed parts of Cape Cod from a hell to a summer paradise. Successful eradication of ragweed has also been accomplished. It is one of those things which requires persistence, education and State aid in the way of legislation and funds, which would bring in somewhat intangible but very considerable dividends. What can we do about it? H. P. G.

HEAT THERAPY

MANY of the trials and tribulations which beset orthodox practitioners of medicine are related to an ineffective and at times seemingly unsympathetic method of managing the chronic and functional types of disease. This deficiency has allowed various opportunistic healing cults, usually utilizing some form of physiotherapy, to gain a considerable following at the expense of a gullible public and to the irritation of the legitimate practitioner. This situation has forced upon the profession a realization that the various

forms of physiotherapy have a place in orthodox medicine and there has been an increasing use of physiotherapeutic apparatus and procedures as the natural result.

The results obtained by physiotherapy (as in other fields of treatment) cannot be predicted quantitatively and largely depend upon the intelligent utilization of effective equipment. Proper training and thorough acquaintance with the fundamental principles of physiotherapeutic apparatus are only too evidently essential for optimum results. Unrestricted distribution and commercial exploitation of such apparatus frequently exceeds proper understanding of its use or any reasonable market for it. Some degree of discredit (not necessarily deserved) may be the natural result.

The beneficial results of malaria in treating paresis and the demonstration of the favorable influence of fever on other chronic diseases presages a probable wave of enthusiasm for artificial fever producing apparatus. The favorable preliminary reports now appearing in the literature indicate that this form of treatment will receive an enthusiastic welcome from both the medical profession and public. Within the near future it is probable that there will be a widespread distribution of several types of such equipment.

It is only reasonable to anticipate that a considerable trial by impartial observers will be necessary before the proper indications and limitations for its use are full developed. Accordingly a considerable period of critical clinical observation by a restricted number of qualified and impartial workers should precede any widespread dissemination of such apparatus.

It is to be hoped that all of the predicted benefits of this form of treatment will be achieved. It must be recognized, however, that the use of heat in its various forms for the treatment of disease is one of the most hoary forms of therapy. Aided by modern scientific ingenuity the beneficial action of this venerable therapeutic agent may prove to be of inestimable value in the alleviation if not complete control of certain forms of human suffering.*

* The reader's attention is called to an excellent article on Physiotherapy in this issue of the Journal. J. H.

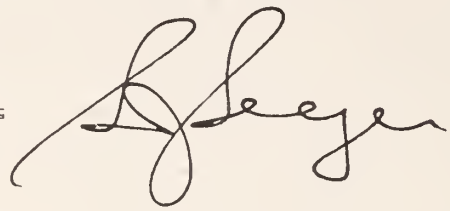
SELF MEDICATION

THE dangers of self medication are well recognized by the medical profession but attempts to correct the evil usually receive scant support from the public. The money spent for such purposes probably exceeds the sum expended for legitimate professional care. The gullibility of the general public in this matter would be incomprehensible if one did not consider philosophically the many illogical reactions of human nature. Suffice it to say that a glimpse, within the medicine cabinet among all classes, will reveal astonishing evidence of the average man's confidence in his own therapeutic ability. It is not my present purpose to trace the evolution of this evil nor suggest any universal remedy but rather to call attention to one therapeutic agent which experience has shown to be potentially dangerous.

Rheumatic conditions are so universal and resistant to any specific therapy that they provide a fertile field for home doctoring. A layman who does not know of at least one "sure fire" cure for rheumatism feels mortified to tears in any neighborhood clinical discussion of this condition. Cinchophen was introduced in 1908 as an analgesic, especially for use in arthritis. Its success in some cases has led to its use in a wide variety of compounds including atophan, neocinchophen, farastan, oxyl iodide and doubtless in an unlimited number of other proprietary medicines. Evidence slowly accumulated that this drug was not an unmixed blessing. Numerous case reports testified to the potential toxicity of the drug; the variety of reactions included skin eruptions; various degrees of anaphylactoid shock, even with small doses; gastrointestinal disturbances and, most serious of all, liver damage with acute yellow atrophy resulting in a mortality of from 40 to 50 per cent in some 90 reported cases.

It is doubtless true that the incidence of more serious manifestations is slight when compared with the widespread use of the drug and its various combinations. However, when one reflects that this drug is widely recommended by certain pharmaceutical houses and is highly regarded by the lay therapeutist and above all can be obtained without a prescription by any Tom, Dick and Harry, we are forced to recognize a serious menace to the ignorant, self medicator. While it is unlikely that the problem can be readily solved, yet each physician should be fully aware of the situation and should do as much as he can among his patients by informing them about this and other potentially dangerous drugs widely used by the laity. J. H.

THE PRESIDENT'S PAGE



THE NATIONAL RECOVERY ADMINISTRATION

THE JOURNAL of the American Medical Association has commented editorially on rulings of the National Recovery Administration and has indicated the important questions regarding which no definite agreement has been reached. The office of our State Medical Society issued an important bulletin on this subject under date of August 24, giving the substance of a ruling affecting hospitals and physicians.* The questions of special interest to the physician, which are called forth by the National Recovery Administration, are those concerning his own hours of labor, its effect upon the hospitals with which he is associated, its effect upon the druggists, its effect upon the hours of labor of his office employees, and its effect upon the cost of medical and hospital services to those who are sick. The Government's obvious difficulties in launching this gigantic undertaking command our patient tolerance of inequities which may develop. We have every assurance that essential justice will be done when time has allowed the consideration of complaints. In the meantime, we may well adopt the watchword of Stephen Decatur, "My country, right or wrong." In this crisis we must give to President Roosevelt the tremendous moral support of the medical profession, and we must also give him the assurance that his efforts will not fail because of lack of co-operation. The American Medical Association will keep in touch with the situation to see that the public health is not jeopardized by any decision affecting adversely the interests of those in need of medical services.

Apparently we have discarded the theory that the state's only business is to act as an umpire and give each man in industry a fair field in the struggle for existence and in the attainment of some rather ill-defined objective. We have passed the stage of dawning consciousness regarding a controlled social order and have reached a stage of action. Medical men will do well to think beyond the immediate application of the code to medical activities, and give serious study to the implications of the social theories which have been accepted. One could hardly qualify as a major prophet on the basis of the prediction that political effort will be made to extend the activities of government in the field of medicine. Will the increased share in the things their work will produce help solve the problem of the cost of medical care for those in the lower income groups, or will the corresponding rise in the cost of commodities negative this possibility? Will the regimentation of industry be followed by an attempt at a regimentation of the medical profession? Will compulsory health insurance on a national basis be proposed? What shall be the attitude of the medical profession? Shall it be outright opposition to any change in the present system? Shall it be the proposal and advocacy of some definite change, or shall it be intelligent co-operation with the authorities by an informed profession with sufficient power in their organization to command respect? I believe that at this time the last represents the best course. We should emphasize that the primary concern of organized medicine is to see that the public health is not jeopardized by any decision affecting adversely those needing medical services. We should insist, also, that justice be done the practicing physician.

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* See page 611.

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SOCIETY PROCEEDINGS

POLK

The annual barbeque and picnic for members of the Polk County Medical Society and their wives was held at the summer home of Dr. J. A. Riegel on Deer Lake, on July 20th. Following an afternoon devoted to swimming, boat riding, golf, and tennis, the physicians were addressed by Drs. William A. O'Brien and William T. Peyton, both of Minneapolis. Dr. O'Brien spoke on "Burns" and Dr. Peyton discussed "Cancer of the Lip and Its Treatment".

VERNON–MONROE–JUNEAU

The Tri-County Medical Society, Vernon, Monroe and Juneau Counties met at Elroy, Wisconsin, on June 22nd and staged a splendid meeting. We were privileged to listen to Drs. E. L. Sevringhaus and Ed. Schneiders of Madison. Dr. Sevringhaus spoke on "Menopausal Disorders" and Dr. Schneiders gave a splendid talk on "Obstetrics and Gynecology" illustrated with slides. Although the day was extremely hot the doctors enjoyed a most profitable and pleasant meeting. Dr. F. H. Ferguson spoke at length on the economic side of the profession.

The July meeting of this society was the peak of the activities of our society, with Dr. Charles Mayo and son, Dr. Joseph Mayo of Rochester giving interesting talks touching many high and important spots pertaining to the medical profession. Dr. Charles Mayo told of his early days of practice and in every phrase tried to simplify the common sense tactics in diagnosis. His talk on "Gall Bladder and Liver Diseases" was plain and impressive. George Crownhart, the pillar of professional defense gave us what every one present have been anxiously waiting to hear and it impressed us all more than ever how important a position George has to fill. I think we can all depend on the slogan "Let George Do It". Dr. Charles Burke of Madison read a paper at length on "Diabetes", giving all details pertaining to diet, early diagnosis and treatment.

The Tri-County Medical Society is developing into a real medical organization and has opened its doors to any group who may feel the value of attending their meetings. A fine program has been planned for the next meeting which will be held at Tomah on September 25th. P. H. H.

NINTH COUNCILOR DISTRICT

Sixy-five physicians attended the summer meeting of the Ninth Councilor District meeting held at Marshfield on the afternoon and evening of August 15th. At two-thirty in the afternoon, a clinic was held at St. Joseph's Hospital, with the following program:

1. Demonstration of cataract cases, using avertin anesthesia by Dr. L. A. Copps and Dr. G. L. McCormick.
2. Cretinism in infants, by Dr. J. B. Vedder and Dr. A. L. Millard.
3. Toxic thyroid in a child seven years of age Successful operation under rectal ether and general anesthesia, by Dr. H. H. Milbee and Dr. H. A. Vedder.
4. Bone Lesion of Fibula by Dr. R. P. Potter.
5. Ununited Fracture of Tibia. Treatment, by Dr. P. F. Doege.
6. Some Types of Ataxia by Dr. K. H. Doege.
7. Transurethral Resection of Prostate by Dr. W. G. Sexton.

Following the dinner at six-thirty at the Hotel Charles, Dr. Stanley J. Seeger, Milwaukee, President of the State Society, spoke on "Treatment of Burns;" Dr. Charles Sutherland of Rochester read a paper on "Roentgenology on the Diagnosis of Bone Lesions", and Dr. John S. Coulter of Chicago discussed "Physical Therapy in Management of Fractures."

ELEVENTH COUNCILOR DISTRICT

A joint meeting of the Eleventh Councilor District of the State Medical Society and the Interurban Academy of Medicine was held at Superior on August 3rd. The district comprises of the counties of Ashland–Bayfield–Iron and Douglas and the Academy is composed of physicians in Douglas County and St. Louis County, Minnesota. Upwards of one hundred physicians attended the meeting which began at two o'clock with a business meeting at which time the following officers were elected for the coming year: President, Dr. C. H. Christiansen of Superior and Secretary, Dr. G. Roy Ringo of Montreal.

Speakers on the seientific program included the following: Dr. Francis D. Murphy, Milwaukee, spoke on "High Blood Pressure"; Dr. Stanley J. Seeger, Milwaukee, discussed "The Treatment of Burns"; Dr. Leo G. Rigler, associate professor of radiology at the University of Minnesota, gave an address on "Radiology", and Dr. Walter A. Fansler, professor of proctology, University of Minnesota, spoke on "Methods of Operating Cancer of the Rectum."

A dinner was held at six-thirty o'clock after which several men spoke on the present status of medical economics. Following this, the meeting was concluded by a musical program. C. H. C.

ERRATUM

In reported committee appointments in our July issue, it was stated that President Stanley J. Seeger had reappointed Dr. H. P. Greeley as Chairman of the Editorial Board. Dr. Greeley is Chairman of the Board with an unexpired term. Dr. Seeger reappointed Dr. Oscar Lotz of Milwaukee to the Board for the three year term ending in 1936.—Editor's Note.

THE WOMAN'S AUXILIARY

MRS. EBEN J. CAREY, Milwaukee, *President*
MRS. ROCK SLEYSTER, Wauwatosa, *President-elect*
MRS. GEORGE H. EWELL, Madison, *Secretary*
MISS RUTH BUELLESBACH, Madison, *Executive Secretary*
MRS. R. G. ARVESON, Frederic, *Treasurer*
MRS. ROBERT FITZGERALD, Milwaukee, *Press and Publicity Chairman*
MRS. JAMES BLAKE, Hopkins, Minn., *National President*

Report of the Retiring President

By MRS. FRED A. NAUSE
Sheboygan

It is a pleasure to report that Wisconsin has fourteen (14) county auxiliaries. The present membership is approximately 588, a gain of 221 over the past year.

Following a letter to the president of every unorganized county, informing him of the advantages of a woman's auxiliary, its aims and purposes, seven (7) new counties were organized since the New Orleans meeting and many other favorable replies were received.

Each of the fourteen county auxiliaries have an advisory council. The Advisory Council of the State Auxiliary consists of four members appointed by the Council of the State Society.

The Committees of the Wisconsin Auxiliary correspond with those of the National Auxiliary, namely: Organization, Press and Publicity, Program, Public Relations, Hygeia, Archives and Historian.

Self medical education has been the aim of the Wisconsin Auxiliary. County auxiliaries have been urged to have medical speakers at their meetings and this has been carried out extensively together with their social programs.

Our county auxiliaries have done excellent public relations work. Milwaukee Auxiliary in cooperation with their county medical society have placed forty-five (45) speakers before organized lay audiences in order to stimulate the interest and understanding of the laity in sound health knowledge. They report a growing interest and a demand for talks dealing with mental and social hygiene. Milwaukee County is also cooperating with their county medical society in transporting children and taking care of clerical work at the immunization clinics. Rock County auxiliary arrange entertainment for the county tuberculosis sanatorium as one of their projects.

The Editor of the Wisconsin Medical Journal, Mr. J. G. Crownhart, has generously given space in the Journal to the Auxiliary so that the activities of the counties throughout the state could be reported. In every instance the Auxiliary notes have occupied two or three pages. It has been a real source of inspiration to new county auxiliaries. Our state publicity chairman has contributed regularly to the National Publicity Chairman. In any communication with a county president the necessity of reading the Journal has been stressed, and when attending a county auxiliary meeting the value of the auxiliary page has been brought to their attention.

Wisconsin carried on an extensive Hygeia program this year. With the thought of promoting Hygeia in the graded schools, seventy-two (72) six-month subscriptions to Hygeia were sent to the county superintendents of schools in Wisconsin. One small auxiliary has earned one hundred dollars with which to give subscriptions to the schools not having Hygeia. One county had parties and the proceeds were used to place the magazine in the rural schools. Another auxiliary with the cooperation of the county superintendent, distributed fifteen Hygeia subscriptions among eighty rural schools,—the county Hygeia chairman collects the magazines from members and sends them to the superintendent of schools for mailing who distributes them to ten teachers and they in turn accept the responsibility for the circulation of each copy. Wisconsin Auxiliary subscribed to 131 Hygeia subscriptions; 41 one year subscriptions and 90 six-month subscriptions.

We also sponsored a Health Essay Contest for the sophomores in high schools in counties where county auxiliaries were organized. The object of the Contest being to stimulate in our young people an interest in and a knowledge of authoritative health information. The essays were based on articles appearing in February and March issues of Hygeia which pertained to health and the relationship of the medical profession to the individual, the family and the community. Nine (9) counties participated in this contest. The first prize consisted of $10.00, the second prize of $5.00, the third prize of $2.50, and $2.50 for the best essay in each county auxiliary. The three prize winning essays have the privilege of broadcasting their essays over the Milwaukee Journal Broadcasting station, WTMJ. Mrs. Henry Gramling was Chairman of the Contest.

The members of the Woman's Auxiliary to the State Medical Society of Wisconsin have taken an active part in the plans for this National Convention, each county president having been a member of the Inter-county Convention Committee.

Throughout the state a growing interest in the Auxiliary is evidenced among the members of the county medical societies as well as among the physicians' wives.

Respectfully submitted,
MRS. FRED A. NAUSE,
Sheboygan, President.

NEWS ITEMS AND PERSONALS

Dr. J. J. Minahan of Chilton was elected a member of the Chilton school board for the coming year.

—△—

Dr. W. M. Sonnenberg and Dr. A. C. Edwards have announced the opening of their offices at 809 North 8th St., at Sheboygan.

—△—

Dr. J. W. Lockhart of Oshkosh was the guest speaker at a meeting of the Milwaukee Rotary Club in July.

—△—

The International Assembly of the Inter-State Postgraduate Medical Association of North America will be held in the Public Auditorium, Cleveland, Ohio, October 16–20, 1933. Many distinguished teachers and clinicians will appear on the program. All members of the State Medical Society of Wisconsin are cordially invited to attend. Registration fee of $5.00 admits all members of the profession in good standing.

—△—

Dr. W. W. Kelly of Green Bay was appointed as head of the Green Bay emergency reemployment campaign.

—△—

On July 10th, Dr. Ralph D. Shaner joined the staff of the Oconomowoc Health Resort at Oconomowoc, filling the vacancy created by the death of Dr. Frederick C. Gessner last February. Dr. Shaner graduated from the Indiana University School of Medicine in June, 1932. In June, 1933, he completed a year of rotating internship at St. Luke's Hospital, Duluth, Minnesota.

—△—

Dr. W. A. Mowry, formerly with the Student Health Service of the University of Wisconsin, has opened an office at 905 University Avenue, Madison, for the practice of internal medicine with special attention given to allergic diseases.

—△—

A number of Wisconsin physicians enjoyed trips and outings during July and August:

Dr. and Mrs. E. T. Ridgway and family of Elkhorn spent six weeks at their summer home on Silver Lake, Wis.

Dr. and Mrs. C. E. Lyght and daughter of Madison motored through northern Wisconsin during August.

Dr. and Mrs. James C. Hassell of Oconomowoc spent two weeks in August driving and fishing in northern Wisconsin.

Dr. and Mrs. H. E. Purcell and son and daughter visited three weeks at the home of a daughter in Elizabeth, N. J.

Dr. and Mrs. John Tasche, Sheboygan, enjoyed a cruise on the Great Lakes aboard the steamship, Tionesta.

Dr. and Mrs. C. R. Bardeen, Madison, and daughter visited in Quebec for two weeks.

Dr. and Mrs. Damon Brown, Madison, motored through northern Wisconsin and Michigan for several weeks.

Dr. and Mrs. Frederick Geist of Madison were in Boston for a few weeks in August.

Dr. and Mrs. J. E. Newton of Hudson visited friends and relatives in Wisconsin and Illinois the latter part of July.

—△—

Dr. and Mrs. H. O. Delaney of Beloit on August 5th were called to the bedside of their daughter, Sister Mary Faith of the convent of Mount Carmel at Dubuque, Iowa, who has been seriously ill with a heart ailment.

—△—

Dr. M. A. Cunningham was elected state president of the Ancient Order of Hibernians at the state convention held in Wauwatosa in August.

—△—

The effects on the human body of thorium dioxide will be described by Drs. E. A. Pohle and Gordon Ritchie of the faculty of the University of Wisconsin Medical School before the meeting of the American Congress of Radiology on September 29th at Chicago.

—△—

Wisconsin physicians will be interested to learn of the transfer of Mr. Joseph W. Hall, representative of the Burroughs Wellcome & Company for the past nineteen years, to the city of Philadelphia where he will be engaged in special work for his firm.

—△—

Dr. Maurice G. Rice, a graduate of Marquette University School of Medicine in 1932, has become associated with his brother, Dr. Rhody W. Rice at Stevens Point in the practice of general medicine and surgery. Drs. Rhody and Maurice are sons of Dr. and Mrs. D. S. Rice of Stevens Point.

—△—

Dr. H. F. McDonald of Hollandale, where he has lived for the past thirty-six years, has disposed of his practice to Dr. Stanley B. Marshall, Madison.

—△—

Dr. A. O. Olmsted of Green Bay was appointed as a member of the Green Bay Board of Education in August.

—△—

MILWAUKEE

Mrs. G. F. Kenney, widow of Dr. G. F. Kenney who died in 1931 died at her home, 3481 N. Hacker Street, on August the 5th, at the age of forty-nine years. Surviving Mrs. Kenney are two daughters, Peggie, and Ruth; a son, John; a sister, and two brothers.

Dr. and Mrs. Harvey E. Webb and family returned to the city on August 6th from a week's motor trip to Eagle River.

—△—

Dr. Helen Jane Zillmer left Milwaukee on July the 14th for a several weeks' trip through the West, and Canada, where she expects to do some mountain climbing.

—△—

Dr. A. J. Muckerheide and family enjoyed a week's outing at Rhinelander, where they motored late in July.

—△—

Dr. and Mrs. F. H. Hagerman left the latter part of July for a motor trip to Canada. They expect to return to Milwaukee early in September.

—△—

Dr. and Mrs. Bernard Krueger enjoyed a two weeks' trip through California and the Canadian Rockies during the latter part of July.

—△—

Dr. and Mrs. John L. Yates returned to Milwaukee early in August from a ten-day motor trip to Hamilton, Ontario, Canada. On their return trip they visited in Buffalo and Cleveland.

—△—

Dr. and Mrs. R. A. Jefferson are occupying a lodge on a seven-thousand acre island in Long Lake in northern Wisconsin. They expect to vacation there until early in September.

—△—

Mrs. Gurina Olson, mother of Dr. Russell E. Olson, died on July 21st, at the age of sixty-nine years.

—△—

Dr. and Mrs. G. A. Carhart and son, Kimball, spent the week-end of July 29th, in Wausau, Wisconsin.

—△—

Dr. and Mrs. James A. Bach left on July 31st for a motor trip through northern Wisconsin. They stopped at Camp Byrn-Afon, where their daughter, Rosemary, is attending camp.

—△—

Dr. and Mrs. Karl Schlaepfer and children returned early in August from Fort Lauderdale, Florida, where they have been for the past five months.

—△—

Dr. Louis M. Warfield and his son, Jack, left on August 4th for a fishing trip in northern Wisconsin. Mrs. Warfield joined them the following week and they then went to Deerwood, Minnesota, for a brief visit.

—△—

Dr. and Mrs. Dean Echols, of Ann Arbor, Michigan, arrived in Milwaukee early in August to visit Mrs. Echols' parents, Dr. and Mrs. O. H. Foerster, and Dr. Echols' parents, Dr. and Mrs. Chester M. Echols.

On August 17th, Dr. Dean Echols and his father left for a ten-day fishing trip in northern Wisconsin.

Dr. and Mrs. Echols will return to Ann Arbor early in September.

—△—

Dr. George E. Brown, head of the section on vascular diseases at the Mayo Clinic, Rochester, Minnesota, spoke at the meeting of the National Association of Chiropodists, held in the Schroeder Hotel during the week of August 7th.

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Dr. Ralph T. Rank has given up his private practice in Milwaukee to take a year's training at the Billings Memorial Hospital, Chicago. Following the completion of his training, Dr. Rank expects to specialize in the eye, ear, nose, and throat specialty.

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On August 2nd, members of The Medical Society of Milwaukee County were guests of the Brook Hill Farms at luncheon and golf at the Waukesha Country Club.

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The sixth annual golf tournament, sponsored by the Milwaukee County Physicians' Golf Tournament and The Medical Society of Milwaukee County, was held on July 27th, at the Blue Mound Country Club, followed by a dinner and business meeting.

Sixty-seven physicians entered the tournament, and fifty-five were present at the dinner.

Dr. Mark Bach won the championship cup with a low gross score of 76. Runners-up were Drs. R. E. Fitzgerald and J. E. Rueth, with low gross scores of 81.

Turning in a score of 81, Dr. E. W. Miller won first prize for low gross for men over fifty, second prize going to Dr. Charles Fidler.

Winners of prizes in the various events were as follows:

Low net
  Dr. J. A. Jenner—Score: 67
Low net (men over fifty)
  Dr. E. M. Rice—Score: 91
2nd low net
  Dr. R. J. Purtell—Score: 73
First to pay dues
  Dr. Dennis F. Pierce
Lowest number of putts (18 holes)
  Dr. J. F. Zivnuska—32
  Dr. H. A. Pfeifer—32
Low gross (first nine holes)
  Dr. Edwin C. Bach—Score: 39
Low gross (second nine holes)
  Dr. A. L. Curtin—Score: 40
Highest gross score
  Dr. E. P. Bickler—Score: 128
Most honest golfers—highest net score
  Dr. Jerome W. Fons—Score: 102
  Dr. J. A. Murphy—Score: 102
Hole in One (Ball in gopher hole)
  Dr. Frank E. Drew

—△—

Dr. Francis D. Murphy addressed the Congress of Medical Railway Surgeons in Chicago on August

tenth on the subject of "Some Aspects of Nephritis in Hypertension."

On August 3rd, Dr. Murphy spoke before the Northern Wisconsin Medical District and Duluth Interurban Medical Society at Superior, Wisconsin. Dr. Murphy's subject on this occasion was "The Management of Malignant Hypertension."

—△—

Dr. and Mrs. Carl Henry Davis left by motor on August 12th for a several weeks' trip through the east. At Buzzard's Bay, Massachusetts, they were joined by their sons who have been attending camp at Buzzard's Bay, following which they enjoyed a trip through the White Mountains. Before returning to Milwaukee they visited Dr. J. Clarence Webster at Shediac, New Brunswick.

—△—

Dr. and Mrs. J. F. Haug motored to Shawano Lake on August tenth for a ten-day stay.

—△—

Dr. and Mrs. Arthur J. Patek left on August the 18th for a motor trip through New England and Canada. While in Boston they visited their son and daughter-in-law, Dr. and Mrs. Arthur J. Patek, Jr.

—△—

Announcement has been made of the wedding of Miss Kathryn O'Connor, daughter of Mr. and Mrs. John O'Connor, and Robert Gramling, son of Dr. and Mrs. Henry J. Gramling, which took place on August the 16th, in Milwaukee.

—△—

Dr. and Mrs. Ernest W. Miller and their daughters, Cile and Patty, left by motor on August 14th, for a camping trip in northern Wisconsin.

—△—

Dr. Eben J. Carey acted as guide to members of the Seven Arts Society and their friends when they visited The Century of Progress in Chicago on August the 16th.

Dr. Carey is director of the Medical Exhibits at the Exposition.

—△—

Dr. Harold B. Miner returned to Milwaukee on September 1st from a motor trip to Canada. While there he visited with relatives in Humberstone, Ontario.

—△—

The second economic conference of the Special Committee on the Distribution of Medical Service was held at the City Club on August 1st. The following vital subjects were discussed:

"Health Insurance—Under the State," by Dr. N. E. McBeath; "Health Insurance—Under Fraternal and Industrial Organizations", by Dr. Stanley J. Seeger; "Health Insurance—Under Professional Direction," by Dr. E. L. Tharinger; "Workmen's Compensation Law and the Insurance Carrier," by Dr. Ralph P. Sproule; "Hospital Insurance Plans," by Dr. Edith McCann.

Before adjourning the Committee voted unanimously to continue its work and if possible, develop a plan or program to be submitted, upon completion to the Society for its action.

Dr. and Mrs. F. R. Janney returned to Milwaukee on August 21st after having spent a week in Chicago visiting the Century of Progress Exposition.

—△—

Dr. Benjamin H. Schlomovitz spent a week in August as the guest of his brother, Dr. Harry Schlomovitz of the Barron Clinic, Barron, Wisconsin.

—△—

Dr. and Mrs. J. J. O'Hara enjoyed a two weeks' sojourn at Spider Lake in Vilas County, Wisconsin, the latter part of August.

—△—

Dr. and Mrs. G. J. Pugh returned September fourth from a two weeks' vacation spent at Lac LaBelle and in Chicago, as visitors to The Century of Progress Exposition.

—△—

Dr. and Mrs. Patrick L. Callan returned to Milwaukee about the middle of August from a motor trip to Lake Helen, Nipigon, Canada, and an extended trip to Lutsen on the north shore of Lake Superior.

—△—

Dr. and Mrs. William L. MacKedon returned to Milwaukee on August 30th from a ten-day trip to New York.

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Dr. S. Herman Lippitt has recovered from an operation for appendicitis performed on Saturday, August 5th.

—△—

Dr. S. A. Morton and Dr. J. E. Habbe spoke before the medical section of the National Fraternal Congress on August 28, 1933. The Monday morning session of the medical section was held at Columbia Hospital, Dr. Morton's subject being "X-ray Aspects of Pulmonary Diseases" and Dr. Habbe's subject, "X-ray Aspects of Cardiovascular Disease".

BIRTHS

Twin sons, Harold Hurlbut and Franklin Nicholas to Dr. and Mrs. Harold J. Schilling of Platteville, July 31st.

A son, Arthur Andreas, to Dr. and Mrs. Abraham A. Quisling of Madison on July 20th.

A daughter to Dr. and Mrs. E. T. Harrington, Milwaukee, on June 24th.

A son to Dr. and Mrs. Hyman Mendeloff, Milwaukee, on July 14th.

A son to Dr. and Mrs. Gamber Tegtmeyer, Milwaukee, on July 23rd.

A son to Dr. and Mrs. Raymond P. Wiesen, Milwaukee, on July 25th.

A daughter to Dr. and Mrs. Victor Taugher, Milwaukee, on July 26th.

A son to Dr. and Mrs. George E. Whalen, Milwaukee, on July 30th.

A daughter to Dr. and Mrs. J. R. Dundon, Milwaukee, on August 3rd.

A daughter to Dr. and Mrs. Paul J. Purtell, Milwaukee, on August 15th.

MARRIAGES

Dr. Dean S. Van Heeke of Phillips to Miss Esther A. Hensing, R. N., of Madison at Merrill, Wisconsin, on July 31st.

Dr. Gordon J. Schulz, Milwaukee, and Miss Rhea Hicks, daughter of Mr. Andrew Hicks of Sheboygan, on July 8th.

Dr. Robert E. Burns, associate professor of orthopedic surgery, University of Wisconsin, to Dr. Charlotte J. Calvert, director of the bureau of child welfare of the State Board of Health, in Minneapolis on August 14th.

Dr. Charles Frederick LeComte, Madison, to Miss Mary McNeil Darling, daughter of Dr. and Mrs. Walter D. Darling of Milwaukee at Madison on August 12th.

DEATHS

Dr. Richard S. Dewey, 88, former superintendent of Milwaukee Sanitarium, Wauwatosa, died at his home at La Canada, Pasadena, California, on August 4th. Dr. Dewey was director of the Milwaukee Sanitarium, Wauwatosa, from 1895 to 1919 coming to Wisconsin from Chicago. His early work was in the field of legal medicine and helped to lay the foundations for the present day scientific study of the criminal insane.

He was elected president of the American Medico-Psychological Association in 1885 and was editor of the American Journal of Insanity and was subsequently elected its editor emeritus.

Born on December 6, 1845 at Forestville, New York, he received his M. D. degree at the University of Michigan. Upon graduation he was resident physician at the Brooklyn New York City Hospital. In 1870 he was a volunteer assitant surgeon in the German Army serving until about 1871 after which he remained abroad for some months for study under Virchow. Upon his return Dr. Dewey was appointed assistant physician at the Hospital for the Insane at Elgin, Illinois, and subsequently saw service at Kankakee. He subsequently established an office at Chicago which he left in 1895 to accept the medical directorship of the Milwaukee Sanitarium which had been established in the previous year.

Dr. Dewey was an honorary member of the Medical Society of Milwaukee County. He was a past president of the American Psychiatric Society and the Chicago Neurological Society.

He is survived by his widow and four children.

Dr. E. J. Stone, formerly located in Milwaukee, died very suddenly in Chicago on August 7th. He was forty-two years of age.

Dr. Stone became a member of The Medical Society of Milwaukee County in 1922, resigning early in 1931 when he moved his practice to Chicago. During the time of his residence in Milwaukee he was connected with the Marquette University School of Medicine in the department of gynecology and obstetrics, which specialties Dr. Stone practiced.

Surviving Dr. Stone are his widow and one daughter.

Dr. Herman Schaper, formerly of Appleton, died at his home in Rockyford, Alberta, Canada, at the age of sixty-eight years.

Dr. Schaper was born at Franklin, Wisconsin, and was a graduate of Rush Medical College in the year 1892 and in 1893 went to Europe where he remained for two years taking post-graduate work. Returning in 1905, he came to Appleton where he practiced until his health failed about ten years ago. Associated with him during the last years was Dr. E. L. Bolton, who with Dr. E. F. Mielke took over his practice after he retired. At one time, Dr. Schaper was a member of the Board of Visitors of the University of Wisconsin.

Dr. Schaper was a member of Outagamie County Medical Society, the State Medical Society of Wisconsin, and the American Medical Association.

He is survived by his widow and one sister. Burial was made in Riverside cemetery, Appleton.

Dr. A. Edwards, Reedsburg, died on August 11th following a few days illness.

Dr. Edwards was born in the year 1864 and was a graduate of the State University of Iowa College of Medicine in 1885. About thirty years ago Dr. Edwards founded the first hospital in Reedsburg of which he had been in charge up to the time of his death.

He was a member of the Sauk County Medical Society, the State Medical Society of Wisconsin, and the American Medical Association.

Dr. Edwards is survived by his widow and three daughters.

Dr. Richard W. Jones, Wausau, died on August 17th of an apoplectic stroke while performing an operation at St. Mary's Hospital.

Dr. Jones was born in Sussex, Waukesha County, in 1878. Graduating from Northwestern University Medical School in 1902, he practiced at Mattoon for a time and then came to Wausau to establish a practice. During the World War, Dr. Jones served as a medical officer and in addition served in the Spanish-American war. He served as commander of the local American Legion post for a number of years.

Dr. Jones was a member of the Marathon County Medical Society, the State Medical Society, and was a fellow American Medical Association. He was also a fellow of the American College of Surgeons. Dr. Jones also served as the delegate from Marathon County to the State Medical Society meeting in 1933.

He is survived by his widow and one son, Robert, of Chicago.

Dr. Edward L. Shepard, Brandon, died on August 7th at his home after an illness of several months.

He was born in the year 1863 and was a graduate of Chicago Homeopathic Medical College in 1890. Dr. Shepard practiced in Edgerton before going to Brandon.

He was a member of the Fond du Lac County Medical Society, the State Medical Society, and the American Medical Association.

Dr. Shepard is survived by one daughter, Mrs. E. F. Linster of Brandon.

Dr. A. M. Kersten, 86, a former practitioner in Wisconsin died at his California home on August 13th. He was the father of Dr. N. M. Kersten of De Pere.

Born in Prussia on August 23, 1847, he came to the United States in 1868 and established a drug store at Fredonia, Wisconsin, and ten years later at Kaukauna. He later attended Detroit College of Medicine and Surgery from which he graduated in 1883. He practiced in Petoskey, Michigan, for more than a year and in 1885 located in De Pere, Wisconsin. His practice while residing there covered a period of 32 years. He retired in 1917 to make his home in Los Angeles.

He is survived by four sons, Dr. Norbert M., of De Pere; Dr. Ernest M., of Fort Dodge, Iowa; Dr. Hugo M., of Los Angeles and Sylvan M., of Green Bay. He is also survived by two daughters.

Dr. John Milton Dodson, for many years dean of Rush Medical College, more recently director of the Bureau of Health and Public Instruction of the American Medical Association, and at the time of his death retired, died at his home in Chicago, August 15, aged 74 years, of uremia. Dr. Dodson was born in Berlin, Wis., Feb. 17, 1859. Following his education in the University of Wisconsin (A.B. 1880), he entered Rush Medical College, receiving his M.D. degree in 1882, and subsequently the M.D. degree from Jefferson Medical College in 1883. He also received the A.M. degree from the University of Wisconsin in 1887. He became demonstrator of anatomy in Rush Medical College in 1889 and professor of physiology in 1891, holding the two positions coincidentally until 1898. He then became professor of diseases of children, having held a similar position in the Woman's Medical College of Chicago from 1894 to 1897. In 1898 he became dean of Rush Medical College and coincidentally dean of medical students in the University of Chicago, holding both of these positions until 1923. In that year he was made executive secretary of the Bureau of Health and Public Instruction of the American Medical Association, in which capacity he was also associated with the editorial staff of *Hygeia*, being largely responsible for the department of Questions and Answers.

Dr. Dodson at one time was a trustee of the Chicago Medical Society and had been president of the Chicago Pediatric Society and also of the Chicago Pathological Society. During his career he contributed largely to medical periodical literature. During the World War he was medical advisor to the governor of Illinois and held the rank of Major in the Army Medical Corps. His membership in scientific organizations included the American Association of Anatomists, American Society for the Advancement of Science, the American Conference on Hospital Service and the American Veterans of the World War.

As dean of students in Rush Medical College, Dr. Dodson was especially beloved by those who came under his tutelage. The Alumni Association of Rush Medical College held a special banquet in his honor, presented him with a testimonial volume, and established a lectureship in his name. He was a well educated physician, with a fine appreciation of the classics of both medicine and literature generally. He was congenial, and his numerous friendships with physicians throughout the country testify to their appreciation of his fine qualities as a physician and as a man.—J. A. M. A. Aug. 26, 1933.

SOCIETY RECORDS

New Members

Richard E. Martin, 1515 Washington St., Two Rivers.

Richard D. Champney, 4028 W. Burleigh St., Milwaukee.

A. J. Hood, 161 W. Wisconsin Ave., Milwaukee.

Bertha T. Haessler, Sta. C, Route 6, Box 499, Milwaukee.

L. M. Browning, 421 N. 89th St., Wauwatosa.

J. F. McCormick, 324 E. Wisconsin Ave., Milwaukee.

Gerald Friedman, 606 E. State St., Milwaukee.

I. Z. Davidoff, 802 E. Center St., Milwaukee.

Herbert E. Froede, Jackson.

H. V. Crum, Sheboygan Memorial Hospital, Sheboygan.

Maurice G. Rice, 401 Main St., Stevens Point.

Elmer E. Bertolaet, Palmyra.

Frank Treskow, Helenville.

Thomas S. Burdon, 508 Minahan Bldg., Green Bay.

L. A. Vander Linde, 805 South 5th St., Milwaukee.

Fabian R. Derse, 3506 W. Fond du Lac Ave., Milwaukee.

Floyd L. Litzen, Gresham.

Changes in Address

Gordon J. Schulz, Milwaukee to Union Grove.

C. T. Clauson, Galesville to Bloomer.

New R. F. C. Ruling

The Reconstruction Finance Corporation has made a new ruling on medical relief which ruling was made effective in Wisconsin as of July first. Under the new regulation issued by the R. F. C. from Washington, funds may be used for the payment of medical attendance and medical supplies for those families that are receiving relief but *may not be used* for the payment of hospital bills or for the boarding out of children.

"These necessary services to the destitute," says the R. F. C. administrator, "should be made available through state or local funds." The American Hospital Association is endeavoring to secure a change in the R. F. C. regulations at Washington but until such change is accomplished at the national capitol, the Wisconsin Industrial Commission, handling the distribution of the state's R. F. C. funds must abide by this new regulation.

Periodic Payment Plans for Purchase of Hospital Care are Held to be Insurance in Wisconsin

That the so-called periodic payment plan for the purchase of hospital care as outlined by the American Hospital Association falls under the Wisconsin insurance laws, was the statement of H. J. Mortensen, Commissioner of Insurance, late in August in response to a request for information from the Wisconsin Hospital Association. The effect of the Commissioner's ruling is that a hospital in Wisconsin may not sell memberships in its organization at a stipulated annual fee to cover a certain period of hospitalization within any given year or in which they guarantee they will cover hospitalization without additional cost for a stipulated period during any given year.

The Commissioner was asked the question by the Wisconsin Hospital Association on the basis of the blanket proposal suggested by the American Hospital Association. After reviewing the terms of the agreements common to all proposed plans, the Commissioner stated that the "proposal comes within the purview of insurance and could only be done by a duly licensed insurance company. * * * It is a form of health and accident insurance."

The response of the Insurance Commissioner to the request of the State Hospital Association follows in full:

THE STATE OF WISCONSIN
Department of Insurance
Madison
August 22, 1933

Mr. J. G. Crownhart, Secretary,
Wisconsin Hospital Association,
119 East Washington Avenue,
Madison, Wisconsin.

Re: *The Periodic Payment Plan for the Purchase of Hospital Care.*

Dear Sir:

This is to acknowledge receipt of your communication and pamphlet with reference to the above plan. In our opinion the above proposal comes within the purview of insurance and could only be done by a duly licensed insurance company. In answer to your second question we believe that an insurance company licensed to transact the business mentioned in section 201.04 (4) Disability Insurance, could issue such certificates as in our opinion it is a form of Health and Accident insurance.

It is true the Wisconsin Statutes do not define insurance but our Wisconsin courts have defined insurance, especially in the case of "Shakman vs. U. S. Credit System" as "A contract whereby one party agrees to wholly or partially indemnify another for the loss or damage which he may suffer from a specified peril." In this plan one party agrees to wholly or partially indemnify another for a loss or damage which he may suffer from a specified peril. Whether the agreement is made between the hospital and an individual or a group of individuals does not take it out of the realm of insurance. A large amount of insurance written in this state is on the group plan, but companies writing this insurance must necessarily comply with our insurance laws.

Section 209.11 prohibits any organization from transacting insurance business of any kind without first complying with our law. The organization would then have to be licensed to transact insurance as mentioned in subsection (4) of section 201.04. The solicitors obtaining subscriptions to this plan would have to comply with our statutes and obtain a solicitor's license. Section 209.05 defines an agent but makes an exemption where it can be shown that he receives no commission.

On page 6 of the pamphlet, Effective Presentation to the Public, provision is made for the payment of a commission and the solicitor would therefore have to be licensed.

Under Extension of Benefits to Dependents on page 3, there appears to be a discrimination in that a discount is allowed to a dependent of a member when the association receives no contribution for this service. We are referring to the second alternative mentioned in this paragraph.

Exclusion of Certain Diseases. Your association does not intend to take care of the hospital charges of those members who receive such care through workmen's compensation benefits. This appears to be a discrimination among members in that one member for a stipulated contribution receives hospital care while the other does not if the hospital care is paid for by a compensation company.

Under Finance, as outlined on pages 4 and 5, a member is not assured of hospitalization when he needs it. The association reserves the right to return to a member a specified amount. In case of a widespread disaster, it is doubtful whether the amount returned to a member will reach anywhere near the amount of what he would have received in benefits had the member been accepted in the hospital. A discrimination would result as to the benefit derived by members paying a similar sum for their protection.

We have attempted to point out the inequities in the plan and also to advise that in our opinion the plan falls within the confines of our insurance statutes.

For your information we are also quoting an excerpt from the National Underwriter of August 18, 1933 which pertains to this same subject.

"Group hospital insurance plans, whereby a person pays so much into a fund each year to receive hospital services when necessary, free of charge, generally are not workable at the present time, according to the opinion expressed by a number of large insurance companies to officials of the Indiana State Medical Association.

"A letter was sent out to a number of the larger companies asking for detailed information in regard to such schemes and asking why, if such plans are economically sound, the larger companies have not entered the field. It was prompted by the fact that within the last few months salesmen have flooded this section of the country selling hospital insurance policies for as low as $6 a year. For information in regard to the soundness of such schemes the association appealed to ten companies, including the John Hancock, Southern Life & Health, Prudential, Pacific Mutual, United States Fidelity & Guaranty and others of similar standing. Without exception every answer was in the negative."

If we can be of any service to you, kindly feel free to call on us.

Very truly yours,

H. J. MORTENSEN,

LJY:MG Commissioner of Insurance.

Speakers' Bureau of the State Medical Society Organized

In February, 1933, seventy Wisconsin physicians and surgeons offered their services for the organization of the first speakers' bureau of the State Medical Society. These members volunteered to travel within a radius of seventy-five miles of their homes and speak before the various county and district medical societies without travel charge. In June, thirteen more names were added to the list, making a total of eighty-three speakers.

In this initial attempt at organizing the bureau, several factors were given consideration, namely, the qualification and experience of the speaker, geographical distribution, subject material, etc. Obviously no one member of the society is able to pass upon the qualifications of any considerable number of his associates, but through various contacts a representative list of speakers was compiled. In the bureau, are the names of seven past presidents of our Society. The larger medical centers, Milwaukee and Madison were better represented than some of the other sections of the state. The various fields of medicine and surgery were covered by a most interesting list of subjects, while medical history, medico-legal problems, and industrial subjects were also given consideration.

"It has long been realized that the strength of any state medical society depends upon its component parts, not only its members but their county and district organizations," declared Dr. Arnold Jackson, Madison, Chairman of the Committee on Scientific Work. "This bureau has been established to provide interesting material for these meetings when presented by those who have made a special study of their subject. In order that their subjects may be available to all members, the Secretaries of the County Societies are requested to bring their list to the meetings.

"Since many of the secretaries had arranged their programs for the remainder of the year, it was impossible for several societies to utilize the bureau last spring. In the past few months, an increasing number of speakers have been requested. The cooperation of the 53 presidents and secretaries of the county societies in utilizing this bureau is earnestly desired if this plan is to serve its purpose. It is felt that while the imported speaker is occasionally desirable, there are within the ranks of our own members, men well qualified to speak on most medical and surgical subjects.

"The fact is fully appreciated that the list of speakers is far from complete and that there are many excellent men whose names are not yet on the bureau. It is hoped that any member who has had any considerable experience in some particular piece of work or field of medicine will volunteer his services to the bureau. The committee plans to enlarge the bureau with additions and change of subjects at least twice a year. Under the present plan, the speak-

ers are volunteering their services without remuneration, but it is felt that they are compensated in part at least for their efforts, by the opportunity of presenting their knowledge of the subject, and by the friendships and contacts that may be made."

Dr. E. J. Carey, New Dean of Marquette

Dr. Eben J. Carey, director of the medical exhibits at the Chicago Century of Progress Exposition and professor of anatomy at Marquette University since 1920, has been named dean of the Marquette School of Medicine, according to an announcement of the Rev. William M. Magee, S. J., president of the university.

Dr. Carey succeeds Dr. Bernard F. McGrath, who resigned because of ill health after five years as dean at Marquette.

A native of Chicago, Dr. Carey attended high school in Los Angeles and took his premedical work and two years of his medical studies at the University of California. He later received bachelor of science, master of science, and doctor of science degrees from Creighton university, Omaha, Nebr., where he taught for six years before coming to Marquette in 1920.

Dr. Carey received his doctor of medicine degree from Rush Medical College, Chicago, in 1925 and served his internship in Presbyterian Hospital there on the Dr. Dean Lewis service. In the meantime, he was dean of medical students at Marquette from 1921 to 1928; medical director of the Marquette Free Dispensary from 1924 to 1928, and chief-of-staff of the Marquette University Hospital from 1926 to 1928. The Dispensary and Hospital were temporarily discontinued in 1928.

The new Marquette dean was commandant and first lieutenant of the R. O. T. C. at Creighton, and is a captain in a medical regiment of the Wisconsin National guard. He is a fellow of the American Association for the Advancement of Science and the American Medical Association, and a member of the State and County Medical Societies, the Milwaukee Academy of Medicine, Alpha Omega Alpha, Pi Kappa Epsilon, Phi Chi and the Elks' club. He has written extensively for technical publications, and presented a text, "Studies in Anatomy," in 1924.

As medical exhibits' director of the Century of Progress, Dr. Carey spent the summers of 1931 and 1932 in Europe in quest of display material. He discovered the famous "transparent man" in Germany and secured it for the Mayo brothers' exhibit at the fair.

Dr. Carey has taken office in the new Harriet L. Cramer memorial medical building at Marquette. Classes will be resumed there on Oct. 2.

Ruling on Hospitals and Physicians With Respect to National Industrial Recovery Act

According to information received in late August, the National Recovery Administration has made the following ruling:

"Hospitals, not engaged in carrying on a trade or industry, do not come within the purview of the National Industrial Recovery Act, so as to come under the ordinary requirement of a code of fair competition. There is nothing to prevent any employee of labor outside of trades and industries, any professional man or organization, or any non-profit organization from signing the President's Reemployment Agreement and conforming to its provisions. This does not mean, however, that they are under any compulsion to do so other than that resulting from a desire to cooperate where appropriate, and so far as possible, with a general program of reemployment at shorter hours and higher wages. To the extent that labor is employed in occupations comparable with those engaged in trade or industry, it is of course desirable that similar conditions should prevail."

(Note: This ruling applies to all hospitals in this state since none of them are so en-

gaged in medical practice as to be considered a trade or industry.)

It is the opinion of the American Medical Association on the basis of this and other rulings that a physician who is engaged in the practice of medicine is under no *legal obligation* to sign the President's Reemployment Agreement nor to bring himself within the coverage of any code.

Your Society is aware that public opinion must be considered by hospitals and physicians in this matter. If a group of hospitals or physicians feel that as a matter of public policy and as a manifestation of patriotism and support the Reemployment Agreement should be signed by them, your Society urges upon them consideration of the following facts:

1. The National Recovery Act is "not designed to promote monopolies or to eliminate or oppress small enterprises and will not operate to discriminate against them".

2. The fact that one hospital or physician displays the blue eagle of the N. R. A. might conceivably work hardship on hospitals or physicians who cannot afford to employ helpers under the hours and wages specified in the Agreement.

3. If the Agreement contains provisions that would render fair competition under it impossible, effort should be made to procure amendments to eliminate such features, or the hospitals or physicians should content themselves with displaying the consumers' blue eagle.

4. It is suggested that the county medical societies take this matter up as a group problem in order that uniform measures can be adopted by its members.

We regret that we have been unable to obtain definite rulings on this matter at an earlier date. All previous information and newspapers and journal reports conflicting with this bulletin should be disregarded. This information comes to us from official sources of the American Hospital Association and the American Medical Association and may be considered accurate.

» » » CORRESPONDENCE « « «

RESPONSIBILITY OF PHYSICIAN

----------, Wis.,
July 21, 1933.

Mr. George J. Crownhart,
Secretary, State Medical Society,
Madison, Wisconsin.
My dear Mr. Crownhart:

It has come to me that the local relief funds are depleted and that the hospitals are no longer being protected by this Relief Committee in a financial way, therefore, if it becomes necessary to hospitalize a charity case it becomes a burden on the doctor to effect monetary adjustments.

It is my understanding that once a doctor accepts a call and visits a patient he is legally bound to continue care of this patient until either discharged by the patient, or cure is effected, or until he is able to provide medical attention through some substitute if he wishes to discontinue care of said case. There is some variance of opinion as to the legality of discharging oneself from any case, once answering a call, and it is on this particular point that I would like an expression of opinion from your office, viz., "Is the doctor free to refuse further care of a patient once he has accepted a call?"

This is of considerable importance to all of us, in particular in those cases where hospitalization is necessary. For example: Seeing a patient with acute appendicitis where no hospitalization funds are available and the hospital refuses to accept such a case as outright charity, what recourse may the doctor have available to him outside of operating in the home?

Your early reply to this inquiry is anticipated.

Yours very truly,

--. --. ---------, M. D.

THE ANSWER

28 July 1933.

Mr. J. G. Crownhart, Secretary,
State Medical Society of Wisconsin,
Madison, Wisconsin.
Dear Mr. Crownhart:

You have forwarded me for my attention an inquiry from a member of your Society which involves two questions, one growing out of the other:

1. Is a physician free to refuse further care of a patient once he has accepted a call?

2. What recourse has a physician available to him outside of operating in the home where available hospital facilities are refused a patient because of the latter's indigence, even though the patient be suffering from acute appendicitis?

I

A physician, by virtue of his profession, is under no legal obligation to accept any case regardless of its nature or emergency character. But once a physician undertakes to treat a patient the relationship of physician and patient is established, and the physician is under the duty of continuing in attendance so long as the case requires his attention. This duty is terminated only (1) by the cessation of the necessity which gave rise to the employment, (2) by the mutual consent of the physician and patient, (3) by the discharge of the physician by the patient, or (4) by the withdrawal of the physician upon giving the patient reasonable notice so that a competent physician can be substituted without increasing the hazards of the patient's recovery. See: 48 C. J. pp. 1128, 1129; Herzog, *Medical Jurisprudence*, Sections 99, 188.

The whole question whether a physician may withdraw from a case, therefore, is one which is dependent upon the circumstances of each individual situation. It should be pointed out that a physician becomes immediately liable for any damage, including increased pain and suffering, caused his patient where he withdraws without providing for the continuance of adequate medical care, or where he neglects to treat a patient while he, the physician, is seeking to provide other medical attendance, because of his wish to withdraw. When the relation of physician and patient is once created, the physician must act with the greatest good faith, for the patient reposes in him the highest trust.

II

Before entering into a discussion of the second question involved, I should like to raise the question as to why a hospital should refuse the admittance of a patient for an emergency operation in view of the enactment of Chapter 165, Laws of 1933, which was introduced at the request of the State Medical Society and passed by the Legislature during the session just ended. The law provides that when, in the reasonable opinion of a physician called to attend an indigent person, immediate hospitalization is required for an indispensable emergency operation or treatment and prior authorization for such hospitalization can not be obtained without delay likely to be injurious to the patient, the town, county, village, or city, as the case may be, shall be liable for such hospitalization. The act provides only for payment of hospitalization charges and does not provide compensation for the physician. I believe that your members should call the attention of the hospital involved to the provision of the law which we have just set out, for in my opinion hospitals need not fear to take cases of emergency character where the patient is indigent.

Under the facts stated in the question under discussion, I am assuming a flat refusal to admit the patient in the face of an emergency which leaves no time for legal redress or argument. It is my opinion that the physician in such a case has no available recourse except to operate in the patient's home. From the very nature of the ailment, an emergency exists, and a physician, having once assumed the treatment of a patient, can not discard the case nor delay treatment pending the arrival of another physician who might be willing to undertake the case without hospitalization.

In summary, therefore, it is my opinion, first, that a physician once having assumed the case of a patient, may not relinquish the case (1) unless the patient is cured, (2) unless the physician and patient mutually agree to the discontinuance of the former's services, (3) unless the physician is discharged by the patient, or (4) unless reasonable notice of withdrawal is given the patient which will enable the latter to secure a competent substitute without endangering his condition or increasing his pain or suffering thereby. Secondly, it is my opinion that in a case involving acute appendicitis, where hospitalization has been flatly refused on the grounds of indigency, the physician, once having undertaken the case, must continue treatment even to the point of operating until such time as another physician takes over the case, even though this involve operating in the home. The mere fact that a hospital refused the use of its facilities for that particular patient would not warrant the physician's dropping the case at that point.

Trusting that this may serve to clarify the two questions raised, I am,

Very truly yours,
ROBERT B. MURPHY, *Counsel.*

RBM:P

DENTISTS OBJECT

THE DENTAL EDUCATIONAL COUNCIL OF AMERICA
Office of the Secretary
1108 Union Trust Building

Providence, R. I., June 30, 1933.

Mr. J. G. Crownhart, Editor,
Wisconsin Medical Journal,
Madison, Wis.

Dear Sir:

At a recent meeting of the Dental Educational Council of America the Council adopted the following minute relative to the final report of the Commission on Medical Education, and the secretary was instructed to send you a copy thereof, with the hope that you may publish it in the next issue of your journal.

> "The Dental Educational Council of America has given special attention to the comment on dentistry on pages 216–217 of the *Final Report of the Commission on Medical Education* (December 1932). Included in the Commission's comment is the expressed opinion that "dentistry should be developed *under* medical education." No reasons for this intended subordination of dentistry are given excepting the general opinions that (a) "It would seem logical;" (b) "would be consistent with university principles which no longer recognize the artificial separation of fields of knowledge;" and (c)

"would go far toward establishing a highly desirable and valuable correlation of the professional training of these two closely related fields of practice" (medicine and dentistry).

"These suggestions for the subjugation of the dental profession are neither impressive nor persuasive. To the Dental Educational Council, cognizant of the related facts in the history of both medicine and dentistry, the proposed development of dentistry "*under*" medical education, in the United States, (a) would seem to be illogical; (b) would be inconsistent with university principles which clearly recognize the public necessity for the self determination of, and for appropriate differences in education for, the various professions; and, (c) instead of correlating the professional training in medicine and dentistry, would degrade one profession for the exaltation of the other, and also demoralize the service of the practitioners thus dishonored.

"There should be intimate *coordination* between the *principles* and procedures of education for medical practice and for dental practice. Although remaining *independent*, these two forms of health-service education should be made more closely *interdependent* for the betterment of each. The *Council and the dental schools have long promoted this mutual helpfulness*. The strengthening of this constructive educational development, in the public interest, appeals to us as a far more important *interprofessional objective* than the relegation of one profession to a position *of enforced inferiority*. For the attainment of this worthier purpose, we pledge the cordial interest and effective cooperation of the faculties of the dental schools in the United States."

If this suggestion meets with your approval, will you please send me, for the files of the Council, a copy of the journal in which the article appears.

Thanking you for your interest in this relation,

Sincerely yours,

ALBERT L. MIDGLEY,
Secretary.

ALM:RF

Proceedings of the State Medical Society of Wisconsin; House of Delegates, Milwaukee, June 12-13, 1933

MONDAY AFTERNOON SESSION

June 12, 1933

The Ninety-Second Meeting of the House of Delegates of the State Medical Society of Wisconsin was called to order at two-thirty p. m. by the Speaker of the House, Dr. Ralph M. Carter of Green Bay, Wisconsin.

Speaker Carter: In opening this session of the House of Delegates, I wish to impress upon all of you that you are the representatives of your county societies, the floor is at all times open to discussion, and if you have opinions, it is not only your privilege but your duty to express them.

The first order of business is the announcement of the reference committees.

Reference Committee on Reports of Officers:
D. J. Twohig, Fond du Lac, Chairman
R. W. Hammond, Manitowoc
C. D. Boyd, Kaukauna

Reference Committee on Reports of Standing Committees:
James C. Sargent, Milwaukee, Chairman
T. J. OLeary, Superior
H. T. Barnes, Delafield

Reference Committee on Credentials:
D. E. W. Wenstrand, Milwaukee, Chairman
E. G. Ovitz, Laona
Wm. Trowbridge, Viroqua

Reference Committee on Resolutions:
R. G. Arveson, Frederic, Chairman
George F. Adams, Kenosha
E. W. Miller, Milwaukee
J. F. Mauermann, Monroe
H. F. Fredrick, Westfield

We will now hear the report of the Committee on Credentials, Dr. Wenstrand, Chairman.

Dr. Wenstrand: Your committee on Credentials is pleased to report at this time, a registration of forty-four members of the House. No questions have been raised relative to the seating of delegates or alternates. Slips for this purpose having been passed out, I move the attendance record so compiled constitute the roll of this session.

. . . The motion was seconded by Dr. Mauermann . . .

Speaker Carter: Gentlemen, you have heard the motion. Is there any discussion? All in favor of adopting the motion as stated say "Aye"; contrary, "No." It is carried.

The Speaker will now entertain a motion to approve the minutes of the 1932 meeting of this House as printed in the Journal of December, 1932.

Dr. Adams (Kenosha): I so move.

. . . The motion was seconded by Dr. Miller of Milwaukee and carried . . .

Speaker Carter: A year ago, Dr. H. P. Bowen of Watertown, a delegate of Jefferson County, presented an amendment to the Constitution which, if adopted, would provide for a change in the method of electing councilors. At the present time, when a councilor is to be elected, the House of Delegates recesses while delegates from the districts affected go into a caucus. When the House re-convenes, the delegates of that district present their nominee. More than one nomination may be received. If any delegate fails to concur in the caucus decision, when nominations have been presented, the House proceeds to elect a councilor. Under the terms of this amendment, the councilor would be elected at the

meeting of the members in his district. This proposed amendment to the Constitution has been published in the Journal in accordance with constitutional provision and is now before the House for action.

Secretary Crownhart: The proposed amendment to the Constitution: Amend Article IX (Officers), Section 2 to read:

"1. Repeal all of Section 2 as now constituted.

"2. Enact Section 2 to read: 'Section 2. The President, President-Elect, Speaker and Vice-Speaker shall be elected by the House of Delegates.'

"The Secretary and Treasurer shall be elected by the Council.

"Councilors shall be elected at a meeting of their respective district societies. Notice of election shall be incorporated in a mail notice to members at least seven days before such meeting. Election, where more than one nomination is received, shall be by ballot and a majority of votes cast shall be necessary to elect. Each candidate for Councilor must be a resident of the district which it is proposed that he represent, and no person known to have solicited votes for or sought the office of Councilor shall be eligible for the current election. Other procedure essential to the election shall be governed by Robert's Rules of Order.

"3. This amendment, offered in 1932, to be acted upon in 1933, shall upon adoption be effective on January 1, 1934, and thereafter."

Speaker Carter: You have heard the reading of the proposed amendment. The question is on the adoption. This represents an important change and discussion should be free.

Dr. Bowen (Watertown): I am the sponsor and father of this amendment. It originated in the democratic county of Jefferson, unanimous approval was given to the thought, not to the amendment as it reads. We took it up at our councilor district meeting in October, 1931. It was there unanimously adopted and I was asked to present it to the House of Delegates in 1932.

Before presenting it, I owe an apology to my district and probably to this House and that is what I am going to make now. Not being an attorney and versed in the technicalities of the wording, so that the thought that we had back in the democratic county of Jefferson should become the thought of the state, before presenting it, I referred the thought to our Secretary, Mr. Crownhart, and received a triplicate copy of it as it is now constructed. I presented it as it was, did not read it over thoroughly and so missed some things that I now find in it that are not in accord with the thought we had. I refer to the first part, repealing all of Section 2, etc. I ask the consent of the House, at this time, for the withdrawal of that amendment and that I be granted the privilege of presenting it with the proper wording tomorrow afternoon. If I do not present it, then it shall be presented by our alternate delegate. I ask that. Am I right or wrong in the statements I have made?

Secretary Crownhart: Dr. Bowen, I am not aware of any mistakes in it. We submitted the thought to our legal counsel and he prepared the proper amendment. So far as I know, it is a proper amendment in its present form but if there is any doubt, I would be the first to ask the consent of the House of Delegates that this business be allowed to go over until tomorrow afternoon.

Dr. Bowen: Do you recognize the request?

Speaker Carter: The Chair will entertain a motion to allow Dr. Bowen to withdraw his amendment, for further consideration of this until tomorrow afternoon. A motion to postpone consideration of this amendment until tomorrow afternoon is in order.

Dr. Peterson: I move you that this amendment be withdrawn until tomorrow afternoon and be presented again at the House of Delegates Session on Tuesday.

. . . The motion was seconded by Dr. Mauermann of Monroe . . .

Dr. Bowen: I presume the thought is that action be deferred instead of withdrawing the amendment. I prefer it to be put that way.

Speaker Carter: I think that is the sense of the motion. Is there any further discussion? All in favor of the motion say "Aye"; contrary, "No". It is carried.

The next order of business is the reports of officers and committees. These reports having been distributed by mail, I will call upon the officers and chairman to summarize the important points and make such additions as they desire. The first is the Chairman of the Council, Dr. Rogers.

Dr. A. W. Rogers: Mr. Chairman, I have been unable to think of anything to add to the report as published.

REPORT OF CHAIRMAN OF THE COUNCIL

To the 1933 House of Delegates:

While the 1933 House of Delegates voted unanimously to retain the dues of the State Society at $15.00 for the year 1933, the executive committee of your Council and subsequently the Council as a whole, made effective a 20% reduction. Material reductions were made in every item of the budget but because of the problems involved in the program authorized by the House, and the current session of the legislature, the reduction in dues was made despite the fact that the Council was fully conscious that it would undoubtedly be necessary to use a considerable portion of the surplus before the year was over. According to the reports of the secretary and treasurer we presently find ourselves in the position of having voluntarily reduced the dues 20% and sustaining a very considerable falling off in membership at the same time. It is hoped, however, that the apparent decreases in membership will not exist by the time the calendar year is over.

It becomes the function of this present session of this House of Delegates to establish the amount of

dues for the calendar year 1934. The Council can only assure the House that any further material reductions in the budget can only now be made through sacrificing some of the major activities of the Society. The Council pledges the House that it will exert its every effort to produce the best possible accomplishments on whatever income the House sees fit to make available for budgetary purposes in 1934.

A long special session of the Council was held in the late fall by reason of the threatened invasion of corporate practice through industrial insurance clinics in this state. As a result of this special session the proposed extension did not materialize. Throughout the months since the annual meeting, the Council has been apprised continuously of the activities and problems of the executive office. Hardly a week passes but what the Council is in receipt of communications frequently requiring mail action and sometimes requiring special sessions.

Within the memory of some members of the present Council, our body was one that met but twice a year for actions that were more or less routine. In recent years the Council has had more and more work thrust upon it until today the position of councilor requires a very real sacrifice in time, expense, and energy. It is indeed a position of responsibility and as chairman of the Council I may not close this report without assuring the House that your Council earnestly endeavors to make such direction of Society activities that they may bring dividends, and that the work of the Society may reflect the wishes and aims of the great group upon whose continued interest every success of the Society depends.

Respectfully submitted,
ARTHUR W. ROGERS, M. D.,
Chairman.

Secretary Crownhart: With the permission of the Speaker, I would like to present to the House another lay secretary, one who comes some distance for this meeting of the American Medical Association and one who helped us to secure this meeting for Milwaukee, Harvey T. Sethman, Secretary of the Colorado State Medical Society.

Mr. Harvey T. Sethman: Mr. Speaker, Delegates and Members of the Wisconsin Society: I consider it an honor, indeed, to be allowed the privilege of listening to the discussion of your House of Delegates and more of an honor to be invited to sit at this table and say a few words to you.

I am sure, that my good friend, George Crownhart, has exaggerated any part I had in steering the American Medical Association to Milwaukee because it is quite beyond my powers, although certainly I have always been a booster for Wisconsin, since first I became Secretary of the Colorado State Medical Society. We in Colorado have looked up to Wisconsin considerably, long before I had any connection with the medical profession, for as soon as I was inducted into office as executive secretary of that society, I was sent first to Madison to find out how the Wisconsin Society and George Crownhart did it.

The office was created in Colorado in 1929. In May of that year, I started a tour beginning with Madison, Wisconsin, taking in some of the other full-time secretarial offices. I think your Society is to be congratulated upon the progress it has made, upon the progress particularly in one line which I have just been studying in one of the reports which is coming before you in connection with your state hospital. I hope to learn something about that for our own Colorado problems this afternoon.

It is a pleasure to bring to you the warmest fraternal greetings from the Colorado State Medical Society, and our best wishes for what I am sure you will have, a most successful meeting of the American Medical Association, and our hope, of which we are also convinced, that the American Medical Association will go away with Milwaukee's and Wisconsin's reputations further enhanced. (Applause)

Speaker Carter: The report of the Secretary.

REPORT OF THE SECRETARY—MANAGING EDITOR

To the 1933 House of Delegates:

Membership

At the conclusion of the calendar year of 1932, the Society had 1975 members. As of the 31st of May of the current year, the paid-up membership numbered 1574 as compared with 1599 on the identical date in 1932. On May 31st, 526 members were in arrears and while some net loss is anticipated for the year, it does not presently appear that the loss will be in the percentage that has obtained in some states. (Membership as of June 7th was 1,630).

Finances

At the time your Society first increased its dues to permit of a broadened field of activity (1923), it seemed proper that an effort should be made to establish a surplus account which would approximate the budget of the Society for one year. By careful investment study, the Treasurer has been able to maintain the integrity of this fund at a time when heavy losses were the rule.

Owing to this surplus the Council was able to reduce the dues for the current year from $15 to $12. This, the Council felt, was wholly desirable even though the House of Delegates had approved continuation of the $15 dues without a dissenting vote.

Due to the extraordinary demands made upon the Society during this acute period, the budget reduction, even though one of 12%, could not represent the same cut as was made in the dues (20%) without risking a great disservice to the membership. The reduced dues were approved for the year anticipating that the surplus account could carry the difference between the income and expenditures made mandatory by this period of stress. Every effort has been made to make additional budgetary

cuts where possible and others will become effective during the last six months of this year.

The dues for the year 1934 are to be determined by your House at this meeting.

Journal

The WISCONSIN MEDICAL JOURNAL has long adopted substantially the same requirements for its advertising pages as those of the American Medical Association. Your JOURNAL, in common with all Journals has experienced a very material decrease in advertising revenues which necessitated an appropriation for the current year from the general funds of the Society to the extent of $2,400. This means that the JOURNAL during the current year will take approximately $1.20 of each member's dues. While every effort will be made to replace the JOURNAL upon a self-supporting basis as soon as possible, attention is directed to the fact that among the State Journals whose finances are known to us, this is the lowest per member cost.

It will be recalled that the JOURNAL operates upon a proper accounting system and to it is charged its proportionate share of salaries, rent and supplies. The JOURNAL accounts are maintained carefully at the central office and the annual audit will be appended to this report for publication purpose. The Secretary's office handles all proof reading, composition, advertising, editing and the compilation of non-scientific material as well as all address lists of the JOURNAL.

For further detail on the publication of the Journal, members are referred to the report of the Editorial Board.

Lay Education

The subject of lay education through the channels of the radio, the news service, and Hygeia, is discussed in detail in the report of the Committee on Health and Public Instruction. These activities are all handled out of the central office of the Society and it is pleasing to the Secretary to note that twenty-six of the recent radio health talks prepared in the central office have been requested by the Association of College and University Broadcasting Stations for use in some twenty-seven such stations throughout the United States. Credit for their reproduction is to be given to the State Medical Society of Wisconsin.

The time given to our radio talks over the two state stations in the hook-up three times a week would cost in excess of $6,000 a year were it to be purchased on any commercial basis.

State Auxiliary

Six Auxiliaries to County Medical Societies have been organized since the last annual meeting, bringing the total number of Auxiliaries to thirteen. In order of organization, they are: Marinette-Florence, Rock, Green Lake–Waushara–Adams, Columbia, Sheboygan, Milwaukee, Winnebago, Polk, Kenosha, Racine, Portage, Manitowoc, Waukesha, and Dane. Miss Ruth Buellesbach of the Secretary's office acts as executive secretary of the Auxiliary.

The membership of the Woman's Auxiliary to the State Medical Society at the close of the fiscal year 1932 was 367 members. A membership upwards of 550 is anticipated for the fiscal year of 1933.

With the thought of promoting authoritative health information among high school students, the State Auxiliary sponsored a Health Essay Contest for sophomores in high schools in the counties in which county auxiliaries were organized. The essays were based on those articles appearing in February and March issues of Hygeia which pertained to health, and the relationship of the medical profession to the individual, the family, and the community. The Advisory Council of each county auxiliary submitted the three best essays to the final judges of the State Auxiliary.

That the seventy-two county superintendents of schools of Wisconsin may become acquainted with the publication endeavoring to promote public health and which is found upon the approved list certified by the State Superintendent of Schools, the Auxiliary entered six-month subscription to "Hygeia" for each of the county superintendents. A personal letter was sent each such superintendent of schools.

A member of our Axuiliary is Chairman of the National Convention of the Woman's Auxiliary to the American Medical Association, and the Wisconsin Auxiliary will be host to the National Convention. All women attending the annual session of the A.M.A. have been invited to participate in the program whether they are members of the Woman's Auxiliary or not.

Medical Relief for the Unemployed

In some counties of the state, the state has had to take over the entire problem of the care of the indigent. In many counties the state is contributing from fifty to ninety per cent of the funds so needed.

In recent weeks an increased number of objections have been received from members to the exceedingly small amounts of compensation allowed for medical relief. In some sections but $2.00 a day is allowed for hospitalization and 35¢ to 50¢ a day for drugs. In other sections, despite the bad roads, physicians are asked to accept but 12½¢ a mile each way as travel compensation.

Because the funds that are involved come through state agencies this general statement is made that each delegate may have an insight into the conditions that have brought about the present situation:

The cost of poor relief in Wisconsin amounted to but $1,200,000 in 1928. In 1933, the total cost may be in excess of $26,000,000. State funds are exhausted and the money that the state is now handling comes from the Reconstruction Finance Corporation of the United States. The. R.F.C. has made a ruling that none of its funds are to be used for hospital or medical care. The Industrial Commission of Wisconsin, appreciating the inhumaneness of this ruling, are permitting the use of limited funds for medical relief of the unemployed. So far as we know, Wisconsin is the only state

where any R.F.C. money is being devoted for this purpose, it being the contention of the R.F.C. that if any funds are necesary these funds should be raised in the localities.

Under the circumstances, it is impossible for your State Society to secure any statewide agreements and in the final analysis such agreements will have to be made in county actions in cooperation with county administrators of the funds. Despite the inadequate amounts available, the total that will be expended to relieve the sick will probably be in excess of $750,000. This favorable ruling of the Industrial Commission means compensation to this extent and while some fee schedules submitted to this office seem entirely inadequate, the fact remains that through the R.F.C. ruling, those who are rendering medical and hospital service in other states are receiving no money at all from this source.

While it is true that the profession rendered service to the indigent that in any monetary value undoubtedly exceeded $10,000,000 last year, so long as the R.F.C ruling stands as a national edict, our own members will appreciate their relatively favorable position in Wisconsin. Physicians and hospitals are not the only ones suffering under the present arrangement for with the increased demands it has become difficult to continue the use of any funds for rent and in the future property owners where indigents are housed may be allowed but a part of the taxes and insurance on their property.

Wisconsin administrators of the federal funds appreciate that physicians are not receiving an adequate amount for their services but the funds are so limited that it is impossible to grant more than that which is presently being taken. The State Society is unable to take any further aggressive steps for the reason that objections made will result in a complete discontinuance of the funds in accordance with the R. F. C. ruling. It was therefore suggested that where a distinctly unfavorable condition existed, the county society meet with local officers and present their problems, with the appreciation that more than 80,000 families are being cared for in the state at the present time under an emergency set-up and under great difficulties.

Some basic facts which underlie the present situation are these:

1. Wisconsin's employment in the manufacturing industries in April, 1933, was but 58% of that in October, 1929.
2. The payroll of the manufacturing industries in Wisconsin in April, 1933, was but 33% of the payroll in October, 1929.
3. The farm situation is so well known to all members as to need no further statement.
4. Despite this great decrease in purchasing power, the number of physicians in Wisconsin has increased by approximately 300 since 1929. The normal increase in population would call for but one-third of this number.

Had your Society made no accomplishment during the present year other than that that recited in securing a more humane distribution of R.F.C. funds in this state, the return to the members would have fully justified the activities of the organization for the return exceeds the entire budget of the Society not less than twenty times.

Social Medicine

With the release of the final report of the Committee on the Costs of Medical Care, a major problem was thrust upon the Society to meet effectively and immediately the majority report of the Committee. Happily our own Wisconsin studies completed in 1932 furnished a most comprehensive basis upon which the report might be judged in our own state. Special bulletins giving essential data were sent not only to officers of County Societies but to health officers throughout the state and other prominent and interested individuals as well as the press. This work resulted in a more deliberate attitude on the part of the public and nowhere in the state was there any evidence of an ill-timed and hasty conference for immediate action such as was suggested by personal letters which literally poured into Wisconsin from the headquarters of the National Committee.

The Committee report has been under constant consideration together with many other reports and studies. It is the intent of the Council to continue its study that the profession itself may be the first to suggest any material changes which seemingly will benefit the public service of medicine.

Legislation

The Wisconsin Legislature has been in session continuously since the second week in January and its sessions promise to continue through the early summer. More measures affecting physicians and the public health have been introduced in this session than in any three previous sessions combined. A detailed report of the activities of the Society is to be found under the report of the Committee on Public Policy. The work is mentioned here only to remind the membership that the Committee's efforts are carried out through the personnel of the central office. This work has occupied almost the full time of the office personnel throughout the past six months and in addition to heavy individual correspondence has involved the mailing of 20,500 bulletins to the general membership.

Your Committee on Public Policy, and particularly your Secretary, wishes, at this time, to make public acknowledgement to the members here assembled of the fine cooperation and high service rendered by your fellow member, Dr. J. H. Hardgrove of Eden, the only physician member among the 133 members of the present legislative session. Dr. Hardgrove not only introduced those measures that were proposed at the request of your State Society, but he was a member of the Committee on Public Welfare and is a member of that Committee of the Assembly before which all measures come, or nearly all, that affect physicians directly. He has been in constant attendance at the legis-

lative sessions at Madison week in and week out, and I want to tell you that no one has worked more seriously for the promotion of those measures which would protect and advance the public health of Wisconsin than has Dr. Hardgrove. I know I speak for your Committee on Public Policy and the officers of the Society when I say that to him and his untiring work are we indebted for much of the success of our present legislative program.

Automobile Insurance—Lien Law

Since the last annual meeting, officers of the Society and legal counsel have made an exhaustive research of the subject matter of lien laws to secure more adequate payment of medical bills following automobile accident injuries in which insurance companies are involved. Long bulletins dealing with the detailed findings have been submitted to officers of the County Medical Societies and an additional report was solicited for publication in the Bulletin of the American Medical Association.

As result of our study, it was our conclusion that lien laws offered no practical solution but that centralized efforts to secure a better degree of understanding and cooperation from the insurance companies would offer means of improving the present situation. Accordingly, legal counsel presented the position of the Society in great detail to the Commissioner of Insurance and secured his consent to a letter from the Commissioner to all insurance companies licensed to do business in Wisconsin setting forth the present situation in great detail and asking, in the name of the Department, their cooperation. Letters were received in response from over one hundred companies doing business in Wisconsin and with but few exceptions, all promised cooperation and many instituted permanent changes in policy which have brought a large and proper compensation to both Wisconsin physicians and hospitals.

Scientific Work

The work of the standing committee of the Society on Scientific Work is reported separately. Special attention is called, however, to the growth of the Medical Library Service at the University of Wisconsin. It will be recalled that this service was instituted by Dean Bardeen at the suggestion of the Society which cooperates to the extent of furnishing to the library all books received for review and all exchange journals. A substantial additional appropriation is required to carry on the work of this service. This appropriation is made available through the efforts of the Dean and to the minds of those who have studied the service, it furnishes a means of postgraduate education throughout the state that presently is of foremost importance. The Secretary expresses his sincere appreciation to Dr. Bardeen for his constant cooperation in the development of this pioneer effort.

Silicosis Clinic

This subject is mentioned separately for the reason that the establishment of a proposed system of silicosis clinics was the subject of a special meeting of the Council. Both time and effort was expended to secure the study which resulted in abandonment of the original form of the proposal. Had this form been adopted it would have necessitated immediate legal action to end the invasion of corporate medicine in this state. It was reported fully in the Wisconsin Medical Journal and is mentioned in this report only as a reminder of one of the important problems which faced this Society during the past nine months.

Travel

During the six of the last nine months, the legislature has demanded of the almost constant presence of your Secretary in Madison. Since the last meeting, however, your Secretary has attended the annual conference for secretaries at the American Medical Association and has visited the Eau Claire, Milwaukee, Waukesha, Rock, Douglas, Ashland-Bayfield-Iron, Grant, and Sauk County Medical Societies. Special conferences and committee meetings have been attended at Milwaukee, Madison, Eau Claire, Ashland, Chicago, Marshfield, Wausau, Oshkosh, and Janesville.

A.M.A. Meeting

For the first time since 1893, Wisconsin is host this year to the annual sessions of the American Medical Association. The work of preparing for these sessions has naturally fallen to the officers and members of the Medical Society of Milwaukee County. Your central office has cooperated so far as was possible but in behalf of the members of the state-at-large, your Secretary makes this present acknowledgment of the arduous work that has been accomplished in the greatest detail by the Milwaukee Society that these sessions of the American Medical Association might measure up in every respect to our cordial invitation extended in New Orleans a year ago.

Conclusion

With the limited personnel and mounting correspondence to be answered, particularly during the legislative session, there has been some delay in the office work of the Society. We regret any delays exceedingly but the frequent legislative emergencies have demanded our every attention.

Increasingly it is true that the work of the Society, while carried on through a central office, is the work of all officers and of its membership. In no instance have we found members who have not willingly and readily accepted our every request for aid. To the officers and members, the Secretary expresses a deep and sincere appreciation for their ready aid and sound counsel that alone has made possible the accomplishments of a Society that is now in its ninety-second year of service.

Respectfully submitted,

J. G. CROWNHART,

Secretary.

Speaker Carter: The next order of business is the report of the Treasurer, Rock Sleyster. I will ask Mr. Crownhart to read it.

Secretary Crownhart: Dr. Sleyster is a trustee of the American Medical Association and is attending a meeting of the Board of Trustees this afternoon.

. . . Secretary Crownhart read the Treasurer's report as follows:

TREASURER'S REPORT
STATE MEDICAL SOCIETY OF WISCONSIN
AS OF JUNE 1, 1933

	General Fund	Med. Def. Fund
Balance of January 1, 1933	$ 1,553.67	$ 1,011.28
Receipts, Dues	19,072.75	1,408.00
Interest on Investments	615.00	217.50
Exhibit Space — E. H. Karrer Co.	80.00	--
Refund Democrat Prtg. Co.	55.46	--
Refund Liability Insurance	1.12	--
	$21,378.00	$ 2,636.78
Disbursements to June 1st	13,111.23	--
Bank Balance in Funds, June 1st	$ 8,266.77	$ 2,636.78

Recapitulation of Funds:

General Fund:		
Bank Balance, June 1, 1933	$ 8,266.77	
	25,000.00	$33,266.77
Medical Defense Fund:		
Bank Balance, June 1, 1933	$ 2,636.78	
	9,000.00	11,636.78
		$44,903.55

INVESTMENT SECURITIES

These are not itemized on this report as there has been no change in the securities since the annual report of the Treasurer was made in January. None of the securities purchased for the Society's account are in default and the interest payments on all securities have been paid promptly. At the lowest point in the stock market the securities had depreciated on an average of about 10%, and at the present time, this depreciation amounts to considerably less than this amount. . . .

Secretary Crownhart: A copy of this report will be placed on file and published in the Journal. It will probably be necessary, as the Chairman of the Council indicated, because of the reduction in dues and the tremendous work on the Society during this important period, to take some part of our surplus before the year is over. We are doing everything to see that is avoided but it may be necessary to use at the maximum, $5,000 of the $25,000 in the general fund.

Chairman Carter: What do you wish to do with this report?

Dr. Mauermann: I move it be received and placed on file.

. . . The motion was seconded by Dr. Peterson and carried . . .

Speaker Carter: The next is the report of the Committee on Necrology.

Secretary Crownhart: The report of the Committee on Necrology as of a given date was sent to all members. There have been some deaths since that time and these will be reported along with those previously submitted in the report.

COMMITTEE ON NECROLOGY

To the 1933 House of Delegates:

The Council, as the Committee on Necrology, has the sad duty of reporting the deaths of the following physicians since the last annual meeting (members of the Society are those in bold face type)

Andrews, Neil — Oshkosh
Antoine, F. J. — Prairie du Chien
Armstrong, Claude E. — Oconto
Arnold, Frank W. — Milwaukee
Baumstark, Andrew A. — Milwaukee
Becker, Wilhelm — Milwaukee
Buehler, J. W. — Prairie du Sac
Cavanagh, D. C. — Montello
Cunningham, J. N. — Stanley
Donohue, E. J. — Antigo
Egan, Charles — Highland
Frank, John H. — Milwaukee
Gessner, Frederick C. — Oconomowoc
Gorst, Charles — Madison
Hittner, James — Seymour
Huennekins, J. H. — Milwaukee
Johnson, A. T. — Sauk City
Johnson, Hugh B. — Tomah
Jurss, George J. — Milwaukee
Kiefer, J. G. — Milwaukee
Langland, Peter — Milwaukee
Leland, Abraham M. — Whitewater
Luhman, F. S. — Manitowoc
Millar, Malcolm G. — Madison
Monsted, J. W. — New London
Nolte, Henry — Milwaukee
Normington, Clara L. — Janesville
Omsted, Nils — Stoughton
Owens, William H. — Milwaukee
Pannkoke, Adolf — Milwaukee
Pinkerton, W. T. — Prairie du Chien
Rasmussen, Hans — Stoughton
Rice, R. H. — Milwaukee
Riley, F. T. — Milwaukee
Rodecker, R. C. — Mercer
Ruckle, William M. — Wisconsin Rapids
Wegge, William Jr. — Milwaukee
Willson, William H. — Fond du Lac
Winn, Lorenzo A. — Poynette
Wolfgram, Otto J. — Milwaukee

Respectfully submitted,

THE COUNCIL,
J. G. Crownhart, *Secretary.*

Speaker Carter: This last report, of the Committee on Necrology is ready for your adoption.

Dr. Oscar Lotz: I move the adoption of this report.

. . . The motion was seconded by Dr. Krueger . . .

Speaker Carter: This will be adopted by a rising vote and the delegates will remain standing for a moment in honor of the deceased.

. . . The members rose to pay tribute to the deceased members . . .

Speaker Carter: At this time, I am going to introduce our President-Elect, Dr. Stanley J. Seeger. It is somewhat out of the order of business, but he is Chairman of the General Arrangements for the American Medical Association, and he must leave shortly. I now have the pleasure of calling on Dr. Seeger.

President-Elect Seeger: My friends, the Constitution of our State Society devolves upon the President, the duty of delivering an address.

. . . President-Elect Seeger read his address. (See August Journal) . . .

Speaker Carter: On behalf of the House, Dr. Seeger, I wish to thank you for this very interesting, very stimulating and thought-productive address.

We will now continue with the report of the Committee on Public Policy, Dr. Otho Fiedler of Sheboygan, Chairman.

REPORT OF THE COMMITTEE ON PUBLIC POLICY

(Revised to publication date)

To the 1933 House of Delegates:

Prior to the opening of the present legislative session, your Committee held three separate meetings in Madison for the long consideration of proposed legislation affecting the public health and the future of the delivery of adequate medical service in this state. It was the consensus of opinion of the Committee that we should center our attention upon such measures where need could be shown beyond measure of doubt, and as at all previous meetings, your Committee viewed each proposal to make certain that it contained in itself a public benefit that could be made perfectly clear to lay legislators.

Delegates who were present in the 1932 House of Delegates will recall that some thirteen separate proposals were submitted to this Committee by the House after having been proposed to the House by a Milwaukee member. Each of these measures was reviewed in the greatest of detail, but none seemed presently acceptable, having in mind that we must center our attention upon the State Hospital legislation, which your House had requested, as being of first importance. Unfortunately this member saw fit to have each of these thirteen measures introduced in the upper house of our legislature despite the fact that they had also failed to secure the approval of the legislative committee of the Medical Society of Milwaukee County. The long and protracted hearings upon these measures and attendant publicity to the effect that they represented efforts of the medical profession to protect its financial strength, did an incalculable harm to our entire legislative program.

Your committee holds that it is the right of every member to take such steps as seem proper and fitting, but it deprecates most sincerely any such procedures as are undertaken over the specific request of the Society, feeling that individual action in such instances is neither representative of the wishes of the membership nor conducive to the advance of organized medicine and the ends for which it must constantly work so hard. This is mentioned in this report not as a rebuke, but to point out the effect of individual action under such conditions and to express the hope that your Committee may not be so handicapped in future sessions.

State Hospital Legislation

The results of this legislative effort are thoroughly set forth in the report of the Special Committee on the Wisconsin General Hospital. Your attention is directed to that report.

Social Health Insurance

Socialist members of the Senate and Assembly introduced identical measures for a system of state medicine which combine certain features of the German and British systems. Briefly, it may be said that the British "approved societies" were hitched onto the German Krankenkassen system, and that this bill included those features of both systems which have been most bitterly fought abroad.

Applicable to all persons whose income was under $50 a month, these bills would permit "approved societies" to provide medical service by a salaried physician. The bill had the two vital defects of combining medical and cash benefits and of creating "funds", which abroad have been dominated by political force to which principles of good medical service and reasonable freedom of choice have had to yield. Each of these measures was thirty-nine printed pages in length and while the Assembly bill was killed by a viva voce vote, the Senate bill was killed by the close vote of 14 to 10.

Optometrists Using the Title "Doctor"

Apparently at the request of the Wisconsin Optometric Association, a Senate bill was introduced which, in its original form, would have permitted optometrists to use the title "Doctor" so long as the word "optometrist" appeared somewhere in the same advertising matter. This measure was reported favorably by the Senate Committee on Education and Public Welfare, with an amendment to provide that the word "Optometrist" should follow the name. Opposition to the bill and amendment was registered by both your Society and the State Health Officer. Three separate hearings were finally given to this measure which was subsequently killed on the Senate floor by a vote of 18 to 9.

Private Patients at State Hospital

A bill which would have the effect of limiting patients at the State Hospital to those who are indigent was introduced in the Senate rather early in the session. The bill had a partial hearing before the Senate Committee on Education and Public Welfare, but was withdrawn by its author.

Anti-Vivisection Measures

Two bills were introduced in Senate and Assembly at the request of the Wisconsin Anti-Vivisection Society. The fight on the measures was led by the State Society and representatives of the Medical schools of both the Universities of Marquette and Wisconsin. The Senate bill was killed by a viva voce vote after the Committee on Education and Public Welfare refused to make either a favorable or unfavorable report on the bill. A more extended committee fight was held on the Assembly bill when a Milwaukee Senator proposed a substitute which substantially would have required the licensing of each experiment by the State Board of Health. The Assembly Committee, however, refused to accept the substitute and the bill was killed in the Assembly, again by a viva voce vote.

Unemployment Insurance—Hospitals

A bill to take hospitals out from under the law requiring funds for unemployment insurance was killed in the Senate, but a law was subsequently passed postponing the effective date of unemployment insurance until such time as general economic recovery had been made in the estimation of the Wisconsin Industrial Commission.

8-Hour Day Bill

Legislation to limit hours of labor were introduced in both houses of the legislature. It will be of interest to our members to know, however, that the bill which had the support of the Wisconsin Federation of Labor made an exception for nurses in hospitals. This exception seemed of utmost importance to the hospitals and medical profession if hospitals in many communities were to continue to operate.

Appropriation for Investigator

Four years ago this Society secured an appropriation of $5,000 annually to the State Board of Medical Examiners for the purpose of employing an investigator to weed out the major forms of quackery in Wisconsin. Two years ago his duties and the supervision of his work were changed to the State Board of Health. This year the Governor recommended that the appropriation be cut to $2,500 annually. This bill passed in the closing hours of the session.

County Health Committee

Your Society again introduced a measure to add a physician selected from a list of three submitted by the County Medical Society to the County Health Committee. These committees are active in those counties having county public health nurses and supervise the work of such nurses. The measure was favorably reported to the Assembly by the Committee on Public Welfare but was killed under the misapprehension that the physician member of the County Health Committee would be paid by the county, and that this would add an additional financial burden. The measure was killed before the erroneous impression could be corrected.

Citizenship for Licentiates in Wisconsin

Acting under the direction of your House, your Committee introduced a measure, supported by the State Board of Medical Examiners, which would have limited the licensing of physicians in Wisconsin to citizens of the United States. At present the requirement is first citizenship papers. The present requirement appears to be legal, but when the full citizenship bill reached the Senate, the question of constitutionality was raised and seemed to be in point. This view was supported by the American Medical Association and as result the bill was permitted to die rather than repeal a constitutional provision and substitute therefor one of extremely questionable constitutionality which, if held unconstitutional in the courts, would leave Wisconsin without any restrictions whatsoever.

Emergency Care of the Indigent

At the suggestion of your Society, approved by your House, a Committee caused the introduction of a bill to permit compensation to hospitals for the care of the indigent when prior authorization cannot be obtained without a delay that might imperil the life of a patient. This measure passed both Assembly and Senate and is now the law of the state.

Reporting of Cancer

Sponsored by action of your House a year ago, the State Board of Health secured passage of a measure to permit the reporting of cancer direct to the Board and as confidential records. Reporting regulations are now being worked out by the Cancer Committee of your Society.

Local Health Officers to be Physicians

A measure was introduced in the Assembly at the request of the State Board of Health to provide that all health officers of the state should be licensed physicians. After two hearings the bill failed of passage because the Assembly questioned whether it could be applied to rural sections. Under the existing law the lay health officer must frequently employ the services of a physician as a deputy in order to diagnose certain types of diseases. This bill would provide that the physician might be health officer for numerous communities and appoint a lay deputy in outlying districts when necessary to perform the non-technical work of the office. It is the present intent of the Board of Health to cause the re-introduction of this measure at the next legislative session.

Reference of Indigents to State Hospital

A bill originally designed to require that only physicians could be source of referring indigent patients to the Wisconsin General Hospital (the Minnesota system) was introduced in the Assembly. The Wisconsin Association for Crippled Children insisted upon an amendment not only to exempt the Orthopedic Hospital, but to so enlarge upon the present law that crippled children might receive free state treatment even though the parents were not indigents. When this amendment was attached to the bill by a vote of 66 to 24 the Assembly author of the bill secured permission to withdraw the entire measure from the present session.

Fees for Physicians

The present law provides that the fee for physicians examining patients on court order to be sent to the Wisconsin General Hospital shall be $5.00. A bill has been introduced in the Assembly at the request of the Washburn County Board to change this law to provide "a reasonable fee, from $1.00 to $5.00." The effect of this measure would be to send all such bills of physician to the auditing committees of the County Boards for determination as to whether the bills would be allowed and in what amount. This bill passed in the legislature after a modification to set the fee at $3.00. The bill was pocket-vetoed by the Governor.

The Chiropractic Bill

The Chiropractic bill of the session has been discussed in such detail in legislative bulletins as to require no additional explanation here. Suffice it to say that it would have given chiropractors essentially all the rights and privileges of those who have secured their license as physicians and surgeons. Strong efforts have been made to pass this measure and two amendments have been suggested to the bill. Two hearings were held before the Assembly Committee on Public Welfare, but both times the Chiropractors' proposals were rejected by the Committee by a vote of 6 to 1. The bill was defeated in the Assembly 63 to 22 and reconsideration was refused by a vote of 27 to 43.

Prenatal Injuries

An Assembly bill was killed which would make the unborn child a legal entity after the sixth month, and permit separate actions in law in the name of the child for injuries sustained during the last three months of the prenatal period, providing that the child is not still-born. Inasmuch as minors may bring suit within two years after becoming of age, such right of action would exist for twenty-three years. The bill was opposed by the State Society on the grounds that the physician might well be held to have cared for the mother at the expense of the child. The physician would be held responsible for his every act during childbirth, when care of the mother demanded such actions as high forceps delivery, etc. Unavoidable birth injuries, birthmarks, medication of the mother,—these and many other sequelae of childbirth presumably would be causes for malpractice suits in the name of a child. Lay juries would thus decide at what date prenatal injuries had occurred and whether the physician was responsible for them. If found responsible for the injury, even though it was not the cause of permanent impairment and was done to save the life of the mother, the physician would still be guilty of malpractice under this proposed measure.

State Liquor Control Board

An Assembly bill calling for a State Liquor Control Board would give authority to the new board to set up a permit system for physicians, charging such fees as the board saw fit, and establishing such regulations as the board desired for the use of medicinal liquors. This bill was opposed by the State Society and was tabled and then killed.

Summary

Over ninety measures, each of which vitally affected some phase of the public health or the adequate delivery of medical service, were introduced in the present legislative session. While the affirmative program of the Society has been passed only in part, it is of more than passing interest to note that no measure passed which was opposed by the Society.

Your Committee wishes to re-emphasize the fact that it had never solicited the vote of any member of the Legislature, seeking only to provide at all times such accurate information which would enable a legislator to pass considered judgment upon the measures pending before him which affected the public health.

Your Committee has repeatedly asked for and secured the cooperation of physicians in every part of Wisconsin in carrying on this educational effort. To such cooperation does the Committee acknowledge its every success.

Respectfully submitted,
THE COMMITTEE ON PUBLIC POLICY,
Otho A. Fiedler, M.D.,
Chairman.
Reginald H. Jackson, M.D.,
S. E. Gavin, M.D.
By J. G. Crownhart,
Secretary,
For the Committee.

Speaker Carter: Dr. Stovall, Chairman of the Committee on Health and Public Instruction.

Dr. W. D. Stovall: I have nothing to add to what has been published in the report.

COMMITTEE ON HEALTH AND PUBLIC INSTRUCTION

To the 1933 House of Delegates:

Under direction of the Council to maintain activities without expansion, the previously authorized work of the committee has been carried on throughout the year in three principle fields. These fields

are (a) continuation of the press service, (b) continuation of the radio broadcasting, and (c) representation of Hygeia.

Press Service

Under direction of this committee, a story a week has been released to upwards of 250 daily and weekly newspapers in Wisconsin throughout the year. Each story is an effort to give the readers interesting and valuable information in the field of health preservation. Up to the present time these stories have been prepared outside the offices of the Society but on and after August first their preparation will be under the immediate direction of the secretary in the effort to reduce budget expenditures. Clippings from these stories indicate that they are used throughout the state and occasional editorial comments emphasize the fact that they are welcomed by the public.

Radio

Three health talks are broadcast each week over the State Station WHA, Madison (University of Wisconsin), with a hook-up of WLBL at Stevens Point. The talks are of ten minutes duration and are presented on Tuesday, Wednesday and Thursday mornings at 10:45. Previous to January first, two talks were presented each week but since January this has been increased to three addresses a week,—a total of 110 health talks in the ten month period, September 1st to July 1st.

La Crosse, Manitowoc and Sheboygan County Medical Societies are receiving copies of the prepared manuscripts for use over their local radio stations.

Titles of typical broadcasts are:

Good Health Is Not Good Luck.
We Can Help Control Contagion.
Keeping After Smallpox.
When Winter Comes.
Your Years and Your Age.
Dangerous Sneezers!
The Family Physician.
"Patent Medicines."
The Sore Throat Danger Signal.
Heart Disease in Children.
The Eyes After Fifty.
Cancer, Its Cure and Prevention.
The Unseen World.
Vacation Health.

WHA is the world's first educational radio station and over 75 per cent of the people of the state (2,226,143) live within the primary coverage area.

Hygeia

"The 2200 physician members of this Society are working as individuals and as a group towards that age old desire of medicine,—disease prevention and prolongation of life. Each year strengthens our belief that to accomplish the ideals of medicine we must seek the aid of those who lead our citizenry." This was a paragraph of the personal letter that went forward together with Hygeia to one hundred eighty-two representative people in Wisconsin in all walks of life who are interested in promoting the well-being of the people of the state. These subscriptions were entered by the State Society at Christmas time,—there being 88 new subscriptions and 94 renewals. The recipients included members of the legislature, Justices of the Supreme Court, state officers including the State Superintendent of Schools, Chairman of the Industrial Commission, Director of the Board of Control, and others having to do with questions involving health and the medical profession, libraries of the eight normal schools, the circuit judges and interested newspaper editors and a selected group of laymen who have evidenced their interest in public health advancement and disease prevention.

That the seventy-two county superintendents of schools in Wisconsin may become acquainted with a publication endeavoring to promote the public health and which is found upon the approved list certified by the state superintendent of schools, the State Society entered six month subscriptions to Hygeia for each of the County Superintendents. A personal letter was sent to each County Superintendent by the Woman's Auxiliary To The State Medical Society.

Respectfully submitted for the Committee.

J. G. CROWNHART,
Secretary.

Speaker Carter: Dr. F. D. Murphy, Chairman of the Committee on Medical Education and Hospitals.

Dr. F. D. Murphy: The report has been published and I have no additional remarks to make.

COMMITTEE ON HOSPITALS AND MEDICAL EDUCATION

To the 1933 House of Delegates:

In the last report of this committee to the 1932 House of Delegates there was a summary of the average indebtedness of the hospitals of various sizes in the State. Up to the present time conditions have changed very little. The bills of the hospitals are mounting, charity is increasing and the incomes are low. There has been, however, a slight upturn during the last 45 days; that is the occupancy of hospital beds has increased somewhat. Incomes have not increased very much.

During the year the following hospitals were opened: Langlade County Memorial Hospital, Antigo (opened April, 1933); Reedsburg Municipal, Reedsburg (opened January, 1933); Sheboygan Memorial, Sheboygan (opened January, 1933); and St. Joseph's Hospital, Rice Lake, was rebuilt March, 1933.

The following hospitals were closed: Dr. Bloor's Hospital, Antigo; City Hospital, Antigo; Niagara Hospital, Niagara; Buck Hospital, Platteville.

On Wednesday, January 4, 1933, Marquette University dedicated the new Medical School building

located on 15th and Wisconsin Avenue, Milwaukee. This school is now equipped to take care of 400 medical students. Ample facilities for medical education in the state are now furnished by the two universities of the state.

Respectfully submitted,
FRANCIS D. MURPHY, M.D.,
Chairman.

Speaker Carter: Dr. Patek, Chairman of the Committee on Medical Defense.

REPORT OF THE COMMITTEE ON MEDICAL DEFENSE

To the 1933 House of Delegates:

The Committee begs to report that the customary work has been carried on with no efforts spared to render the best possible service to the membership. Because of the short time elapsing since the last report, no additional compilation seems needed at this time.

Respectfully submitted,
A. J. PATEK, M.D.,
Chairman.

Speaker Carter: We will hear from Dr. Greeley, the report of the Editorial Board of the Journal. (Not present)

EDITORIAL BOARD OF THE WISCONSIN MEDICAL JOURNAL

To the 1933 House of Delegates:

The Editorial Board met in Madison, organized, and went over routine business recommending the continued employment of the Medical Editor at a slight increase in salary. Instead the salary of the Medical Editor was cut out entirely. The Editorial Board received with much gratification Dr. Huston's offer to continue his work without salary and accepted the offer with alacrity, but with a feeling of pained surprise.

The further work of the Board has been an attempt to introduce more scientific material into your Journal with the elimination of some of the lengthy verbatim legislative reports, personals and some "copy" which could be cut down or not printed so often. There is a great deal of accumulated unpublished material, more new material is coming in than ever before, yet we cannot enlarge the size of the Journal until income is increased.

A comparison with "Minnesota Medicine" or "The New England Journal of Medicine," which covers nine societies of New England, makes our Journal seem a very efficient organization and business and news sheet, but a relatively weak sister in matters scientific. A continued improvement along this line is hoped for without sacrificing too much of the small town stuff in the way of personal items, birthdays, trips and professional cards and announcements of barn storming trips, etc., which we all like to read, but which adds nothing to the Journal. It probably helps sell the Society and the Journal, but does not elevate or dignify the profession. The board acted unanimously in this plan.

Dr. John Huston has submitted the following report. "Material for the Journal on hand: Papers presented at 1931 State meeting 2; papers presented at 1932 State meeting 51; papers presented from time to time (1932–1933) 10; case reports 19; papers unsatisfactory and to be returned to author, 6. At the present time material for May, June and July issues have been prepared for publication. The above papers therefore will have to be published subsequent to July, 1933. We have been able to publish on an average 5 papers and 2 case reports in each issue and therefore have material more than sufficient for next year without any program. New papers are plentiful now."

This statement shows how necessary it is to clear up the present load and be in a position where we can get new and better material by solicitation and otherwise. Since work is less men have turned more to writing.

We hope for your cooperation in this attempt to improve the scientific interest in the State Medical Journal.

THE EDITORIAL BOARD,
Oscar Lotz,
G. H. Ewell,
H. P. Greeley,
Chairman.

Speaker Carter: We will hear from Dr. Stovall, Chairman of the Committee on Cancer.

Dr. Stovall: The report of the Committee on Cancer has been published and there is nothing to be added.

COMMITTEE ON CANCER

To the 1933 House of Delegates:

The Council at its January meeting, 1931, accepted the suggestion of your Cancer Committee that a survey of the facilities in this State for the care of the cancer patient be made by the American Association for the Control of Cancer. The results of this survey have been presented in previous reports as were the recommendations of the committee based upon the results of the survey. The Council modified those recommendations and created a new committee composed of twelve members, one from each councilor district. This report deals with the activity of the new committee.

The problem, in the opinion of the committee, resolved itself into two important activities: the dissemination of information about recent advances in the diagnosis and treatment of cancer both to the profession and the public and the accumulation of information on the incidence of the disease. The first part of the problem requires an outlay of money which at present is not feasible and no steps have been taken to advance that phase of the work.

The other phase, however, seemed feasible. Any statistical study of the incidence of cancer, its age distribution, type, anatomical structures involved

and the results of various methods of treatment, require the accumulation of this information by some central board. Such statistical studies are essential to the further progress of studies on the control, diagnosis and treatment of cancer.

It appears to the committee that the Board of Health in the offices of which there is collected similar information concerning communicable diseases and other vital statistics was the bureau which could collect the data required for cancer and with the approval of the Council this Board was approached with the idea that cancer be made a reportable disease. In order to insure privacy of the records and to keep the information concerning the patient as confidential matter between the patient and his physician, it was thought to be desirable to have all reports sent directly to the State Board by the physicians and for the State Board to hold the records as confidential and not available except for legitimate studies.

The Board of Health was glad to cooperate with the Society in this undertaking and agreed that all reports should be sent directly from the physician and not through local health officers. It was not possible, however, for them to declare cancer a reportable disease. In order to do this a special legislative act was necessary. The Secretary of your Society, therefore, had a bill drawn making cancer reportable to the Board of Health. You were represented at the hearings for this bill both before the Assembly and Senate Committees by the Chairman of this Committee and the Secretary of the Society. Both legislative committees were most cordial in their reception of the bill and were unanimous in their recommendation of it for passage by the legislature. It was passed by the legislature and cancer is now a reportable disease.

In order to accomplish the purpose of the Society in the creation of this law two things are of prime importance: first, the physicians throughout the entire State must cooperate by conscientiously reporting all cases of malignancy occurring in their practice; second, the accumulation of significant data with each case. This necessitates the development of a report card on which all important information for statistical studies of the disease will be recorded. The Board of Health has requested this Committee to give them assistance in the development of such a report form. We are, accordingly, busy now investigating the types of card used by other states and countries and in getting information from various sources as to the kind and amount of data which these cards should record.

We are making a great effort to have the information gathered here of such a nature as to be important to students of cancer everywhere. The makeup of the report form is, of course, important but of equal importance will be the attitude of the profession in making out the reports. If it is done earnestly and with professional concern for the recording of accurate information, there will be nowhere information which will excel ours for statistical studies into the morbidity and mortality of cancer and the results of various methods of treatment. The members of this Society must remember that this is their project and not that of the Board of Health. We have initiated and sponsored this act from the beginning to its enactment and the Board of Health has been our willing and responsive cooperator. The data accumulated will be what we make it.

W. D. STOVALL,
Chairman.

Speaker Carter: The Committee on Scientific Work, Dr. Arnold Jackson.

Dr. Jackson: I have nothing to add to what has been published in the report.

COMMITTEE ON SCIENTIFIC WORK

To the 1933 House of Delegates:

The Committee on Scientific Work of the State Medical Society has initiated a plan to provide the various county and district medical societies of the state with speakers, who are members of the State Medical Society. The Committee was gratified at the response it received from members who volunteered their services.

Seventy men have offered to speak within a radius of 75 miles of their home without expense to the medical society. In the initial effort to provide a list of speakers for this bureau it was obviously impossible to include all those who were qualified. The committee hopes to enlarge this bureau and to make various changes from time to time, so that the subject material will be kept up to date.

The committee is now preparing a supplementary list to be mailed to the secretaries of the various county medical societies. Suggestions for improving and developing this plan will be gratefully acknowledged.

Many of the secretaries have already availed themselves of this bureau in arranging their programs, and their cooperation in carrying out this plan is earnestly requested by the committee.

ARNOLD JACKSON, M.D.,
Chairman.

Speaker Carter: Dr. Reginald Jackson, Chairman of the Committee on the Wisconsin General Hospital.

Dr. Jackson: Mr. Speaker and Members of the House: I do not know whether this report has been published, has it Mr. Crownhart?

Secretary Crownhart: It has been sent to all the delegates.

REPORT OF THE SPECIAL COMMITTEE ON THE WISCONSIN GENERAL HOSPITAL

To the 1933 House of Delegates:

At the last meeting of your House you instructed your Committee to work towards the accomplishment of three objectives:

(1) By legislative action to provide that cost of caring for indigent patients at the Wiscon-

sin General Hospital should devolve entirely upon the county of residence instead of the arrangement whereby the state and county shared the cost equally except that the county had to pay all the costs of transportation and costs of guardian or attendant where such a person was found essential.

(2) By action of the Regents to secure changes in administrative policy at the Hospital to the end that:

a. The policy of accepting the private pay patients at the State Hospital should be discontinued.

b. Formalization of records for the clinic case (the part pay patient) and limiting reference of this type of case to physicians.

Appreciating the involved nature of this subject matter the House gave to your Committee the power to proceed as we saw fit to bring about those changes which seemed essential to those who had studied the present and future needs of the Medical School, the Hospital, people and the profession of this state. Time does not permit of the voluminous report that would be required if your Committee were to advise you in every detail of the steps taken to secure proper presentation of the viewpoint of your Society. The program outlined to your Committee demanded of and received the constant and untiring study and efforts of the members of your Committee and the executive officers of your Society. But far more than this, it received the thoughtful consideration of members and officers throughout this state who responded most generously and promptly to the slightest Committee request.

LEGISLATIVE ACTION

After a long consideration of the legislative portion of this program, endorsed by our Governor, the legislature saw fit to adopt the recommendation of the Joint Committee on Finance. As you will recall, this recommendation provided that state aid should be extended for the care of the indigent at this centralized institution only to the extent of two persons per 1,000 population per county, according to the last federal census, for any one fiscal year except that no limitations of state aid should apply in those few counties where no local hospital facilities exist. This exception will become inoperative as local facilities are afforded in the future. In event that any county exceeds its limit, such county must pay full cost of care for each such person over the limit.

In many counties of the state the legislative action gives immediate relief to the there existing situation in which an over-centralized system of care of the indigent had imperiled the local medical and hospital facilities, which, in any analysis, must always provide the only available service for upwards of 80 per cent of the population. In some counties the legislative action apparently brings little relief but your Committee is of the opinion that its very existence will serve to center the attention of referring officials upon the fact that it is not in the interest of economy nor good medicine to send to a centralized institution those indigents who may receive, at approximately identical costs the needed care locally. Your attention is further directed to the fact that this legislation establishes for the first time in the history of this state the policy that state aid shall not be extended without limit. While your Committee and officers gave of their very best that the original recommendation of your House, adopted unanimously a year ago, might prevail, it is with a distinct pride of accomplishment that we recount to you now the enunciation of a new state policy which is a far more equitable one than that which formerly existed. We bespeak for this legislation a careful trial during the two years to come in hopes that the limits it sets may prove to be, in themselves, the solution to an apparently costly over-centralization.

OTHER ACTION

The problem of the pay and part pay patient was, in accordance with your direction and our recommendation, discussed with the administrative authorities of the University. The discussion was long, detailed and extensive. In so far as the private patient at the State Hospital was concerned, exercising the authority delegated to us by you a year ago, your Committee offered the suggestion that private patients be continued so long as they were referred to the institution by non-staff physicians. While we reaffirmed our position that it was our considered judgment that our original recommendations would be to the best interests of the institution and those whom it sought to serve, we advanced this further suggestion with the expression of hope that "if properly administered and given a fair trial it may prove to be in itself an acceptable solution."

During the month of April, two conferences were held with administrative officers of the Hospital and Medical School in the course of which all concerned had an exchange of viewpoint and as result of which certain changes in policy were advanced by the administrative officers themselves who expressed the thought that such changes would meet the change in conditions which presently exist over that time when the Hospital was first established nearly a decade ago. It is our understanding that (assuming an adjournment of the legislature without further legislation affecting the Hospital) the administrative officers of the Hospital will recommend to the Board of Regents and if affirmed by this Board, the profession will then be apprised of changes in admission procedures based on the following principles:

PRIVATE PATIENTS

a. With respect to the private work of full service staff members of the University and private patients at the Wisconsin General Hospital, limita-

tion of both to referred work, insofar as such limitation does not contravene the nature and responsibility of the Hospital as a state institution. Any exceptions to this policy of reference to be approved by the Administrative Committee and only for the purpose of permitting the institution best to discharge its proper function.

b. A limitation of an average of thirty beds or less for care of private patients.

SPECIAL RATE OR "CLINIC" PATIENTS

c. Formal application blanks for the admittance of these patients in the interest of conserving the state's service for the worthy in need thereof. These application blanks to require the signature of the regularly attending physician and to include an affidavit by the patient as to his economic condition.

d. As a service of the University in cooperating with physicians in the field in special diagnostic and therapeutic problems, the part pay patients to be received only upon reference by physicians. Any exceptions to this rule to be approved by the Administrative Committee of the Hospital and only for the purpose of permitting the institution best to discharge its proper function.

e. The University has announced plans whereby representatives of each of the preceptorial centers will be invited to Madison twice a year.

f. Dr. Bardeen is pleased to accept the suggestion that at least twice a year administrative officers of the University and representatives of the Council hold an informal meeting to discuss problems of mutual concern, the proper solution of which would benefit the public health.

Some of these changes involving merely administrative procedure have already been put into effect and others will be announced shortly. Still others will require the formal approval of the Board of Regents, but this formal approval cannot well be requested by the administrative officers of the Hospital until the results of legislation are known. As stated previously in this report, we assume that there will be no further legislative change at this session and it is anticipated that upon adjournment sine die of the legislature the Regents will adopt such recommendations as will best promote the interests and service of the Hospital and Medical School.

It is to be emphasized that the foregoing enunciated principles which will guide changes in rules and regulations for the admission of pay and part pay patients are advanced by the administrative officers of the University after these many months of conferences. Your Committee here reaffirms its hope that the effectiveness of these announced policies may be such as to deserve the support and hearty cooperation of all physicians interested in securing for all the people that medical service that, regardless of their status in life may best promote their group welfare and further advance the public health of our people.

CONCLUSION

Your Committee stands before you in this report as having given of their best that those policies which seem to promise most for the broad public welfare might prevail. In so far as your judgment indicates that we have made successful accomplishments in the public interest, your Committee would ask that you attribute those accomplishments not alone for the members of the Committee and officers but to a membership throughout the state that is awakened to a keener sense of those broader responsibilities of the physician everywhere which go far beyond the care of individual patients. To such a membership and to a Society imbued with age-old desire of medicine to serve all people as best it may, does this Committee attribute this report. We close this report and our Committee's activities with a most sincere expression of hope that the newer policies of our largest state institution designed by its officers to meet changed and changing conditions may prove to be those which will give a full discharge of the state's responsibilities to its citizens without concomitant disadvantages. We pledge our hearty cooperation to the administration of the Hospital in carrying out the policies outlined for the welfare of the sick and those engaged in ministering to their needs.

Respectfully submitted,

REGINALD H. JACKSON, M.D.,
President.
For the Committee.

Remarks from the Floor

Dr. Jackson: Mr. Speaker, I should like to make a few impromptu remarks. It is my understanding that it was deemed advisable to leave this rather voluminous report as it is for publication, but as it may leave a hazy impression of just what was accomplished by the special committee and by the special sub-committee, I should like to hear from some of the members of the sub-committee, Dr. Gavin, Dr. Seeger, Dr. Joseph Smith and Mr. George Crownhart. My own impression, and I think these gentlemen will sustain it, is that practically all of the recommendations advocated by the Special Committee are at the end of this calendar year, that is the end of this June, to go into effect.

In conclusion, I wish to say that while the chairmanship of the special committee has been one of the most trying experiences of my life, I would gladly go through it again if necessary to achieve changes which will be for the lasting benefit, not only to the medical profession but also for the benefit of the University of Wisconsin School of Medicine. As I have stated before, no medical school in history ever achieved distinction or good repute without the sympathetic cooperation and support of practicing physicians. I wish to go on record as one, and I hope you will all join me, who will give that support under the changes, as I understand them.

Finally, I wish to take this opportunity to thank all who aided me in carrying to a conclusion this work, including the members of the committee, the council, members of the special sub-committee and last but not least, the membership at large without whose support the work could not have been done. (Applause)

Speaker Carter: According to Dr. Jackson's suggestion, I will call on Dr. Gavin to say anything he may have to say.

Dr. S. E. Gavin: Mr. Speaker, I do not know of anything I can add to the report already published. We began last year, after the authorization of the House of Delegates. The field in which we were directed was first, concerning the indigent or county cases; second, the so-called clinic or five dollar case and third, the private case. According to your instructions, it was indicated that it was desirable to have the private case eliminated and the clinic case so formalized that it would be necessary to have written requests by the family physician in order for him to secure admission.

The indigent, of course, depended entirely upon the action of the legislature. You are all familiar with the fact that it was recommended by the governor's budget message that all state aid be eliminated so far as the indigent case is concerned. The Finance Committee, however, did not accept the recommendation entirely but did place a definite limit upon the number of indigent cases which could be admitted from any one county after which the state aid would be withdrawn. That, of course, is at the present time signed and is the law.

The clinic case, five dollar a day case and the private case, of course, depended entirely upon the action of the university authorities. We feel that we are in agreement. While they have not taken final action, it has been understood that as soon as the legislature adjourns and they know exactly where they are, from the standpoint of legislation that may be passed, that the formalization of the clinic case will be satisfactory.

A subsequent arrangement was suggested by this Committee acting upon the broad authority granted by you last year, in which the demand for elimination of the private case was not made. After investigating the methods followed by the various state university medical schools, it was thought advisable, at this time, to make the suggestions to the Board of Regents that the private case be limited entirely to cases referred by the family physician. It was found that some portions of the medical society desired the privilege of referring some of their private cases to men in the university faculty. It was thought only fair, at least, to try it for a while under that provision and that is the suggestion that has been accepted by the members of the Board and faculty with whom we met.

It seemed to the Committee that the thing was put up on a very fair and satisfactory basis. The authorities there have expressed their willingness to meet with the committee of this State Society at stated intervals, to meet with the preceptorial group at stated intervals so the sense and desires of the medical profession at large will be understood by the medical school and the university.

At the termination of this committee's activities we feel, at least I feel, that we have accomplished practically everything we set out to do. I am sure that the medical profession, as soon as this thing becomes workable, will find that there will be no objection and no spirit on the part of the university authorities to in any way hinder the adoption and workability of this plan. I do not believe there is any reason why we cannot go along at least for a trial period, and see whether or not this thing works properly. I feel that it will.

I want to say to you before I sit down that some of the members of the Committee, simply reflect what little honor or glory that may come to a movement of this sort, if there is any such honor and glory. The Chairman of the Committee, our President, Dr. Jackson, has really taken the brunt of the work. He and Secretary Crownhart have done a tremendous amount of detailed work.

Dr. Joseph Smith: Following the publication of the Committee's report, the matter was under consideration for a considerable period of time and finally a meeting was held in Madison in May, at which the various preceptors throughout the state were asked to come in and express their feeling with regard to the relations of the Medical School of the State University to the general profession throughout the state and the executive committee of the hospital.

This meeting was held at the Loraine Hotel in Madison in May and a very frank expression was had of the feeling of the medical men throughout the state. I think the executive members of the Executive Committee got a little different slant on the feeling of the medical men throughout the state from what they have had before. That was the next step in the procedure.

Following that, a sub-committee was appointed which consisted of President Seeger, Dr. Gavin, the speaker, and your secretary. We met in Madison a little later and drew up what we felt should be a tentative program of agreement with the Executive Committee of the University. Subsequently, we held meetings with the Executive Committee at President Frank's office, at which President Frank presented the attitude of the University, and our Secretary presented the basis upon which we proposed or we felt that the agreement should be made. We spent the forenoon discussing this matter with the Executive Committee of the hospital in President Frank's office and certain features were brought out there that we did not realize at the time of the other meeting. In the first place, the legislature was still in session and that uncertain factors existed at that time, as to what might be done in a legislative way affecting the university policies. The President, while accepting our proposal, felt that it would be better to leave these

until the legislative atmosphere was cleared even though we felt sure that no further measures would be passed by the legislature which would upset any arrangements we might make.

After that, he said the Regents would be asked to make recommendations or rules and regulations governing the conduct of the hospital which would in effect embody the suggestions or the agreement at which we had arrived. It was further agreed that a sub-committee of the council should meet at least twice a year with this executive committee of the University and iron out any further disagreements which might arise. In other words, the University Executive Committee put themselves in practical agreement with our policy and made a general agreement with us to cooperate in every way possible in carrying out the things for which we had asked.

Of course, the legislature is still in session but it does not look as if any of these measures which they had in mind are going to be passed and we have every reason to believe that the Executive Committee will act in good faith and carry out the things upon which we agreed. That still remains to be seen, whether they will stand by it or repudiate it.

In effect, the agreement which was made is as follows:

"With respect to the private work of full service staff members of the University and private patients at the Wisconsin General Hospital, limitation of both to referred work, in so far as such limitation does not contravene the nature and responsibility of the Hospital as a state institution."

President Frank pointed out a thing which perhaps you have not thought of; that is, the hospital is a state institution and, therefore, its officers could not enter into any contracts with any definite group to do or not do a certain thing. That may be apparent to all of you; for instance, if they agreed with the doctors to do a certain thing, some other group might come along and ask for a similar agreement. They feel, it being a state institution, they could not bind themselves to a written agreement to carry out definite policies.

"Any exceptions to this policy of reference to be approved by the Administrative Committee and only for the purpose of permitting the institution best to discharge its proper function.

"A limitation of an average of thirty beds or less for care of private patients.

"Special rate for clinic patients. Formal application blanks for the admittance of these patients in the interest of conserving the state's service for the worthy in need thereof. These application blanks to require the signature of the regularly attending physician and to include an affidavit by the patient as to his economic condition.

"As a service of the University in cooperating with physicians in the field in special diagnostic and therapeutic problems, the part-pay patients to be received only upon reference by physicians. Any exceptions to this rule to be approved by the Administrative Committee of the Hospital and only for the purpose of permitting the institution best to discharge its proper function.

"The University has announced plans whereby representatives of each of the preceptorial centers will be invited to Madison twice a year.

"Dr. Bardeen is pleased to accept the suggestion that at least twice a year administrative officers of the University and representatives of the Council hold an informal meeting to discuss problems of mutual concern, the proper solution of which would benefit the public health."

That is the way the matter stands at the present time and we anticipate that after the legislature adjourns, the Regents will take some action upon these suggestions, which we have entered into a general agreement concerning and that we will be called in to make a final agreement with the Executive Committee of the State Society on this matter. That is the situation as it is left at the present time.

Secretary Crownhart: Mr. Speaker, I wonder if the delegates and members of the Society as a whole appreciate what they asked that special committee to do in the field of legislation. I had a newspaper man at Madison say, "Well, George, I don't know how your committee feels about it but I think they have been asked to move the Capitol to Milwaukee." In some respects, if we only got as far as West Allis, I think that we did start on our way.

It would take hours of your time, literally hours, to recite in detail, and in the most interesting detail, what your Committee has done under the direction of Dr. Jackson, your President and its every member. They themselves devoted Sunday after Sunday after Sunday to meetings and conferences at the call of the Secretary that we might know the feelings of the membership as a whole and men throughout the state have responded to those meetings, never absent.

I would like to say one thing, that where all of us have used the word "agreement" we are not using it in the sense that here is a paper which we have all signed. We are using it in the sense that we have an understanding. It has been made evident to you this afternoon that this understanding is clear and concise. Now it is true that there are some modifications of our original report. That does not mean that we are convinced that we were wrong in certain respects; it means that there has been a meeting of minds and that we understand some of their difficulties. We, on our part, have stood ready to make certain modifications in hopes that a trial would prove them to be acceptable, and we do most sincerely hope that trial will prove them to be acceptable. If it does not, of course, we must stand necessarily upon our original position.

I want to assure you that so far as I have been in conference, and I know that I speak for every member of the Committee who has been in this conference, that unlike the reports of some of these diplomatic meetings abroad and elsewhere, there has

been no disposition on our part, nor so far as I earnestly believe on the part of those at the school, to use words to cloud meanings, for the understanding is there. After you sit around a table with men for three and four hours naturally, it is hard to reduce all of that to paper, but these representatives of your society appreciate, understand and clearly sense those changes which are going to be made in the interest of promoting the best medicine for the public in this state. I think that is all I can add and we do most sincerely hope that this report proves to be acceptable to all who are involved, with emphasis upon the public in whose welfare our efforts were based.

Speaker Carter: Gentlemen, these various reports which have been presented will be referred to the respective reference committees of the House. The reports of the Chairman of the Council, the Secretary and Treasurer, will be referred to the Committee on Reports of Officers; the others will be referred to the Reports of Standing Committees, except that on Necrology, which has already been adopted.

According to the Constitution, the Committee appointments of the President-Elect must be confirmed by the House. For the purpose of this confirmation, I am now going to ask President-Elect Seeger to give his appointments.

COMMITTEE APPOINTMENTS

President-Elect Seeger: Mr. Chairman and Gentlemen: I wish to submit the following committee appointments for the ensuing year.

COMMITTEE ON SCIENTIFIC WORK

Arnold Jackson, Chairman, to serve during the term 1933 to 1936. Dr. Jackson has been chairman this year, during an interim year, and I feel that it would be a shame for the Society to lose his ability and his contacts in preparing a real scientific program. To fill the term from 1933 to 1935 on this committee, I appoint Dr. W. M. Wochos of Kewaunee.

COMMITTEE ON PUBLIC POLICY

I regret to say that Dr. Otho Fiedler, who has served on this committee for many years, feels he does not wish to serve longer on this Committee and I wish to make recognition at this time of his long service to this organization and his valuable service to this Committee.

I have appointed to replace him, Dr. Ralph M. Carter of Green Bay.

EDITORIAL BOARD

The term of Dr. Oscar Lotz expires this year and I reappoint Dr. Oscar Lotz to the Editorial Board for the term 1933 to 1936.

COMMITTEE ON MEDICAL DEFENSE

The term of Dr. A. J. Patek terminates this year and I reappoint Dr. Patek for the term of 1933 to 1936.

COMMITTEE ON MEDICAL EDUCATION AND HOSPITALS

I appoint Dr. F. D. Murphy Chairman for the term 1933 to 1936; Dr. C. R. Bardeen, of Madison, for the term ending September, 1935.

COMMITTEE ON MEDICAL ECONOMICS

I appoint Dr. R. G. Arveson of Frederic.

THE COMMITTEE ON HEALTH AND PUBLIC INSTRUCTION

I appoint Dr. R. W. Blumenthal of Milwaukee, and Dr. W. G. Sexton of Marshfield to replace Dr. A. J. Wiesender of Berlin, whose term expires this year.

ADVISORY COMMITTEE ON MEDICAL EXTENSION

Dr. Carl Davis, Milwaukee.

COMMITTEE ON CANCER

The following whose terms expire this year on the Committee on Cancer are reappointed to this committee: Dr. F. Gregory Connell of Oshkosh; Dr. W. E. Ground of Superior; Dr. G. R. Duer of Marinette, and Dr. J. F. Wilkinson of Oconomowoc.

Speaker Carter: The Chair will entertain a motion that these appointments be confirmed.

Dr. Weber: I move these appointments be confirmed.

. . . The motion was seconded by Dr. Wenstrand of Milwaukee and carried . . .

Speaker Carter: The next order of business is the election of the Committee on Nominations. In accordance with precedent, I will ask the Secretary to read the names of the counties in each district and as the names are read, the delegates will rise and at the conclusion, will nominate one from among themselves to represent their district on the Nomination Committee. At the conclusion of the nominations, the Speaker will entertain a motion that the House declare these members to be the nominees.

Secretary Crownhart: Mr. Speaker, as we read the names of the counties in the various districts, will the delegates please rise and remain standing until one among them is nominated to be the representative of that district on the Nominating Committee.

First District: Dodge, Jefferson and Waukesha County Societies.

. . . Dr. W. S. Waite of Watertown arose . . .

Dr. Bowen: I will ask permission to pass for a few minutes.

Secretary Crownhart: Second District, Kenosha, Racine and Walworth County Societies.

. . . Dr. G. F. Adams of Kenosha was nominated . . .

Dr. Adams: I am serving on another committee.

Secretary Crownhart: Dr. Adams is serving on the Resolutions Committee and does not wish to accept the nomination.

. . . Dr. T. C. Hemmingsen of Racine was nominated . . .

Secretary Crownhart: Third District, Dane, Columbia, Green, Rock and Sauk County Societies.

. . . Dr. J. F. Mauermann of Monroe was nominated . . .

Secretary Crownhart: Fourth District, Crawford, Grant, Iowa, Lafayette and Richland County Societies.

. . . Dr. C. A. Armstrong of Prairie du Chien was nominated . . .

Secretary Crownhart: Fifth District, Calumet, Manitowoc, Washington-Ozaukee and Sheboygan County Societies.

. . . Dr. C. J. Weber of Sheboygan was nominated . . .

Secretary Crownhart: Sixth District, Brown-Kewaunee, Door, Outagamie, Fond du Lac, and Winnebago County Societies.

. . . Dr. D. J. Twohig of Fond du Lac was nominated . . .

Secretary Crownhart: Seventh District, Juneau, La Crosse, Monroe, Trempealeau–Jackson–Buffalo and Vernon County Societies.

. . . Dr. C. F. Peterson of Independence was nominated . . .

Secretary Crownhart: Eighth District: Marinette–Florence, Oconto and Shawano County Societies.

. . . Dr. G. R. Duer of Marinette was nominated . . .

Secretary Crownhart: Dr. Duer is a member of the Council.

. . . Dr. T. J. Redelings of Marinette was nominated . . .

Secretary Crownhart: Ninth District: Clark, Green Lake–Waushara–Adams, Lincoln, Marathon, Portage, Waupaca and Wood County Societies.

. . . Dr. S. M. B. Smith of Wausau was nominated . . .

Secretary Crownhart: Tenth District: Barron–Washburn–Sawyer–Burnett, Chippewa, Eau Claire and Associated Counties, Polk, and Pierce–St. Croix County Societies.

. . . Dr. F. E. Butler of Menomonie was nominated . . .

Secretary Crownhart: Eleventh District: Ashland–Bayfield–Iron, Douglas.

. . . Dr. Christiansen of Superior was nominated . . .

Secretary Crownhart: Twelfth District: The Medical Society of Milwaukee County.

. . . Dr. Gramling of Milwaukee was nominated . . .

Secretary Crownhart: Thirteenth District: Oneida-Forest-Vilas and Price-Taylor County Societies.

. . . Dr. E. G. Ovitz of Laona was nominated . . .

Secretary Crownhart: We now have nominees as follows:

First District: Dr. W. S. Waite of Watertown
Second District: Dr. T. C. Hemmingsen of Racine
Third District: Dr. J. F. Mauermann of Monroe
Fourth District: Dr. C. A. Armstrong of Prairie du Chien
Fifth District: Dr. C. J. Weber of Sheboygan
Sixth District: Dr. Twohig of Fond du Lac
Seventh District: Dr. C. F. Peterson of Independence
Eighth District: Dr. T. J. Redelings of Marinette
Ninth District: Dr. S. M. B. Smith of Wausau
Tenth District: Dr. F. E. Butler of Menomonie
Eleventh District: Dr. Christiansen of Superior
Twelfth District: Dr. Gramling of Milwaukee
Thirteenth District: Dr. E. G. Ovitz of Laona

Speaker Carter: I will now entertain a motion to confirm these nominations and to declare the nominees the choice of the House.

Dr. Hemmingsen (Racine): I so move.

. . . The motion was seconded by Dr. Peterson . . .

Dr. Bowen: What is to be done about the First District?

Dr. H. T. Barnes (Delafield): Dr. Bowen and I were outside and Dr. Bowen asked to pass for the time being, which is perfectly proper, I believe.

Speaker Carter: Under the circumstances, I think we may re-hear nominations from the First District.

Dr. Barnes: I nominate Dr. Bowen of Watertown. (consent)

Speaker Carter: Is there any discussion on Dr. Hemmingsen's motion that the nominees be confirmed? All in favor say "Aye"; opposed, "No." The motion is carried.

Secretary Crownhart: This Committee on Nominations is going to meet immediately with other reference committees of the House upon adjournment of this session. Instructions for all reference committees, reports of standing committees, reports of officers, committee on Resolutions and Committee on Nominations will be in special envelopes at this desk. This Committee is asked to wait and secure them and hold their initial meeting immediately upon adjournment.

Speaker Carter: The next order of business is the election of councilors. In accordance with precedent, the councilors are elected by the House as a whole, but the nominations are made by the districts affected. Taking each district separately, I will ask the Secretary to read the roll of counties and the delegates from each of the districts will have five minutes in which to caucus.

Secretary Crownhart: Mr. Speaker, during the recess, will the delegates of the first district, Dodge, Jefferson and Waukesha County, meet in conference. They are to make a nomination for the councilorship to succeed Dr. A. W. Rogers.

Delegates from the Second District, Kenosha, Racine, and Walworth County Societies, will meet and make a nomination for the councilorship to succeed Dr. Frank W. Pope of Racine, whose term has expired.

Delegates from the Eleventh District, Ashland-Bayfield-Iron, Douglas, will meet to make a nomination for councilorship to succeed Dr. F. G. Johnson of Iron River, whose term expires.

Delegates from the Twelfth District, Milwaukee County, will meet to make a nomination to succeed Dr. Blumenthal whose term expires.

Speaker Carter: I will now declare a recess of five minutes.

. . . The delegates recessed for five minutes . . .

ELECTION OF COUNCILORS

Speaker Carter: We will now entertain the nominations for councilor of the First District.

Dr. Barnes: The delegates of the First District have voted to nominate Dr. Arthur W. Rogers.

Speaker Carter: Any other nominations? If not, I will declare the nominations closed and instruct the Secretary to cast the unanimous ballot for Dr. Rogers.

. . . The Secretary cast the unanimous ballot for Dr. Rogers . . .

Speaker Carter: The Second District will now report on their nominee to succeed Dr. Pope of Racine.

Dr. Adams: The unanimous recommendation of the delegates of the Second District is that of Dr. F. W. Pope succeed himself as councilor of the Second District.

Speaker Carter: Any other nominations? If not, I will declare the nominations closed and instruct the Secretary to cast the unanimous ballot for Dr. Pope.

. . . The Secretary cast the unanimous ballot for Dr. Pope . . .

Speaker Carter: Councilor for the Eleventh District to succeed Dr. Johnson of Iron River.

Dr. O'Leary: The delegates from the Eleventh District have decided upon Dr. Johnson.

Speaker Carter: Are there any further nominations? If not, I will declare the nominations closed and ask the Secretary to cast the unanimous ballot for Dr. Johnson.

. . . The Secretary cast the unanimous ballot for Dr. Johnson . . .

Speaker Carter: Councilor for the Twelfth District to succeed Dr. Blumenthal.

Dr. F. A. Thompson: The Twelfth District takes pleasure in re-nominating Dr. Blumenthal.

Speaker Carter: Are there any further nominations? If not, I will declare the nominations closed and ask the Secretary to cast the unanimous ballot of this House for Dr. Blumenthal.

. . . The Secretary cast the unanimous ballot for Dr. Blumenthal . . .

Secretary Crownhart: The Secretary has cast the unanimous ballot of this House for Dr. Rogers as Councilor of the First District to succeed himself; Dr. Pope of the Second District to succeed himself; Dr. F. G. Johnson of Iron River, councilor of the Eleventh District to succeed himself; Dr. Blumenthal of Milwaukee of the Twelfth District to succeed himself.

Speaker Carter: The Speaker now has the pleasure of presenting to you at this time, your retiring President. We shall be happy to hear from him as to his suggestions and recommendations for the future conduct of our Society. Dr. Reginald Jackson.

PRESIDENT'S RECOMMENDATIONS

President Jackson: Mr. Speaker and Members of the House of Delegates: Last September, in speaking before this body as President-Elect, I stated that from various hints given me by my predecessors in office, I anticipated not only a year of honorable distinction but also one filled with arduous work and worry. That statement has proved, in the event, to be a 100 per cent bull's eye anticipation. I also stated that no matter how perplexing and difficult the problems which confronted our profession, I was convinced that there was inherent in the membership of our Society all the resources of wisdom, courage and ability essential to meet and solve them satisfactorily. Today, I remain of the same opinion. The accomplishments of the Society during the past year will come to you through the reports of the Secretary and the chairmen of various committees. I trust they will meet with your commendation and approval.

The principal suggestion which I offered on assuming office was the organization of a Bureau of Correlated Health, activities to provide a forum where present and future problems of disease control would be presented and intelligently discussed. On account of the very great importance of other Society matters this year, it has not been possible to do any more than send out feelers to some of those who might be directly interested in such a plan. The response has been such that I should like to see a committee appointed to carry forward the idea to a conclusion. Our Secretary is also Secretary without salary to the Wisconsin State Hospital Association and is cooperating with the American Society for the Control of Cancer; thus a nucleus or germ of the idea is already in existence.

Another thought somewhat along the same line relates to the activities of the County Societies. I have been very favorably impressed by the work of some of the county societies in developing direct contacts through special committees with the county officials responsible for the care of the indigent sick. I believe that this work has resulted in a far more favorable impression of our profession on the part of these officials than existed heretofore. As times improve I am sure a direct benefit will accrue through the realization and appreciation of the splendid way in which our members have responded to the need for altruistic action in the economic crisis we are experiencing. This possession, by some members, of the ability to carry on effective conferences and make compromise adjustments with public officials should not be allowed to lapse but should

become an integral factor in the future programs of all county societies. My own impression of the future of the average general practitioner of medicine revolves about the strength and activities of the county society he is a member of.

Unless county societies adopt a continuing program of gradually assuming, through education and demonstration, their ability and right to become the recognized controlling and guiding influence of all activities relating to the sick within a given country, the future will be a repetition of the past with a continuing loss, through the steady encroachment of semi-medical social and public welfare activities, not only of prestige but of prerogatives and functions which inherently belong to the general practitioner.

I have the highest admiration for the work of some of these semi-public agencies but in all counties in this state where they are not active, I should like to see the county medical societies give demonstration of doing this work in a completely satisfactory way. This thought embraces the idea that when a county society once accomplishes such a project it will continue with other activities, such as goiter prevention campaigns, prevention of cardiac lesions and complications, prevention and control of cancer, etc. It will be alert to all advances in public health work and will sympathetically cooperate with the officials of the central bureau by putting on campaigns and doing the actual administration of preventive or curative measures. The too frequent, somewhat slurring remark that the general practitioner is not capable of doing this work and that it requires a specialist has done incalculable harm. Possibly in the past, with the rapid advances in technic and methods practitioners who had graduated twenty years earlier honestly felt that the newer knowledge was beyond their ken. Today medical colleges surely turn out graduates sufficiently prepared to take up, develop, and administer practically all local activities in this field under central control and guidance as has been so well demonstrated in New York State where no city under 50,000 population has a full time public health physician.

If practical, I would suggest that in order to stimulate the interest of future county society officials and facilitate their work along these lines, a clearing house of county society problems and possible solutions gathered from experience, be established in the Secretary's Department to the end that eventually a suggestive directional guide may be published by the Council embracing many problems not satisfactorily covered by the Constitution and By-laws. Thus, as regards the problem of contract practice whether it is ethical or not apparently depends upon local conditions.

One of the state medical societies in the South advises its component county societies that the Board of Censors should be selected with great care and that every contract held by a member or about to be taken by him, must be submitted to the Board of Censors and their decision as to whether it is ethical or not under local conditions is final and obligatory.

The county society which I have envisioned for the future can only come into being through the full realization of its members that the day of individualism is passing and that the potential future strength of the State Society rests entirely on the development of county units of this type, units which will not only improve the status of its individual members, but which, when occasion arises, will throw the full strength of its organization behind whatever program the officials of the state society propose. As the modern world is constructed it is becoming ever more evident that to the victor belongs the spoils and unless the medical profession is alert, well organized and prepared to demand, if necessary fight for its rights, it will inevitably be despoiled.

In conclusion, I wish to express my very great appreciation of the splendid cooperation and support which I have received from the various officials of the Society and from the membership in general during my term of office. I thank you. (Applause)

Speaker Carter: As to Dr. Jackson's recommendations concerning the immediate future of our Society, they are referred to the Council.

Mr. Secretary, have you any new business to bring before the Society?

Mr. Crownhart: I wish to remind the delegates that one year ago the delegates from the Brown-Kewaunee Medical Society invited this Society to hold its 1934 meeting in Green Bay with the Tercentenary Society of that city. In accordance with the provisions of the By-laws, the Council has investigated the facilities of Green Bay and considered them sufficient. This is referred to the Committee on Nominations whose report will be given tomorrow afternoon.

It suggests, in the second place, for your consideration an amendment to the By-laws. At the present time, the By-laws provide that the Committee on Scientific Work, and that is the committee that plans the annual program and carries on the scientific work of the Society, shall consist of three members and the Secretary. Your Council suggests to you the amendment to the effect that the Committee on Scientific Work shall consist of three members and the Secretary and the Medical Editor of the Journal, ex officio, that amendment having been presented at this session will be before you for action tomorrow afternoon.

In the third place, the Council approves and asks your approval for the granting of a new charter. At the present time, the Brown-Kewaunee County Society is one group and the Door Society is a second society. Members of the Door County Society are desirous of affiliating themselves, and have been accepted for membership in the Brown-Kewaunee Society, in accordance with action of this House, if it meets with your approval. The Council recommends that this House presently grant a chart-

er to a new society to be known as the Brown-Kewaunee-Door County Society. I will pause at this moment so we may have action on this recommendation.

Dr. Redelings: I move you that this request be granted. I think Door County logically belongs to Brown-Kewaunee.

. . . The motion was seconded by Dr. O'Leary of Superior . . .

Speaker Carter: You have heard the question. Is there any discussion? Are you ready for the question? All in favor say, "Aye"; contrary, "No". The motion is carried.

Secretary Crownhart: In connection with the report of the special committee to investigate any and all procedure of admittances to the Wisconsin General Hospital, you will remember that one of the recommendations which was adopted by the University was to the effect that members of the Executive Staff of the Hospital meet with the representatives of the Council at least twice a year, in addition to meeting with representatives of the preceptorial staff. It is the belief and opinion of the Council that such a committee to meet with the executive officers of the hospital should be one truly representative of the entire society and not just the Council and they ask your authorization to the end that the President may be empowered presently to appoint such a committee in such number as he sees fit from the Society membership as a whole.

Speaker Carter: I will entertain a motion to that effect.

Dr. Wenstrand: I so move.

. . . The motion was seconded by Dr. Butler of Menomonie . . .

Speaker Carter: Is there any discussion? If not, all in favor of the motion say "Aye"; contrary, "No." The motion is carried.

Secretary Crownhart: Mr. Speaker, I have one or two announcements I wish to make.

. . . Secretary Crownhart made announcements on meetings of committees . . .

WORK OF SECRETARY

Secretary Crownhart: Necessarily, an executive secretary operating the full-time office of the Society is not only brought into close contact with the work of all the committees but virtually carries out the instructions of the committees. His work for a period of nine months is before you, not only in his own report, but through the reports of various committees.

A year ago your Secretary left the room that there might be a full, frank and free discussion of any criticisms, or any suggestions of any nature that might be made. He would like to do it at this time, if there are any such suggestions or criticisms to be made, in order that they may be made in perfectly free manner, not only for the interest of the Society but for whoever is to carry on the work of secretaryship, not only now but in the future.

. . . Secretary Crownhart left the room . . .

Speaker Carter: Is there any discussion, criticism, or otherwise, of Mr. Crownhart?

Dr. Wenstrand: I move a rising vote of thanks to Mr. Crownhart for the very fine work he has done during the last year.

. . . The motion was seconded by Dr. Mauermann . . .

Dr. Stang: George has asked for an expression. There might be some criticism, not that I have any, but I think now is the time to express it, if you have any criticism of your Secretary or his work. Let us have the suggestions here. Sometimes we do not like to express them, but I am sure in this group, things do come up that we do not quite approve of and I would suggest that if anybody has anything on his chest, he should speak now.

Dr. J. C. Wright: I feel that George Crownhart is all right.

Dr. Rogers: The only thing I want to say about Mr. Crownhart and his work, is to endorse the statement in the last editorial page of our President. Living in Madison Dr. Jackson made the statement that he did not know until he became president, what work was done in the office of the State Society. I made the same statement some years ago and I think anybody who has any criticism to make should go up there and spend about half a day in that office. Right there alone are enough bills piled up to cover more than one man's work. How he does it, I don't know.

Dr. McGovern: I have criticized George Crownhart. He is a very able, clever man, but I see no reason why there should not be a medical man in the place where George Crownhart is. Olin West is doing his job in the American Medical Association just as well as George Crownhart is in Wisconsin and I think it is logically a place for a medical man. A medical man with his medical training has a different viewpoint as compared to the layman and that different viewpoint means a whole lot. The medical man is the biggest coward on God's earth. It is a difficult thing to get medical men to fight for themselves. We hear about this and that and the other things to help the poor, afflicted sick, but not a word about how can you help the unfortunate doctor. How can you put a little money in his pocket? How can they help themselves? The layman, as secretary, does not do a thing to help him, because he does not know the troubles of the great mass of medical men in the state of Wisconsin or any other state.

I have no real, direct criticism of George, but he is a layman and a medical man can do the job better than a layman, I do not care who the layman is.

Dr. Rogers: I would like to answer the last statement. Dr. McGovern has answered it himself; however, he has made the statement that the doctor is a coward. Well, God help the coward that ever gets up there with that bunch in Madison. (Applause) In the first place, gentlemen, Mr. Crownhart is trained in legislation and the doctor is notoriously rotten in law and in finances. That is the

reason we are all broke. Let a doctor get up there without some legal training, with that bunch and it will be much like Mr. Wilson going to Europe.

Dr. Adams: Gentlemen, if Olin West as a doctor, runs the organization of the American Medical Association well, George Crownhart runs the Wisconsin State Medical Society better. (Applause)

Dr. Trowbridge: I presume that George Crownhart does not know me, but I do want to say this and I hope none of you get into the trouble I did a year ago. It started with malpractice. We don't like to say anything about that. We had a little case of malpractice started. Crownhart is wonderful. A doctor does not know anything outside of his own business and I don't believe he knows much about that sometimes. To continue with my story, I telephoned Mr. Crownhart at five-thirty in the morning and he said, "Dr. Trowbridge, what can I do for you?"

I said, "I don't know exactly what I should do," and he said he would tell me. The fellow thought he had a fracture of the oscalcis. It didn't prove to be that, however. We had our attorney whom the President will remember. He sailed along fine. The attorney on my opponent's case met me and said, "Dr. Trowbridge, we didn't have the nerve to win the case."

I know I would have been hit hard, were it not for George Crownhart. He will do that for anybody who is a member of the Medical Society.

In my opinion, much as I hate to disagree with Dr. McGovern, a doctor cannot take that place as well as a layman. I know his father was a good judge and a good lawyer. I don't think you will make any mistake in putting Mr. Crownhart back again.

Dr. Fredrick: It is not important to the Medical Society possibly to state any criticism I might have of Mr. Crownhart. I have no criticism of Mr. Crownhart. I have been around the state some and have asked for views. Some people do not seem to be very ready in stating their views. I would like to state a few things that I have heard about the state. I do not agree with some of them. One remark I have heard several times is in regard to the Secretary's salary and my answer to that was that I thought he earned it, and as long as he earned it, I did not begrudge him the salary he receives. They think they could get somebody good enough for a smaller salary. I do not believe that. In regard to having a lawyer represent us, I think we need a preacher also.

Even Mr. Crownhart states to us and our Society, "You take those things up in your locality, the doctors should not turn against each other." He cannot come there and chase those things out and I think we would have to have a preacher in order to do that. I would not want to pay the preacher anything to do it.

Another criticism I heard, not this year, but last year, was that it was a little difficult for our Secretary to act, even when he wished to do things for us. You will remember he is hired by the Councilors. You will remember they are sometimes regents and sometimes preceptors and you will remember we are not sometimes very well remembered in that respect. Mr. Crownhart has, I think, this year, a new vision. I think he has been working extremely industriously on that and I would not begrudge him twice the salary he is receiving.

There is a little something in the matter which has been suggested by our President that we should fight for those things that arise among us that are just and right and not be ashamed of them so we could even dispense with the preacher.

Dr. Peterson (Independence): I notice that Dr. McGovern wants a secretary to be a doctor. The last speaker calls Mr. Crownhart doctor. Now, whenever the legislature meets, there are always one or more bills to make doctors out of chiropractors and optometrists. Why not ask them to make a doctor out of Mr. Crownhart and you have it all fixed? (Laughter)

Speaker Carter: Moved and seconded that the House extend a rising vote of thanks to Mr. Crownhart.

. . . The motion was carried unanimously . . .

. . . Mr. Crownhart returned to the room . . .

Secretary Crownhart: Mr. Speaker, I think, just as every doctor loves the field of medicine, because of all the associations and the relations and the feeling of accomplishment, so is that true in other fields and I only want to tell you that so long as I can carry on and meet with your approval, that is the greatest compensation in this office. In the office of the President, the office of the Speaker and any other office, it is the compensation of knowing the men think you are trying to accomplish the ends they desire and they are with you in trying to do it.

Speaker Carter: Are there any resolutions to come before the meeting?

McGOVERN ON CONTRACT PRACTICE

Dr. McGovern: It is too bad to impose this on you at this time, but I am going to give you a different viewpoint. I had a little different viewpoint a few minutes ago, but you couldn't see it.

I expected to get into the House of Delegates of the American Medical Association but I did not succeed.

I wish to call to the attention of this National Medical Organization the greatest menace that confronts our profession at the present time—that is contract practice.

What is contract practice? As used in medicine, I believe that we will all concede that it is an agreement for the mutual financial gain of both parties. An implied or written contract between the employer of labor and a doctor not only limits and restricts the activities of the contracting parties, but it has a limiting and restricting effect on those who are not parties to the contract.

The medical profession generally and the laborer are the ones who are limited and restricted. These limitations take away from those medical men who are not parties to such contracts, their patients and their families and reduces the field from which they must draw their practice.

This field should be open to all of the profession with no restrictions and with equal opportunity. Instead, the contrary is true. This large group of medical cases given the contract doctor by his contract, are exclusively his without his being compelled to acquire them in open competition with the rest of the medical profession.

This condition exists in all industrial and manufacturing plants, department stores, public serviced corporations, fraternal orders, schools and medical clinics in any part of the United States.

Besides contract practice, the medical profession is compelled to meet the danger of state medicine or socialized medicine.

This is illustrated by the medical activities of the local health department, the county government and the state and national governments. To these large groups of society from which the independent medical practitioner is excluded, may be added the very large group of free cases treated in hospitals, dispensaries, and offices where no remuneration whatsoever is given. Add to that the final group, the largest of all the groups, which embraces all society; namely, those treated over the radio, then you will realize the unfairness of the present system.

Fifty years ago, the practice of medicine had not developed to the point where it was financially worthwhile commercializing. Most of the members of the medical profession were general practitioners and were kept fairly busy treating infectious diseases. The minority of the profession at that time were specialists. There were no legal restrictions to entering the practice of medicine until after the different states created the medical examining boards.

In 1911, the Workman's Compensation Act creating the Industrial Commission was passed. Wisconsin was the first state that succeeded in passing a workmen's compensation law that would stand up as constitutional in our courts. The object of the Workmen's Compensation Law was to place the loss caused by industrial accidents and sickness on society by compelling the manufacturer to carry all of the loss caused by accidents and sickness in his factory.

It enabled him to pass this loss on to the consumer as part of his overhead in the price of his article. Up to that time, the injured or sick employee carried the entire loss and, at the present time, the working man is still carrying more than his share of it. It is estimated that the employee now carries about forty per cent of the loss. This is caused by the ability of the employer and the insurance carrier to unload a great many disabling accidents and industrial sickness. When the medical profession gains the control of the distribution and treatment of the industrial accidents and sickness, this forty per cent will be transferred from the shoulders of labor to the shoulders of society where it belongs.

The Workmen's Compensation Law gave the manufacturer the legal right to appoint a panel of physicians to treat the sick and injured workman. It did not take the manufacturer long to commercialize that legal advantage. We find, today, the manufacturer and the insurance carrier working hand in hand and cooperating with the Industrial Commission in the care and treatment of all the injured. By allowing the manufacturer to select a panel, the rights of the employees are totally ignored. The manufacturer soon learned that he could select a physician who would be thoroughly obedient to his wishes in holding the cost of the care of the sick to a minimum. He learned that the physician would be his medical representative when the case came to trial before the Industrial Commission or in court. The relation of patient and doctor, as such, never exists in industrial medicine.

In 1929, the Industrial Commission law of Wisconsin was amended by eliminating the panel and making the industrial medicine all straight contract work. The legal procedure of the Industrial Commission fits in very nicely with the amended law and forms a combination that is almost impregnable.

The Wisconsin Industrial Commission consists of three commissioners who are given the power to appoint assistants of any and all varieties without restraint from any source. They have appointed nine examiners whose duty it is to preside as judges in the trials of disputed cases. The disputed cases are usually those involving a permanent disability. When an employee sustains an injury or is taken seriously sick, he is placed under the care of a contract doctor. At the earliest moment he is ordered back to work. If the injury causes a disability that makes it impossible for him to do the work that he has been doing, he asks for an easier job. He is refused a lighter job and is ordered back to the old job. He tries to do the work but because of his disability he is unable and in desperation he quits and goes home. The compensation that was paid him during the acute stage of his disability stopped as soon as he went to work.

With his family in want, there is only one course open to him; namely, to apply to the Industrial Commission for a settlement. You know the rest. He has to hunt a lawyer and medical experts to prove that he was sick or disabled so that he has become unfit to do the work that was required of him. Can you realize the advantages that an unscrupulous employer has over his workmen? If an employee receives a disabling injury, the employer can get rid of him regardless of the desire of the employee to hold his job. The physi-

cian will force the man back to work before he is able to do the work that he had been doing. He is then compelled either to stand the job or leave the plant. When he leaves the plant and applies to the Industrial Commission for sufficient compensation to support his family, he is forced instead to accept a final settlement and, if the employer does not want him back, he is through.

The examiner has no legal status except as an appointee of the Industrial Commission. He does not decide whether the case is compensable or not, or what compensation will be given, if any. The decision in the case is made by a member of the Industrial Commission who seldom or never attends the trial and has not heard one word of the testimony. The examiners have no responsibility and each trial is only an incident in a day's work.

In all legal trials where medical testimony is necessary, the unsupported statement of even an irresponsible doctor is accepted. It then becomes necessary for the opposite side of the case to meet such statements with similar unsupported statements. It does not matter that the statements of one or both sides cannot be substantiated by any reliable medical authority. To illustrate, the work of Aub, Minot, Reznikoff and Fairhall on lead poisoning constitute the only reliable authority on that subject, yet no medical witness is allowed to quote from Aub's book to substantiate any statement that he has made regarding lead poisoning. I believe it is time that the medical profession undertook to pass a law giving to medical authorities the same standing in the trial of medical cases as is given to judicial decisions. Then if a witness makes an idle statement, he can be required to back it up by competent medical authority.

In 1911, when the Workmen's Compensation Act was passed, the medical group had to enter the picture. This was the beginning of contract practice in America. In that law the employer was given the right to practice medicine without spending one day or one dollar to acquire that right. Since 1911, a great many changes have taken place. The employer who up to that time had been paying no attention to the injured or sick workman, now realized that there was an opportunity to profit by the new law.

Every bill passed by any legislature before 1911 was declared unconstitutional. The new law took away from him contributory negligence and negligence of fellow employees and in that way he was compelled to either accept the Workmen's Compensation Act or face his trials without the old defenses that had protected him in the past. He realized very quickly that he had an opportunity to exploit the laborer and the medical profession. He could select a physician to whom he could refer most of his cases. By sending a large number of cases to one doctor, it would induce the doctor to work for a small fee. It would enable the doctor to employ nurses to assist in doing a wholesale business and still leave the doctor a handsome income. This worked beautifully for the contract surgeon until the Industrial Commission law was amended in 1929. The amended law gave the industrialist greater power. The manufacturer then decided to economize by employing the nurses himself instead of allowing the surgeon to reap the saving from the wholesale services of the nurse. By referring a large number of cases to one surgeon it placed that surgeon where he could not oppose the will of the employer. When an injured employee sustained a permanent disability, a disability that ought to carry compensation for life, the surgeon was expected to dispose of that case with trifling cost to the employer. The contract surgeon would place the disability at ten per cent. The surgeon for the employee would place it at sixty or seventy per cent. The Industrial Commission would compromise by deciding that there was fifteen per cent disability. It would net the employee a few hundred dollars and his expense would amount to one-half or more of all that he received. If he was unable to prove a positive disability that was caused by his work beyond any possible doubt, he would not be able to obtain any compensation.

These are the cases that go to make up the forty per cent of industrial loss that labor is compelled to carry today. The employee in either case found it difficult to obtain employment and frequently, sooner or later, he became a public charge. This condition resulted when the legislature gave the employer the right to choose the panel.

After the amendments of 1929, the employer made greater use of the nurses. The nurses in every plant in Milwaukee are practicing medicine. Only a few years ago the panel physician was attending to the dressings of injured employees. Today the nurse is doing most of that work. After the doctor's first attendance, the nurse takes charge and treats the injured employee unless some complication arises.

Three conflicting interests are involved in the practice of industrial medicine. It has always been a medical question but the medical profession have shown neither the inclination nor the leadership in the handling of it. They have allowed the industrialists to appoint a panel from the beginning. We now find that the industrialists have complete charge and that the profession is taking orders from them. The employee, the recipient of the care, is naturally not fitted to take charge of the treatment of his injured associates but he should not be denied the right to choose his own physician. He should receive the best medical care that modern medicine is capable of giving him and an honest adjustment of his disabilities. Too often he does not get that care nor that honest adjustment.

The industrialists who have always been mercenary are not fitted to have charge of medical work because the employer is unable to administer that law honestly. I do not mean that there are no honest business men who are imbued with the

highest and noblest intentions toward their employees. However, men of that type form only a small minority of the industrial world. The ideals of the medical profession have always been high but the medical profession is possessed with too strong a tendency toward self-sacrifice and a complete lack of inclination, even ability, to run their own business. The business man on the other hand usually lacks the humanitarian outlook but he has a certain smartness—the smartness of a man who has spent his life in making a business success. Industrial medicine is a medical problem that is vital to the welfare of the medical profession. It has had far reaching effects that may ultimately destroy medical organizations and its recent marvelous progress. There is no other group in society that enters as intimately into the family life of the community as the medical profession.

There is no other group that contributes as much toward the care of the indigent and helpless without compensation. Still they are cheated of their compensation from a group of patients who ought to pay a fair remuneration to every member of the medical profession. The medical men are the only group fitted to have charge. They have to do the work anyway and there is no reason why the family physician should be denied the charge of the care of an injured head of one of his families.

By placing the control of this whole work under the County Society, it can be done with fairness to the employer, justice to the medical profession and the best results to the injured employee. The only point that can possibly be disputed would be the compensation therefor and that could be regulated by conference, or, if necessary, referred to a reorganized Industrial Commission. The exploitation of the injured employee that is being practiced today would be eliminated. The medical profession would give each sick and injured employee the same service that he gives to every other member of the family.

The history of the fidelity of the medical profession is a sufficient guarantee to the public that the work would be done honestly and that the employer would have to pay only what was a reasonable fee for the work. The County Medical Society would be compelled to assume the authority in the distribution of the work. It would be compelled to charge each member who receives patients through the society a certain amount for each case. The amount charged should be more than the expense incurred by the society because it is very necessary for the County Society to build up a reserve fund. Because the Society is furnishing a certain number of pay cases to each member, he can afford to contribute to the Society's reserve. The Society is thus enabled to take on other activities such as assuming the expense of employing nurses to do welfare work, immunization work and periodic health examinations. In this way, the activities of the County Society could be developed to cover everything that pertains to preventative and curative medicine. When this state is reached, society will be receiving one hundred per cent in efficiency for less money by a big margin than is possible under any system.

The Milwaukee County Medical Society, at the present time, is doing very praiseworthy work. It is giving post graduate courses in the different branches of medicine that assist in the training of its members in subjects they are not often called upon to practice. The recent demonstration of the immunization of the indigent children of the city was a big forward step. Some of the county societies of the state are taking charge of the care and treatment of all of the indigents of the county by arrangement with the county boards.

Dr. Olin West, who spoke at the December, 1932, meeting of the Milwaukee County Medical Society, told the society that the cause of the doctor's troubles today was contract practice. The men who have been benefiting by contract practice are willing to do anything to satisfy the discontented membership except to stand up like men and assist in fighting for the rights of the profession. Secretary Wilbur asked the question last summer, "Will the doctor fight for his profession?" My experience over the past ten or fifteen years tells me that he will not. He has become too used to "letting George do it," too accustomed to being dictated to by laymen, and too afraid he will tread on the toes of some of his more aggressive colleagues.

The contract doctors have been numerous enough and aggressive enough to hold down most of the important offices in the Milwaukee County Medical Society, and the other medical societies in Wisconsin. That leaves the men who wish to organize to rid our profession of contract practice in a very difficult position. There is no hope for the medical profession until the state society is reorganized. Members of the medical societies should be elected to legislative positions. In this way they can bring pressure on the legislature and the Governor to amend the present Workmen's Compensation law in order to give to each workman the right to select his own doctor and if he has no selection that the selection be made by some one in the County Medical Society.

The power that is in the hands of the industrialists today must be transferred to the medical society and the Industrial Commission must be reorganized and some of their unwarranted authority taken from them. For the past few years, and particularly since the committee on the high cost of medical care has attracted so much attention, a great deal has been said, written and outlined regarding plans (most of them insurance plans) for the improvement of the incomes of the medical profession. Not one of these articles or discussions has had the courage to mention the real cause of the doctor's financial difficulties until recently. Recently there have been a number of papers written on the subject of contract practice

but little or no discussion in the medical meetings. There has been a conspiracy of silence among those of our members who have a financial interest in contract practice to keep the discussions of this problem out of the medical meetings and the medical magazines.

The medical societies, including the American Medical Association, state and county organizations, are too highly organized. All of the important work is done by a small committee or different small committees. The result is that important big subjects never reach the rank and file of the organization. As a consequence, the rank and file have no way of expressing their desires or sentiments regarding medical subjects. This is particularly true of the county societies and, with nearly as much force, of the state societies. If this subject were discussed during only one meeting of the State Society, the sentiment in favor of concerted action in order to accomplish these things would be strong enough to force the opposition to give way.

I would like to express another thought; namely, that I believe it to be a mistake for a medical society to have a lay secretary. The long training that a medical man receives takes him away from nearly everything but his medicine. That long training develops in the medical man the idea of helping his fellow man to the exclusion of helping himself. On that account, a medical secretary will grasp the medical standpoint and assist when he realizes, as many members of the society realize, that the medical profession is in danger. The lay secretary, on the other hand, has altogether different plans. He views it from an entirely different mental attitude and as a result nearly always opposes the best interests of the profession. None of the medical training develops the characteristics that must be developed in the medical man at the present time; that is, the instinct to fight for himself and the welfare of the profession.

The medical journals have not contributed anything that might assist toward crystallizing sentiment in favor of ridding the medical profession from the domination of the industrialists in medical matters. The newspapers hesitate to publish anything for fear of losing the advertising of the industrialist.

At the last meeting of the state secretaries in Chicago, several papers were read pointing out the evils of contract practice. One man from Michigan asked to have the meeting outline a plan to remedy the evil but he was compelled to go home without one word to assist him in the solution of the problem.

Dr. Fishbein, in his recent address to the Auxiliary, stated that the ever increasing percentage of specialists would have to be stopped, that the medical profession today was overspecialized. Correct contract practice and you will diminish specialization at least one-third.

Let us consider just what will follow the correction of contract practice. The general practitioner will be given a larger percentage of that work. He will be assured a living income from the beginning of his professional life to the end. It will mean that a larger number of the young doctors will enter the practice of medicine as general practitioners. Your over-specialization is due to contract practice. The general practitioner's families and patients are taken away from him just as soon as the head of the house enters the employ of any of the large companies. Why should one or two physicians with a group of nurses be allowed to build a fence around a large group of medical work?

The medical clinics in the small cities have contributed no small amount toward making it difficult for the medical profession to eliminate contract practice. The clinics have contracts with the railroads and manufacturers for the care of their injured employees. Every one in these clinics is backing contract practice. Unfortunately, the members of these clinics become the officers of the respective county medical societies. In some towns one or two men dominate the sentiment of the city. This makes it more difficult to organize the profession of the state to wield the necessary medical backing to insure success in the important changes in the industrial and medical laws.

In order to get control of the care of the sick and injured and to prevent disease, the medical men must have enough backbone to enable them to stand up, get together and organize as a political body. I could not better express what I mean. than to suggest that the medical profession emulate the splendid example of the dental society during the present session of the legislature.

The Secretary of the State Medical Society attempted to do with the dental profession what he has been so successful in doing to the medical society. He advised the dental society very strongly that they were attempting too much and would fail. Instead of taking his advice, they went ahead. firm in their determination to win, and their bill passed the Assembly with one dissenting vote and was passed unanimously by the Senate. If the medical men will refuse to be controlled by a lay secretary and will follow the example set by the dental profession, we will succeed in getting control of the sick and injured and make our societies the militant bodies they should be.

During the past several sessions of the Wisconsin legislature, nothing in the way of medical legislation has been accomplished. This problem of contract practice has been getting more serious each year but still it appears to be impossible to get more than a "corporal's guard" of medical men to do anything. The one big thing that must be accomplished first is to take away from the industrialists their special privilege of dictating the care of the industrially injured.

The next step will be to define what the practice of medicine is, so that the nurse, the chiro-

practor, the manufacturer and any one else who pleases, will not be allowed to practice medicine. To succeed it will be necessary to form an organization that will be state wide. We will need several doctors in every assembly and senate district. Will the Wisconsin physicians who favor such a program write to me and assist in ultimately perfecting an organization that will be as successful as the dentists have been. In all other states I would recommend a similar organization be perfected to rid the country, from the Atlantic to the Pacific, of contract practice.

Speaker Carter: Is there anything else to come before the House of Delegates? If not, a motion to adjourn this session is in order.

. . . A motion to adjourn, properly made, seconded and carried, and the meeting adjourned at five p. m. . . .

(Adjournment)

TUESDAY AFTERNOON SESSSION

June 13, 1933

The combined second and third sessions of the House of Delegates was called to order at two-thirty p. m., Speaker Carter presiding.

Speaker Carter: The meeting will please come to order. We will listen to the report of the Committee on Credentials, Dr. Wenstrand, Chairman.

Delegate D. E. W. Wenstrand: Mr. Speaker: Your Committee on Credentials is pleased to report at this time the registration of forty-three (43) members of the House.

No questions have been raised relative to the seating of Delegates or Alternates.

Slips for this purpose having been passed out, I move that the attendance record so compiled constitute the roll of this session.

. . . The motion was seconded by Delegate H. J. Gramling, and carried without dissent . . .

Speaker Carter: Yesterday we deferred action on the resolution by Dr. Bowen of Watertown to permit of essential corrections, which, however, do not change the nature of the resolution. The House having granted its permission to these corrections, I will now ask the Secretary to read the revised resolution, which is now properly before us for action.

Secretary Crownhart: When our counsel drew this amendment to the Constitution, as Dr. Bowen said yesterday, unwittingly he omitted re-inserting term of officers, which is already in our Constitution.

Therefore, Dr. Bowen's amendment as now before us is as follows:

"PROPOSED AMENDMENT TO THE CONSTITUTION

"Amend Article IX (OFFICERS), Sec. 2 to read:

"1. Repeal all of Section 2 as now constituted.

"2. Enact Section 2 to read: " 'Sec. 2. The President, President-Elect, Speaker and Vice-Speaker shall be elected annually by the House of Delegates.

" 'The Secretary and Treasurer shall be elected annually by the Council.

" 'Councilors shall be elected at a meeting of their respective district societies. Notice of election shall be incorporated in a mail notice to members at least seven days before such meeting. Election, where more than one nomination is received, shall be by ballot and a majority of votes cast shall be necessary to elect. Each candidate for Councilor must be a resident of the district which it is proposed that he represent, and no person known to have solicited votes for or sought the office of Councilor shall be eligible for the current election. Other procedure essential to the election shall be governed by Robert's Rules of Order.

" 'The terms of Councilors shall be for three years and all officers shall serve until their successors are elected and installed. The terms shall expire in the following order: third, fourth, fifth and sixth districts in 1934; seventh, eighth, ninth, tenth and thirteenth in 1935, and first, second, eleventh and twelfth districts in 1936, and thereafter shall be elected in this order.'

"3. This amendment, offered in 1932, to be acted upon in 1933, shall upon adoption be effective on January 1, 1934."

I think, Dr. Bowen, it is now in proper form, and at present is before you for action.

Speaker Carter: Gentlemen, this resolution is now before you for discussion.

Councilor H. M. Stang (Eau Claire, 10th District): It is presumed that the members are in good standing in the medical society? It does not mention it there. We had a misunderstanding in regard to election of a member to a certain county society. Some safeguard may be necessary to prevent anything like that happening.

Secretary Crownhart: Section 6 of Chapter III of the Constitution covers that, Dr. Stang, for it states:

> "The House of Delegates shall divide the State into Councilor Districts, specifying what counties each district shall include, and, when the best interest of the Society and the profession will be promoted thereby, organize in each a district medical society, of which *all members of the component societies shall be members.*"

Speaker Carter: Is there further discussion?

Delegate H. P. Bowen (Jefferson Society, Watertown): Mr. Speaker: It might be in order for me to make a few remarks upon this amendment.

I might go back and repeat what I said yesterday, that it unanimously passed our county society, originating in that county society. It unanimously passed the First Councilor District, meeting in October, 1931, that Councilor District being composed of Dodge, Jefferson and Waukesha counties.

We propose this amendment because we feel it to be quite as democratic as for the election of congressmen. We feel it to be very democratic.

We feel that we are the best judges of who shall be our councilors. It is not because we have been

particularly dissatisfied in the past, not for any specific reason, but we do feel that it is much more democratic than the existing section of the Constitution.

We do feel that we of Councilor District No. 1 are not qualified to go up into the northern part of Wisconsin and pick your councilor. We do not do it for congressmen. We in our congressional district pay little attention to what you do up in Green Bay, Superior, or La Crosse.

We do feel that we of our Councilor District are fully qualified to bring into this organization the Councilor who is qualified to act. And for that reason the amendment has been proposed—because of its democracy, because it is truly representative of our people. I wish to assure you that it is not because of any dissatisfaction in our Councilor District at any time, but merely because of its democracy. For that reason I propose this amendment, and I would like to hear more discussion before the vote.

Speaker Carter: Gentlemen, I feel this is an important measure, and it should be thoroughly discussed. If anybody has any opinions on it we would like to hear them.

Delegate C. D. Boyd (Outagamie Society, Kaukauna): At first thought it would appear that this scheme of electing councilors would be more representative of a councilor district than electing them here. It seems that two or three spontaneously elect the councilors. Whether that is a popular wish of the districts, might seem questionable.

But, on the other hand, it seems to me if, in the state there are not any arrangements made for councilor district meetings, the component societies of the councilor district I think are not called more than in two or three instances, and should a councilor call a councilor meeting for the purpose of electing a councilor, it would seem to me to be just as embarrassing to discharge that councilor at such a meeting as it would be in any other personal contact.

The machinery, it seems to me, is not properly prepared for this thing to take place. I question very much whether we should tamper with our Constitution. It is not a good thing to do generally.

Delegate Redelings (Marinette-Florence Society, Marinette): Dr. Bowen stressed the democracy provided in this change of Constitution. I take the position that when a district is composed of, we will say, three counties, and the councilor's term expires, each county society is apprised of the expiration of the councilor's term, and it is the privilege and the power and the authority of the county society to instruct its delegate. The delegate here is a representative of the county. He is not here as an individual. And while I have no objection to modifying the Constitution, I feel as Dr. Boyd does, that it is tampering with a sacred thing, in a way.

I have felt that our established custom is not only efficient, but satisfactory, and that transferring this election to the district society will prove in some of the districts quite a hardship.

I am no longer councilor, but I wish to state to this body it is no small job to arrange for a district society meeting in the Florence County Medical Society District.

I feel as Dr. Boyd does, we should very thoroughly consider this matter before we make a change.

Delegate D. E. W. Wenstrand (Milwaukee): I would like a point of information, Mr. Speaker. Can Mr. Crownhart tell us what is the practice in other states? Are the councilors elected by the districts, or by the House of Delegates?

Secretary Crownhart: Doctor, I am afraid I cannot answer that question except in this way. About five years ago the American Medical Association appointed a committee of ten members, as I recall it, from various states in the country, to prepare and issue a new, model Constitution and By-Laws for state societies. Our Constitution and By-Laws, as it stands, is that model constitution. I do not know what the custom is in other states.

Delegate C. F. Peterson (Trempealeau-Jackson-Buffalo Society, Independence): Mr. Speaker: If I remember rightly, about a half dozen years ago this same question was up before the House of Delegates.

At that time I took the view that the way we nominate and elect our councilors was the correct one, and I think for the first time opened my mouth as a member of the House of Delegates on any question before the House.

A year or two later we elected a councilor for one of the districts in this way that we have now of electing councilors and I remember very distinctly that the delegates got together in one corner of the room and then afterwards reported, and the majority of those delegates nominated a certain candidate for councilor for that district. But the minority brought out a report as well and the House of Delegates then proceeded to elect the one nominated by the minority.

How did we know that that was the sentiment of that district, that it was democratic, that the man who was elected really representing the majority of that district?

It seems to me there was an error there, and it rather refutes the argument just made that our present way is the most democratic way or the most representative.

I now take the opposite stand, practically so instructed by the society that I represent, the Trempealeau-Jackson-Buffalo Society, as that Society now favors the election of councilors by the districts, and that the Constitution be amended as is proposed here today.

Delegate G. F. Adams (Kenosha Society, Kenosha): Mr. Speaker: I would like a little information. Is it not a fact that at one time it was supposed to be the policy of the State Medical

Society that councilors should be recommended to this body, not elected, but recommended by the district meeting.

We had a little experience in the second district. We had a councilor who had served there for a long time and he drifted into public service work. We felt that he did not represent the practitioners. He was a public service man. He could not see things from our point of view.

We knew that was so, when he got up on his hind legs one day and said, "I am unqualifiedly for state medicine," and that was in a mixed meeting. We asked him to resign. "Humph," he said, "get me out if you can." Then the term of the councilor was six years.

I want to tell you that at the next meeting of the Councilor Society a recommendation was made to this House that another man, who is now serving, be the Councilor for this district. He never has liked me since.

Delegate J. W. Prentice (Ashland-Bayfield-Iron Society, Ashland): Mr. Speaker: I may misinterpret the By-Laws, but in our district anyway the Councilor does not call the district meeting.

We have our District Meeting Society and it has its officers, the same as any other constituent part of the State Society, so that the Councilor is not embarrassed in any way in calling a meeting.

Also it seems to me in a district that is made up of several component societies, if each society instructs their delegate as to whom they would like for their councilor, and there are several names presented, when those men get together for a few minutes (maybe they do not see each other until four or five minutes before the House meets) it is unsatisfactory for them to nominate a man from their district. I believe, at least from our part of the state, it would be much more representative and more satisfactory to have a councilor elected at our district meeting.

Delegate C. B. Hatleberg (Chippewa Society, Chippewa Falls) Mr. Speaker: I would like to know what could be the possible objection to having our councilors elected by our district meetings?

Surely, as stated by Dr. Bowen, districts know better who is qualified for a councilor than do a few delegates who come here. It looks to me like a feasible and a reasonable thing for each district to elect its councilor. I do not see where objections could come in, even though we have a Constitution and By-Laws. In a good many places there are revised Constitutions.

Speaker Carter: Answering your question, so far as I can see the only objection is that the district meetings are ordinarily rather loosely organized affairs with a rather indefinite set-up. It might be, under those circumstances rather difficult to hold an election.

Have you any other objections, Mr. Secretary?

Secretary Crownhart: As a matter of policy I do not care to enter the discussion.

Delegate Redelings: Mr. Speaker, it occurs to me from your suggestion, it might be wise to provide for the alternative election of a councilor where a district society has failed to do it. The district societies have not been functioning regularly in the past. I would like to ask for information from our secretary. How many of the districts have had annual district meetings?

Secretary Crownhart: Up to about five years ago, Dr. Redelings, there were only one or two of the districts holding regular meetings. Dr. Smith's district has been holding them for a long number of years. At that time we put on a drive to organize district societies so we could get program material. Since then the great majority, at least, of the districts have been holding annual district meetings.

Delegate Redelings: Mr. Speaker, I do not wish to monopolize the floor but I have something more to say, if I may.

Another difficulty presents itself to my mind, and that is, a joint meeting of two district societies. That has occurred in our section—the Fifth and Eighth have had two joint meetings. There are two bodies together. It makes a combination as complex as your State Society.

Delegate Bowen: Mr. Speaker: In the First Councilor District Dr. Rogers some few years ago set up this method of holding meetings and conducting meetings, which I approve and subscribed to very much because of its democracy. He ordered the meeting as Councilor for the district, as I understand, and at that meeting he said he would like to have elected a President, Vice-President, Secretary and a Treasurer. He, himself was out of it. We have our meetings, alternating, going from one county to another. We have held joint meetings with Dr. Harper's district in Madison.

But to get around to the point where you hold joint meetings, I happen to have a little to do with congressional district meetings, which are composed also of societies, but if we have anything to settle we caucus, each county going by itself. You could do the same thing in your joint meeting.

I cannot, myself, subscribe to the sanctity of this present document of the Constitution of the State Medical Society of Wisconsin, and do believe it should be flexible enough to permit of alterations at such time as we see fit.

We have an excellent example of that with the Constitution of our United States. What a beautiful time we are going to have repealing the Eighteenth Amendment. Colonel E. M. House criticized our Constitution because of its lack of flexibility. You know they have given us seven years to repeal the Eighteenth Amendment. I am willing to take six years to repeal this amendment. We will do it.

I believe at this time this body has not completely assimilated the democracy of this proposed amendment, and for further assimilation and to give them the opportunity, I raise a point of order that the amendment as now presented is not the amendment that I presented a year ago, and therefore cannot be voted upon today. It is now a new

amendment, and I propose it as such for further consideration.

Speaker Carter: Dr. Bowen's point is well taken and with the permission of the House the Chair will sustain him in that point.

Hearing no objection, the amendment is read today for action next year.

Secretary Crownhart: Mr. Speaker, inasmuch as that error which occurred was entirely an error of the Secretary, and does not affect the meaning of the amendment of the Constitution, if Dr. Bowen wishes it voted upon today, I want to be the first one to ask the House to suspend that point of order.

If it seems better for it to lie on the table for another year, that is perfectly proper. But if he wants it acted upon today, it is my error, and I would like the opportunity to ask the House to suspend that point.

Delegate Bowen: The point of order was to permit further assimilation. I realize the fact that unanimous consent has been granted for further consideration today, but I believe it is not assimilated. Democracy to some people is still a new idea in America, and I ask that we defer it until next year, for that reason.

Speaker Carter: Unless the House wishes to suspend the point of order and take action today the ruling of the Chair will stand. Hearing no objection, the ruling stands.

Yesterday the Secretary read a proposed amendment to the By-Laws which had been submitted by the Council. I will ask the Secretary to read this amendment, which is now before us for action.

Secretary Crownhart: Mr. Chairman: Yesterday the Council proposed an amendment to the By-Laws, which, having been on the table one day, in accordance with the By-Laws, is before you for action.

The purpose, as I stated yesterday of the Amendment is to add to the Committee on Scientific Work which presently consists of three members and the secretary—to add to that Committee the Medical Editor of THE JOURNAL so that Section 2 of Chapter 7 would then read:

> "The Committee on Scientific Work shall consist of three members and the Secretary and Medical Editor, ex-officio * * * *"

That is before the House at this time for action.

Speaker Carter: You have heard the proposed amendment.

Delegate Bernard Krueger (Milwaukee Society, Cudahy): I move that we adopt the proposed amendment.

. . . The motion was seconded by Delegate Redelings, there was no discussion, and the motion to amend was carried . . .

Speaker Carter: I will now call on Dr. Rogers.

Councilor A. W. Rogers (First District, Oconomowoc): Mr. Chairman, I do not want to arouse any false hopes in anybody's mind because of the shape and appearance of this box. I have seen boxes that looked like it before.

It has been customary for the past several years to present a wooden gavel to the retiring President. The word "wooden" brings to mind a story I read recently.

It seems that when Mr. Coolidge retired from the White House and went back to his old home in Vermont some of his neighbors thought it would be a very kindly and courteous thing to call on him and present him with a little gift. So they had a hand made wooden rake, and the gentleman who was making the presentation speech laid great stress upon the handle.

He said, "You will observe, Mr. Coolidge, that the handle is made of hickory. Like yourself, it is staunch, unbendable, and firm." And then they all sat back, waiting for Mr. Coolidge to speak.

Mr. Coolidge took the rake and looked it over very carefully, paying particular attention to the handle, and his speech consisted of one word—"Ash!" (Laughter)

Well, I cannot rise to the intellectuality of Mr. Coolidge. I will attempt to approach his brevity. We appreciate very much the very trying experiences, Dr. Jackson, that you as President of the State Medical Society have gone through during the past year, and your colleagues, in appreciation of the one hundred per cent manner in which you have met these contingencies as they have arisen, wish to present you with this gavel. (Rising applause)

President Reginald H. Jackson: Dr. Rogers, Members of the House, and Friends: I wish to assure you, in accepting this souvenir emblem of my brief authority, I do so with the feeling that the past year has been one of the most satisfactory in my professional life. It has been a year in which I have received not only a liberal education in the work of organized medicine, but one in which I have made so many new, friendly contacts with my colleagues. I thank you. (Applause)

COMMITTEE REPORTS

Speaker Carter: We will now hear from the Reference Committee on Reports of Officers, Dr. Twohig is the Chairman.

Delegate D. J. Twohig (Chairman, Committee on Reports of Officers): Mr. Speaker: "*The Report of the Chairman of the Council.* This report is very concise and modest and not representative of the time, study and accomplishments of that body and its sub-committees. The Committee questions the action of the Council in reducing the dues. We approve the report and recommend its adoption."

. . . Motion was made by Delegate C. D. Boyd, Kaukauna, that the report be adopted. The motion was seconded by Delegate T. J. Redelings, Marinette. There was no discussion and the motion was unanimously carried . . .

Delegate D. J. Twohig: "*The Report of the Treasurer.* The Committee has examined the Treasurer's report and it appears correct and complete.

We believe, however, that an Auditor's report should be attached thereto. We approve this report and move its adoption."

. . . The motion was seconded by Delegate Bernard Krueger, Cudahy. There was no discussion and the motion was unanimously carried . . .

Delegate D. J. Twohig: "*Report of the Secretary.* This report is complete and comprehensive in every detail. It has been published and reviewed before the House of Delegates. The report suggests the immense amount of work and close attention given to legislative matters and also the thoroughness in which it has been carried out. We approve the report and move its adoption."

. . . The motion was seconded by Delegate L. W. Peterson, Sun Prairie. There was no discussion and the motion was unanimously carried . . .

Delegate D. J. Twohig: I now move the adoption of all of these reports as given.

. . . The motion was seconded by Delegate Redelings, Marinette.

Secretary Crownhart: Mr. Speaker: Before we proceed to the next order of busines may I explain to the House, so they have an understanding of one item. This is purely by way of explanation because the Treasurer is necessarily absent attending a meeting of the Board of Trustees of the American Medical Association.

The report as adopted suggests an auditor's report should be attached. I merely want you to know the custom has been to attach this for the purpose of review by the Council. Such an audit is made each year and the present audit is in the hands of the Council. I know I speak for the Treasurer when I say he will be very happy to see that in the future it is not only turned over to the Council, but to the Special Committee who handles the Treasurer's report. I know I speak for him when I say that he will be happy to accept that suggestion.

Speaker Carter: The preceding vote was incomplete. The question now before the House is the adoption of the report of the Reference Committee on Reports of Officers.

. . . The motion was carried . . .

Speaker Carter: We will have the report of the Reference Committee on Reports of Standing Committees. Dr. James C. Sargent, Chairman.

Delegate James C. Sargent (Chairman, Reference Committee on Reports of Standing Committees): Mr. Speaker: "The Reference Committee on Reports of Standing Committees of the 1933 House of Delegates has received the reports and recommendations of the following committees and submits the following report:

"1. *Committee on Health and Public Instruction.* The Committee moves the adoption of the report."

. . . The motion was seconded by Delegate J. F. Mauermann, Monroe. There was no discussion and the motion was unanimously carried . . .

Delegate Sargent: "2. *Committee on Medical Defense.* The Committee moves the adoption of the report."

. . . The motion was seconded by Delegate Peterson, Independence. There was no discussion and the motion was unanimously carried . . .

Delegate Sargent: "3. *Committee on Scientific Work.* The Committee moves the adoption of the report."

. . . The motion was seconded by Delegate Krueger, Cudahy. There was no discussion and the motion was unanimously carried . . .

Delegate Sargent: "4. *Committee on Cancer.* The Committee moves the adoption of the report."

. . . The motion was seconded by Delegate George W. Neilson, Milwaukee. There was no discussion and the motion was unanimously carried . . .

Delegate Sargent: "5. *Editorial Board of the Wisconsin Medical Journal.* The Committee moves the adoption of the report."

. . . The motion was seconded by Delegate Hatleberg, Chippewa Falls. There was no discussion and the motion was unanimously carried . . .

Delegate Sargent: "6. *Committee on Hospitals and Medical Education.* The Committee moves the adoption of the report."

. . . The motion was seconded by Alternate Delegate Louis Fauerbach, Madison. There was no discussion and the motion was unanimously carried . . .

Delegate Sargent: "7. *Committee on Public Policy.* The Committee moves the adoption of the report."

. . . The motion was seconded by Delegate D. E. W. Wenstrand, Milwaukee. There was no discussion and the motion was unanimously carried . . .

Delegate Sargent: Mr. Speaker, I move the adoption of the report of our Committee as a whole.

. . . The motion was seconded by Delegate Peterson, Independence. There was no discussion and the motion was carried . . .

Speaker Carter: We will now hear from Dr. Arveson, Chairman of the Reference Committee on Resolutions.

Secretary Crownhart: This report is in the hands of the Secretary, handed to him just before the meeting, and signed by all members.

"*To the House of Delegates:*

> "Your Committee upon Resolutions wishes to report that after carefully considering the question of dues that it recommends that for the coming year they be placed at $12.00."

Speaker Carter: Do I hear a second?

. . . The motion was seconded by Delegate H. P. Bowen . . .

Speaker Carter: Is there any discussion?

. . . There was no discussion and the motion was unanimously carried . . .

Delegate Gunnar Gundersen (La Crosse Society, La Crosse): Mr. Speaker, is it proper to introduce a privileged resolution at this time?

Speaker Carter: It is.

Delegate Gundersen: I wish to present the following resolution:

"WHEREAS, Dr. J. H. Hardgrove of Eden, a member of the State Medical Society of Wisconsin, is presently serving as the only physician member of the 1933 Wisconsin legislature, and

"WHEREAS, Dr. Hardgrove has caused the introduction of those measures proposed by our Society to advance the joint interest of the public and profession of this state and has served as a member of the Assembly Committee on Public Welfare before which all major health measures have been heard,

"WHEREAS, Dr. Hardgrove has worked zealously for the promotion of those measures which would protect and advance the public health of Wisconsin; therefore, be it

"*Resolved,* That the House of Delegates of the State Medical Society of Wisconsin extend to Dr. Hardgrove its cordial greetings and sincere appreciation for his untiring work and high accomplishments as a member of the Wisconsin legislature."

I move the adoption of this resolution.

. . . The motion was seconded by Delegate Boyd, Kaukauna . . .

Speaker Carter: This is a privileged resolution. We will act upon it at once.

Delegate H. J. Gramling (Milwaukee): I heartily agree with this resolution, and it is deserved. But the question here is, will you hinder the doctor's work in the legislature in the future if it goes out that today we passed this resolution. You know how our opponents will pick this up and they may hinder the doctor's work for the State Medical Society if it becomes known this resolution was introduced here.

I am heartily in accord, but there is just that question.

Councilor Rogers: It would be a personal letter, would it not? If the doctor thinks it is going to hurt him he certainly would not show it. I am for it.

Speaker Carter: Is there further discussion?

Delegate George W. Neilson (Milwaukee): I understand that the proceedings of this House will not be published in our JOURNAL for probably three or four months. By that time the legislature will be adjourned.

Secretary Crownhart: That is correct.

. . . There was no further discussion and the motion was carried . . .

Speaker Carter: Under the Constitution and By-Laws officers of the Society must be elected at a Third Session of the House of Delegates.

Due to the unusual arrangement of the sessions this year no formal third meeting as such has been scheduled. I will now entertain a motion to adjourn after which we will immediately reconvene in the Third Session of the House, to comply with the terms of the Constitution.

Delegate Bernard Krueger (Cudahy): Mr. Speaker, I move we adjourn.

Delegate Redelings: I second the motion.

Speaker Carter: It has been regularly moved and seconded that we adjourn. Are you ready for the question?

. . . Question was called, and the motion to adjourn was carried. The meeting adjourned at three-twenty p. m., and was immediately reconvened as the Third Session of the House of Delegates . . .

ELECTION OF OFFICERS

Speaker Carter: The meeting will come to order. Mr. Secretary, have you any recommendations?

Secretary Crownhart: Mr. Speaker: Following the custom of secretaries carried out from a time long before George was your secretary, he wishes to make an announcement before he opens this sealed report, to remind you that the Committee on Nominations brings in their nominations to you. There may be one or more than one nomination. Their report, of course, does not preclude additional nominations from the floor.

. . . Secretary Crownhart read the report of the Nominating Committee, as follows:

For President-Elect, T. J. O'Leary, Superior
Speaker, R. M. Carter, Green Bay
Vice-Speaker, Gunnar Gunderson, La Crosse
Delegate to the American Medical Association, Joseph F. Smith, Wausau
Alternate Delegate to the American Medical Association, M. D. Bird, Marinette
Place of 1934 Meeting, Green Bay

Secretary Crownhart: Is Dr. Sexton in the hall? In the absence of the Vice-Speaker, and inasmuch as the Speaker has been nominated to succeed himself, will Dr. Rogers, Chairman of the Council, please preside at the election?

. . . Councilor A. W. Rogers assumed the Chair . . .

Chairman Rogers: You have heard this report as read by the Secretary, gentlemen. Are there any further nominations? Any nominations from the floor? If not, we will proceed to the election of the first one on the list. For President-Elect, Dr. T. J. O'Leary, of Superior.

Delegate E. F. Schneiders (Dane Society, Madison): I move that nominations be closed.

Delegate S. G. Higgins (Milwaukee Society): I second the motion.

Chairman Rogers: You have heard this motion made and seconded, approving of the nomination of Dr. O'Leary. What is your wish? Those in favor of the motion signify by the usual sign; those opposed. The motion is carried. Dr. O'Leary is elected.

The second one on the program is the Speaker of the House, to succeed himself, Dr. Carter.

Delegate Redelings: Mr. Chairman, if I understood that last motion correctly, it was a motion that nominations be closed. You put the vote and

declared the nominee elected. I may be in error, but that is what I understood. Am I correct?

Chairman Rogers: There were no nominations. I offered the opportunity.

Delegate Schneiders: My intent was that the Secretary be instructed to cast the unanimous ballot for Dr. O'Leary.

Chairman Rogers: Then, coming back to this original motion, you have heard the motion that nominations be closed. Those in favor of this motion signify by saying "aye"; contrary "no". The motion is carried.

Delegate F. A. Thompson (Milwaukee Society): I move that the Secretary cast a unanimous ballot for the election of Dr. O'Leary as President-Elect.

. . . The motion was seconded by Delegate Redelings of Marinette and carried unanimously . . .

Chairman Rogers: Dr. O'Leary is elected.

The second one on the list is for the Speaker of the House, Dr. R. M. Carter, to succeed himself. What are your wishes?

Delegate Wenstrand: I move the nominations be closed and the Secretary instructed to cast the unanimous ballot of the House for Dr. Carter.

. . . The motion was seconded by Delegate Boyd and carried . . .

Chairman Rogers: Speaker Carter is re-elected to succeed himself.

. . . Speaker Carter resumed the Chair . . .

Speaker Carter: Gentlemen, as your next Speaker I want to thank you. It is a surprise to me. I feel that as a rule these things should be passed around, but if this is the wish of the House I feel I should accede.

The next on the list is for the office of Vice-Speaker of the House, to succeed Dr. W. G. Sexton of Marshfield, Dr. Gunnar Gundersen.

Delegate Gramling: Mr. Speaker, I move that nominations be closed and the Secretary instructed to cast a unanimous ballot for Dr. Gundersen as Vice-Speaker.

. . . The motion was seconded by Delegate William Trowbridge, Vernon Society, Viroqua, and carried . . .

Speaker Carter: Dr. Gundersen is elected.

Delegate to the American Medical Association Dr. Joseph F. Smith of Wausau, to succeed himself.

Delegate Sargent: I move that nominations be closed and the Secretary instructed to cast a unanimous ballot for Dr. Smith as Delegate to the American Medical Association.

. . . The motion was seconded by Delegate Higgins of Milwaukee and carried . . .

Speaker Carter: For Alternate Delegate to the American Medical Association, Dr. M. D. Bird of Marinette, to succeed himself.

Delegate L. W. Peterson (Sun Prairie): I move that nominations be closed and the Secretary instructed to cast a unanimous ballot for Dr. Bird as Alternate Delegate to the American Medical Association.

. . . The motion was seconded by Delegate Redelings of Marinette and carried . . .

Speaker Carter: For the place of the 1934 Annual Meeting. The Committee on Nominations has recommended Green Bay. Do I hear a motion?

Delegate Gundersen: I move that the recommendation of the Committee be accepted.

Delegate Krueger: I second the motion.

Speaker Carter: Is there any discussion?

Delegate G. F. Adams (Kenosha Society, Kenosha): I move you as an amendment to that motion, to reject the recommendation of the Committee and that we meet at Madison next year instead of Green Bay.

Speaker Carter: Is there a second to the amendment that the meeting be held in Madison in 1934?

. . . There was no second to the amendment, and question called for . . .

Speaker Carter: All those in favor of the original motion to meet in Green Bay, say "aye"; those opposed, "no". The motion is carried. (Applause)

Is there any New Business to come before the meeting?

Secretary Crownhart: I think I see Dr. O'Leary in the House now.

Speaker Carter: I will appoint Dr. Sargent and Dr. Gavin as a committee to escort Dr. O'Leary to the Chair.

. . . Delegates Sargent and Gavin escorted President-Elect O'Leary to the Chair . . . (Applause)

President-Elect O'Leary: Mr. President, Mr. Speaker, Members of the House: Do not start walking out on me, I am not going to make a speech. I just want to express my appreciation for this great honor bestowed upon me. I say great honor, because I think it is probably the greatest honor that can come to a medical man from his own state, to be chosen President, and particularly from a great state like Wisconsin.

I promise you that I shall endeavor to carry out the policies that have been so well established by our retiring President. I may fill the bill only fifty per cent—not 100 per cent, like he has—and I know I will be greatly benefited by following closely the work of our present President, Dr. Stanley J. Seeger of Milwaukee. That is my speech. I thank you very much for this honor. (Applause)

Speaker Carter: Are there any announcements or committee reports to come before the meeting?

. . . Announcements by the Secretary . . .

Speaker Carter: Before we have a motion to adjourn I want to thank the House for the privilege and pleasure of having been your Speaker.

I will now entertain a motion to adjourn.

Delegate J. F. Mauermann (Green Society, Monroe): I move we adjourn.

. . . The motion was seconded by Delegate Gramling, and the meeting adjourned at four-thirty p. m . . . (Adjournment)

Attendance House of Delegates, Milwaukee, 1933

Society	*Delegate*	*1*	*2*	*3*
Ashland–B–I	R. O. Grigsby, Ashland	a	a	a
	J. W. Prentice, Ashland*	a	x	x
Barron–W–S–B	D. L. Dawson, Rice Lake	a	a	a
	J. H. Wallis, Rice Lake*	a	a	a
Brown–Kewaunee–Door	R. M. Carter, Green Bay	x	x	x
	Wenzel Wochos, Kewaunee*	a	x	x
Calumet	J. W. Goggins, Chilton	a	a	a
	F. P. Knauf, Kiel*	a	a	a
Chippewa	C. B. Hatleberg, Chippewa Falls	a	a	a
	A. J. Sommers, Chippewa Falls*	a	a	a
Clark	H. H. Christofferson, Colby	x	x	x
	R. H. Wink, Granton*	a	a	a
Columbia	A. J. Batty, Portage	a	a	a
	H. F. Fredrick, Westfield*	x	x	x
Crawford	C. A. Armstrong, Prairie du Chien	x	x	x
	J. J. Kane, Prairie du Chien*	a	a	a
Dane	L. W. Peterson, Sun Prairie	x	x	x
	Louis Fauerbach, Madison*	a	x	x
	Joseph Dean, Madison (1)	a	a	a
	E. F. Schneiders, Madison*	x	x	x
	H. E. Purcell, Madison	a	a	a
	H. Keenan, Stoughton*	a	a	a
Dodge	E. P. Webb, Beaver Dam (1)	a	a	a
	A. W. Hammond, Beaver Dam*	a	a	a
Douglas	T. J. O'Leary, Superior	x	x	x
	C. H. Christiansen, Superior*	x	x	x
Eau Claire & Associated	F. C. Kinsman, Eau Claire	a	a	a
	F. E. Butler, Menomonie*	x	x	x
Fond du Lac	D. J. Twohig, Fond du Lac	x	x	x
	H. R. Sharpe, Fond du Lac*	a	a	a
Forest	E. G. Ovitz, Laona	x	x	x
	C. O. Decker, Crandon*	a	a	a
Grant	E. H. Spiegelberg, Boscobel	x	x	x
	M. A. Bailey, Fennimore*	a	a	a
Green	J. F. Mauermann, Monroe	x	x	x
	W. G. Bear, Monroe*	a	a	a
Green Lake–Waushara–Adams	A. J. Wiesender, Berlin	x	x	x
	G. E. Baldwin, Green Lake*	a	a	a
Iowa	H. D. Ludden, Mineral Point	a	a	a
	T. A. Hagerup, Dodgeville*	x	x	x
Jefferson	H. P. Bowen, Watertown	x	x	x
	W. A. Waite, Watertown*	x	x	x
Juneau	J. S. Hansberry, Wonewoc	x	x	x
Kenosha	G. F. Adams, Kenosha	x	x	x
	J. F. Cleary, Kenosha*	a	a	a
La Crosse	Gunnar Gundersen, La Crosse	x	x	x
	R. L. Eagan, La Crosse*	a	a	a
Lafayette	R. B. Quinn, Darlington	a	a	a
	W. B. Williams, Argyle*	a	x	x
Langlade	J. C. Wright, Antigo	x	x	x
	J. W. Lambert, Antigo*	a	a	a
Lincoln	E. O. Ravn, Merrill	x	x	x
	W. H. Bayer, Merrill* (1)	a	a	a
Manitowoc	R. W. Hammond, Manitowoc	x	x	x
	W. A. Rauch, Valders*	a	x	x
Marathon	R. W. Jones, Wausau	a	a	a
	S. M. B. Smith, Wausau*	x	x	x
Marinette–Florence	T. J. Redelings, Marinette	x	x	x
	J. V. May, Marinette*	a	a	a
Milwaukee	A. A. Pleyte, Milwaukee	x	x	x
	Millard Tufts, Milwaukee*	x	x	x
	S. G. Higgins, Milwaukee	x	x	x
	N. E. McBeath, Milwaukee*	x	a	a
	M. G. Peterman, Milwaukee	a	a	a
	Lucius Hipke, Milwaukee*	x	x	x
	Bernard Krueger, Cudahy	x	x	x
	Wm. M. Jermain, Milwaukee*	x	x	x
	F. A. Thompson, Milwaukee	x	x	x
	S. H. Lippitt, Milwaukee*	x	x	x
	D. E. W. Wenstrand, Milwaukee	x	x	x
	R. A. Toepfer, West Allis*	x	a	a
	Edith McCann, Milwaukee	x	a	a
	U. A. Schlueter, Milwaukee*	x	a	a
	E. W. Miller, Milwaukee	x	x	x

*

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Trempealeau–J–B	C. F. Peterson, Independence	x	x	x
	H. A. Jegi, Galesville*	a	a	a
Vernon	Wm. Trowbridge, Viroqua	x	x	x
	R. H. Ludden, Viroqua*	a	a	a
Walworth	J. W. Doughty, Delavan	a	a	a
	E. D. Sorenson, Elkhorn*	a	a	a
Washington–Ozaukee	H. Meyer Lynch, West Bend	x	x	x
	N. E. Hausmann, Kewaskum*	a	a	a
Waukesha	H. T. Barnes, Delafield	x	x	x
	H. A. Peters, Oconomowoc*	a	a	a
Waupaca	Sam Salan, Waupaca	a	a	a
	J. H. Murphy, Clintonville*	a	a	a
Winnebago	J. W. Lockhart, Oshkosh	x	x	x
	G. E. Forkin, Menasha*	a	a	a
Wood	F. X. Pomainville, Wisconsin Rapids	x	x	x
	K. H. Doege, Marshfield	a	a	a

x—Present
a—Absent
*—Alternate
(1)—Ill

THE JOURNAL BOOK SHELF

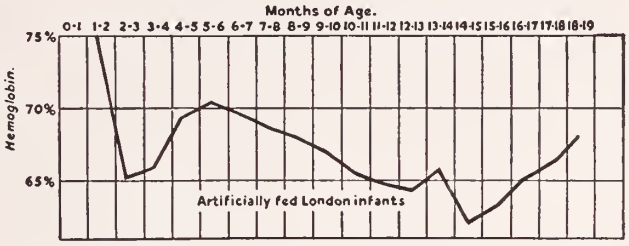
BOOKS RECEIVED FOR REVIEW

Fractures. By Paul B. Magnuson, M. D., associate professor of surgery, Northwestern University Medical School, Chicago. Prices $5.00. J. B. Lippincott Company, Philadelphia.

Experimental Pharmacology and Toxicology. By Henry G. Barbour, A. B., M. D., Yale University, New Haven, Conn. Illustrated. Price $2.75 net. Lea & Febiger Company, Philadelphia.

Preventing NUTRITIONAL ANEMIA *in Infants through a Normal Dietary Regimen*

NUTRITIONAL anemia was present in 45% of the breast-fed and 51% of the bottle-fed in a group of more than 1,000 infants studied by Mackay.[1] Although this anemia was of mild degree, *it was sufficient approximately to double the morbidity among the artificially fed.*



Hemoglobin level in the blood of infants of various ages. Note fall in hemoglobin, which is closely parallel to that of diminishing iron reserve in liver of average infant. Chart adapted from Mackay.[1]

Anemia Prevalent

Commenting on this work, the British Advisory Committee on Nutrition writes, "This form of anaemia is prevalent among infants, especially those living under conditions of city life, and is attributed to a deficiency of available iron and possibly also of copper. Its most important feature is susceptibility to infection, particularly a liability to colds, otorrhoea, bronchitis, and enteritis, and a tendency for infections to become chronic."[2]

Iron, incorporated in powdered milk, should be given as a routine to bottle-fed infants, according to the recommendations of this committee in a report to the Ministry of Health.

Milk Deficient in Iron

Stored in the liver of the full-term infant is a supply of iron and copper theoretically sufficient for the first six months of life. But actually the reserve is subject to wide variation, probably because of (except in the case of prematures and twins) variations in the iron content of the mother's diet during pregnancy. Hill, for example, says, "If the mother is anemic herself, or if she has eaten little iron-containing food during the last months of pregnancy, her offspring is born with an insufficient iron deposit. . . ."[3]

	IRON	COPPER
Cow's Milk, 14 oz.	1.01 mg.	0.166 mg.
Dextri-Maltose with Vitamin B, 1 oz.	2.40	0.570
	3.41	0.736
Daily Requirement*	3.11	"traces"

It is generally agreed that breast milk and particularly cow's milk are markedly deficient in iron and copper. But when 1 oz. of Dextri-Maltose with Vitamin B is added to 14 oz. cow's milk, properly diluted (as at 1 month), the above increase in iron and copper results.

FOR the same reason that it is desirable to reinforce the milk supply of the infant with iron, the trend is toward the introduction of iron-rich solid foods at an early age. The iron content of many foods is variable, however. Leichsenring and Flor[4] found that children's diets planned to contain 5 and 8.5 mg. iron actually contained only 3.25 and 6.5 mg., respectively. Pablum, higher than most foods in iron and containing standardized amounts of this mineral can be administered as early as the third month, when nutritional anemia begins to appear (see chart above). Clinical studies by Summerfeldt[5] show that Mead's Cereal (of which Pablum is the pre-cooked form) is capable of increasing the hemoglobin percentage of growing children.

	IRON	COPPER
Cow's Milk, 20 oz.	1.44 mg.	0.24 mg.
Dextri-Maltose with Vitamin B, 1½ oz.	3.60	0.855
Mead's Cereal or Pablum (dry), ¼ oz.	1.70	0.09
	6.74	1.185
Daily Requirement*	4.18	"traces"

When ¼ oz. of Pablum is fed to the 3-months-old infant receiving 20 oz. cow's milk and 1½ oz. Dextri-Maltose with Vitamin B, a significant increase in iron and copper takes place.

* The desirable iron intake for children according to Rose *et al.* is 0.76 mg. per 100 calories. Infant of 1 month (8¼ lb.) and infant of 3 months (11¼ lb.), both require 50 calories per lb.[6]

[1-6] *Bibliography on request.*

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A Standard Classified Nomenclature of Disease. Compiled by The National Conference on Nomenclature of Disease. Edited by H. B. Logie, M. D., C. M., Executive Secretary. The Commonwealth Fund, New York, N. Y. 1933.

Giants and Dwarfs. A study of the Anterior Lobe of the Hypothysis of Palmer Howard Futcher. Harvard University Press, Cambridge, Mass. 1933.

The Physiological Effects of Radiant Energy. By Henry Laurens, Ph. D., professor of physiology in the Tulane University School of Medicine, New Orleans, La. This is an American Chemical Society Monograph. Price $6.00. The Chemical Catalog Company, Inc., 330 West 42nd St., New York, N. Y.

Roentgenographic Studies of the Urinary System. By William E. Lower, M. D., F. A. C. S., chief of department of urology, former associate professor of genitourinary surgery, Western Reserve University, surgeon to Cleveland Clinic Hospital, and Bernard H. Nichols, M. D., F. A. C. R., chief of department of roentgenology, Cleveland Clinic. Price $16.00. C. V. Mosby Co., St. Louis, Mo.

A New Approach to Dietetic Therapy. By Eugene Földes, M. D., formerly assistant professor of medicine, University of Budapest, Hungary. Richard G. Badger, 100 Charles St., Boston, Mass.

Essentials of Prescription Writing. By Cary Eggleston, M. D., assistant professor of clinical medicine, Cornell University Medical College, New York City. Fifth edition, revised. 155 pages. Cloth $1.50 net. W. B. Saunders Company, Philadelphia and London.

Frontiers of Medicine. By Morris Fishbein, M. D., editor, Journal American Medical Association and Hygeia, the Health Magazine. The Williams & Wilkins Company, Baltimore, 1933, in cooperation with The Century of Progress Exposition.

Histopathology of the Peripheral and Central Nervous Systems. By George B. Hassin, M. D., professor of neurology, University of Illinois, College of Medicine; attending neurologist, Cook County Hospital, Chicago. Price $6.00. William Wood & Company, Baltimore, 1933.

Lymphatics, Lymph and Tissue Fluid. By Cecil K. Drinker, B. S., M. D., professor of physiology, Harvard School of Public Health and Madeleine E. Field, A. B., Ph. D., instructor in physiology, Harvard School of Public Health. The Williams & Wilkins Company, Baltimore.

The Vitamins in Health and Disease. By Barnett Sure, Ph. D., professor of agricultural chemistry, University of Arkansas, Fayetteville, Arkansas. Price $2.00. The Williams and Wilkins Company, Baltimore. 1933.

Obstetrics and Gynecology. Edited by Arthur Hale Curtis, M. D., professor and head of the department of obstetrics and gynecology, Northwestern University Medical School; chief of the gynecologic service, Passavant Memorial Hospital, Chicago. With 1664 illustrations. Volume II. W. B. Saunders Company, Philadelphia. 1933. Per set, cloth $35.00 net.

BOOK REVIEWS

Any scientific publication reviewed in this column may be obtained for inspection. Orders for such inspection should be directed to the Medical Library Service, 424 N. Charter Street, Madison, Wis.

Arteriosclerosis. A publication of the Josiah Macy, Jr., Foundation. Edited by Edmund V. Cowdry, Washington University, St. Louis. Price $5.00. The Macmillan Company, 60 Fifth Avenue, New York.

This text constitutes a most comprehensive treatment of the subject of arteriosclerosis. The contributors are conspicuous in their several fields, thus assuring an authoritative source reference. The historical section is a particularly brilliant one, but a broader approach might have been effected had the treatment been less bibliographic. To select from the many angles of the subject any single one of particular merit would constitute an injustice to the general high tone of the whole. Suffice it to say that the text book constitutes the most important summarization of the subject since Sir Clifford Allbutt. It has the further advantage over that contribution of a deeper and broader analysis of the underlying anatomy, physiology, pathology, and chemistry of the disease. Conversely, the clinical analysis suffers. It is perhaps too much to ask of a text of this size and composition that the clinical aspects of the subject matter should have attention commensurate with the fundamental considerations; but certainly such subjects as are very meagerly discussed from a clinical viewpoint by men interested in the basal sciences might better have had the attention of clinicians.

One is amazed to find the perpetuation of such a term as cirrhosis related to the arteriosclerotic kidney (page 16), since the term was introduced by Laennec as descriptive of the tawny color of the hobnail kidney. The reviewer is interested to note, on page 33, a most unphysiologic inference of a greater tactile acuity in the nail bed than in the finger tip, a quoted passage suggesting that the artery be rolled under the finger nail.

The section of comparative pathology of arteriosclerosis in the lower mammals and birds supplies much food for thought and it is particularly significant that no strict analogies can be drawn from the food habits or physical activities of the several species.

The essayist's approach to the treatment of arteriosclerosis is one of despair and defeatism; and while the subject does not offer conspicuous promise, the therapy of confidence and good cheer is so important to this group of patients that one wonders that it is so inadequately discussed. The final summarizing chapter is brilliantly done and its two concluding paragraphs epitomize the entire problem most adequately. W. S. M.

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Surgical Pathology. By William Boyd, M. D., professor of pathology, University of Manitoba; pathologist to the Winnipeg General Hospital, Winnipeg, Canada. Third edition, thoroughly revised. 868 pages with 477 illustrations and 13 colored plates. Cloth $10.00 net. W. B. Saunders, Philadelphia and London, 1933.

Professor Boyd has meticulously condensed the second edition. He has "tightened the belt of speech" and at the same time incorporated the most outstanding developments in the field of surgical pathology during the last ten years. Although the third edition has been lessened by 57 pages, new knowledge has been added to each chapter.

The new material is presented rather concisely. A few of the most interesting new subjects of the text are Masson's musculonervous complex of the appendix, development of enterogenous cysts, autolytic peritonitis, thermic death following cholecystectomy, cysts of the semilunar cartilages, absorption of bone, Cushing's syndrome, etc. Various achalasias (manifestations of disturbed sympathetic control of sphincters-cardiospasm, Hirschprung's disease, non-obstructive hydronephrosis) are emphasized especially in chapters X, XIV and XX. The chapters on the diseases of the appendix, gallbladder and thyroid gland are superlative. The surgeon will breathe a sigh of relief if he reads these chapters. Every surgeon has removed apparently grossly normal appendices from patients who presented classical symptoms of acute or chronic appendicitis. Clinical pathologists have been unable to interpret the morphological changes in these appendices and have passively and easily dismissed them as chronic appendicitis. The troublesome neurophathic appendix vindicates the surgeons' attempts to alleviate the patient. Boyd discusses this type of appendix in chapter XV. Likewise, perplexing gallbladder problems, cholesterosis and cholecystitis glandularis proliferans are elevated from obscurity.

The importance of the examination of the cerebrospinal fluid as a therapeutic and diagnostic aid is simplified. A warning is issued to those who perform spinal punctures on patients with brain tumors. The last chapter brings the general laboratory closer to the surgeon.

Each chapter on special pathology is introduced with a brief description of the normal gross and microscopic anatomy of the organ to be discussed. This of course is an invaluable habit of the text, without which both surgeon and pathologist cannot intelligently interpret pathological changes.

Dr. Boyd is a master word picture artist. The text is absorbingly flavored with his personal vast experience. Morphology does not play a major role, but it is occasionally stressed in order to emphasize finer differentiations.

Although the reorganization of the text has improved it immensely, one almost wishes that the third edition should not have suffered some of the omissions. Etiologies have been shortened or omitted. In the second edition a copious paragraph is devoted to Bunting and Yates' research on Hodgkin's lymphogranulomatosis, but in the current edition the paragraph has been completely omitted.

The reviewer hopes that the future edition will reinstate the first chapter of the second edition, in which Dr. Boyd elegantly defends Osler's statement "as is our pathology so is our practice".

The surgeon's library is incomplete without this book. It is strongly recommended to senior medical students and those who seek concise reference in the field of surgical pathology. S.B.P.

Diet in Sinus Infections and Colds. By Egon V. Ullmann, M. D. Price $2.00. The Macmillan Company, New York.

This book is a combination of recent research by nutrition workers of the entire world, making some observations in a pseudo-scientific way about infections in the respiratory tract and urging a few selected dietetic ideas which appeal to the author. It is impossible to state whether this book was written medical or lay readers. Critical medical readers will find much to make them doubt the dependability of conclusions drawn by the author. Lay readers will find an enormous burden of technical material which the author tries to simplify without too much success.

The following quotation gives a fair idea of what the author urges. "The principles of the diet consist firstly, in the restriction of salt, and secondly, in choosing the food in such a way as to counteract acidosis. The diet must be an alkaline one. Its main characteristics are the following:

1. The use of only fresh food.
2. The restriction of salt.
3. The preference of alkaline food.
4. The reduction of animalic proteins.
5. The reduction of carbohydrates.
6. The use of unrefined carbohydrates whenever possible."

It is obvious that this author has not had occasion to follow the results of his dietetic advice in any large number of patients or he would have learned of the impossibility of following certain dicta about the use of bulky foods with irritable gastrointestinal tracts. The book contains so little that is original that it is difficult to see what field it can fill. E.L.S.

Gastric Anacidity. By Arthur L. Bloomfield, M. D., professor of medicine, Stanford University, San Francisco, and W. Scott Polland, M. D., instructor in medicine, Stanford University, San Francisco. Price $2.50. The Macmillan Company, New York.

This book, in large part, is a compilation of data pertaining to the subject of the title and the authors have included considerable material from their previous papers. Little of the information included is new but much of it is recent. Two chapters are given over to the subject of anacidity in pernicious anemia and with gastric carcinoma. The authors criticize and object to test meals of various types on several grounds and they enumerate "the criteria

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Volume XXIV, as well as all of the earlier volumes, has been assembled with the original idea; namely, to create a work which would be acceptable to the general practitioner.

Obviously the 484 papers which were written in 1932 at the Mayo Clinic could not be given in full. Therefore they have been allotted the amount of space which each was felt to merit. Some of the articles are abridged, others abstracted, and still others given only by title. This, however, is not of any disadvantage because they have all appeared in full in some journal. It can be highly recommended as a valuable reference book for any member of the medical profession. J. W. G.

Urology in Women. By E. Catherine Lewis, M. D., (London), F. R. C. S. (England). Surgeon to the Royal Free Hospital; surgeon and urologist to the South London Hospital for Women. Price $2.25. William Wood and Company, Baltimore. 1933.

If one reads the preface of this book, the brief treatment of the following subject matter is partially explained.

The various lesions of the urethra are adequately treated except that of inflammation which does not refer to the cystic and inflammatory lesions so adequately described in Folsom's articles.

On the whole one gets the impression of briefness not expected in a book. Various methods of treatment other than the author's are not included.

This book should be used only as a reference after having read some standard text. J. B. W.

The Organs of Internal Secretion. By Ivo Geikie Cobb, M. D., M. R. C. S., author of "A Manual of Neurasthenia", "The Glands of Destiny", "Aids to Organotherapy." Fourth edition. William Wood and Company, Baltimore, 1933.

This volume cannot be recommended for the use of either the general practitioner or the endocrinologist. It is not complete enough nor up-to-date so that it can be looked upon as an authoritative guide to the voluminous recent literature in this field. It ignores many of the demonstrated facts in clinical as well as experimental endocrinology. Unfortunately the author takes much of his information and his therapy from one American commercial producer of organotherapeutic products, and reproduces this without critical comment. E. L. S.

Materia Medica and Therapeutics. A text-book for nurses. By Linette A. Parker, B. S. (Columbia Univ.), R. N., formerly instructor in nursing and health, Teachers College, Columbia University, New York. Fifth edition, thoroughly revised. Illustrated with 41 engravings. Lea & Febiger, Philadelphia, 1933.

This book could be used as a text for student nurses though it seems rather brief. The drugs are classified according to systems affected, and many new drugs are included which are not found in other texts. Another inclusion which is unusual and valuable is that of physiotherapy and psychotherapy.

The drugs and solutions problems are not particularly well explained, although good examples of the various types encountered in administration of medicines are given. M. Z.

A Text-Book of Surgical Nursing. By Frederick E. Neef, B. S., M. D., formerly professor of gynecology and dean of department of obstetrics and gynecology, Fordham University School of Medicine; attending surgeon, St. Elizabeth's and Misericordia hospitals, and New York City Cancer Institute. Lea & Febiger, Philadelphia, 1933.

This book seems to be an exceptional collection of essential facts on surgical nursing. The material covers a wide range in a compact space, is well organized, clear, concise, and is presented in a decidedly interesting manner.

It includes a short history of surgery, a presentation of the various procedures concerned in preoperative and postoperative surgery; complications of surgery; conditions demanding surgery; and some valuable information on the use of radium.

I liked the book very much and am sure any nurse would find it of great benefit. F. F.

Pediatric Nursing. A text-book for nurses. By Abraham Levinson, B. S. M. D., associate in pediatrics, Northwestern University Medical School; attending pediatrist, Sarah Morris Hospital for Children of the Michael Reese Hospital, Chicago. Second Edition, thoroughly revised. Illustrated with 28 engravings and a colored plate. Lea and Febiger Co., Philadelphia.

This is a good text-book for nurses. It contains a very complete list of children's diseases and ailments, described in a concise, yet effective manner. The author perhaps makes the mistake of treating all subjects as equal in importance. The illustrations are fairly good but not as numerous as in some texts.

The author seems to understand nursing procedures well, for he presents many difficult situations which are apt to arise in the carrying out of physicians' orders.

The chapters on "Psychological and Sociological Factors in Child Nursing" are very good. This portion of the book contains "The Perplexed Mother," "The Kind Grandmother" and "Superstitious Notions", all of which are invaluable chapters because this material is not found in most pediatric nursing texts, yet is of unusual value to nurses who so often serve as mediators. F. T.

Giants and Dwarfs. A Study of the Anterior Lobe of the Hypophysis by Palmer Howard Futcher. Harvard University Press, Cambridge, Mass. 1933.

This volume of 71 small pages is a very interesting resume of the historic attitude toward giants and dwarfs followed by a brief summary of the discoveries of the present century about pituitary functions. The mention of the recent work is necessarily brief and fragmentary and there is no attempt at

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Advertisements for this column must be received by the 25th of the month preceding month of issue. A charge is made of $2.00 for the first appearance of copy occupying 1 inch or less of space and $1.00 for each succeeding insertion of the same copy. Kindly accompany copy with remittance to cover number of insertions desired. Advertisements from members of the State Medical Society will be accepted without charge. Such copy will be taken out after its second publication unless otherwise requested. Where numbers follow advertisements replies should be addressed care Wisconsin Medical Journal.

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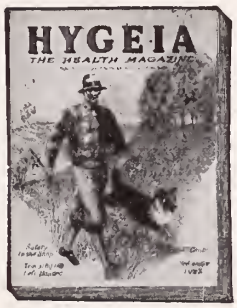

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making it critical. The book is not a scholarly review but entertaining reading for the clinician or the general reader of medical problems. E. L. S.

Surgical Anatomy. By C. Latimer Callander, A. B. M. D., F. A. C. S., assistant clinical professor of surgery and topographic anatomy, University of California Medical School; associate visiting surgeon to the San Francisco Hospital. With a foreword by Dean Lewis, M. D. 1115 pages with 1280 illustrations, some in colors. Cloth $12.50 net. W. B. Saunders Company, Philadelphia.

A comprehensive work which covers the anatomy and its surgical application admirably. The actual disease processes are in most cases discussed and the surgical anatomy of their treatment is plainly described. On the whole, an unusually good book. A. C. T.

Light Therapy. By Frank Hammond Krusen, M. D., director of the Department of Physical Medicine, Temple University School of Medicine, Philadelphia. Price $3.50. Paul B. Hoeber, Inc., New York.

This volume was written in order to "epitomize and clarify the existing data concerning light therapy". The author also feels that a physician after careful study of the text should be able to use light therapy intelligently in his practice. He persents the subject matter under the following headings: Definition and History; Physics; Sources of Therapeutic Light; Need for More Accurate Selection of Therapeutic Rays; Physiology; Technic of Application of Light Rays; Forms of Administration of Light Therapy; Indications for Ultraviolet Radiation; Ultraviolet Radiation in Diseases of the Alimentary Tract; Ultraviolet Radiation in Diseases of the Circulatory System; Ultraviolet Radiation in Diseases of the Respiratory System; Ultraviolet Radiation in Diseases of the Nervous System; Ultraviolet Radiation in Diseases of the Bones, Joints and Muscles; Ultraviolet Radiation in Skin Diseases; Ultraviolet Radiation in Genitourinary and Gynecological Diseases; Ultraviolet Radiation in Diseases of the Eye, Ear, Nose, Throat and Mouth; Ultraviolet Radiation in Systemic and Miscellaneous Diseases; Indications for Luminous Heat and Infrared Radiation; Contraindications to Light Therapy; Dangers and Limitations of Light Therapy and Conclusions. In conclusion it is stated that "Despite general usage of sunlight therapy, and of various types of therapeutic lights, light therapy is still in a chaotic state. There is still much controversy concerning the physiological effects of various light wavelengths, and about the technique of application. Light therapy has been applied too frequently in an empirical manner, without sufficient knowledge of its effects". E. A. P.

Experimental Pharmacology and Toxicology. By Henry G. Barbour, A. B., M., D., Yale University, New Haven, Conn. Illustrated. Price $2.75 net. Lea & Febiger Company, Philadelphia.

The title of this book might be misleading since it is not an investigative treatise but a laboratory course for medical students. As stated by the author, it is not intended to supplant more extensive works on the subject. Experiments performed with a minimum of special apparatus, and which are consistently successful, have been chosen to demonstrate the more important actions of drugs of proven therapeutic value.

Instructions for procedure are concise and are followed by a brief resume correlating the results obtained with clinical facts.

A section is devoted to instructions for class demonstrations which require some technical skill in performance.

The book should be of especial value to the beginning teacher of pharmacology who has limited funds to expend for animals and apparatus. M. H. S.

An Introduction to Dermatology. By Norman Walker, Kt., M. D., LL. D., F. R. C. P., consulting physician, assisted by G. H. Percival, M. D., Ph. D., F. R. C. P., assistant physician for Diseases of the Skin, The Royal Infirmary, Edinburgh. Ninth edition. Price $8.00. William Wood & Company, Baltimore. 1933.

The 9th edition of this well known work follows the same general plan of presentation employed in prior editions but it has been carefully revised in the light of the many new advances which have been made in the field of cutaneous medicine. Only the more common diseases of the skin are described, but each description is brief and to the point. They are fortified also by numerous illustrations and many plates, half tone and colored. But even more valuable perhaps is the note of personal opinion which the author incorporates in his discussions throughout the volume. The easy, conversational style which he uses in telling the reader his own views about these diseases is most commendable and the views themselves most sound and conservative. It is unfortunate that such a well written book be so poorly bound.

Senile Cataract; Methods of Operating. By W. A. Fisher, M. D., F. A. C. S. Second Edition, 267 pages with 183 figures. Chicago Eye, Ear, Nose, and Throat College, Chicago, 1933.

This little volume is made up of ten chapters, all of which (with the exception of the last) are devoted to the various methods of cataract extraction now in use. Five of the chapters have been written by Hofrat Prof. Ernst Fuchs, Prof. I. Barraquer, Dr. H. T. Holland, Dr. John Westley Wright, and Dr. A. Van Lint, respectively, in which each author describes his method. Four chapters are written by Dr. Fisher wherein he describes the procedure of Dr. Arnold Knapp, Prof. Elschnig, Homar Smith, and his own methods of extraction. In the last chapter Dr. Nugent discusses the fitting of correcting lenses after cataract extraction.

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cisely and thoroughly described. The book will prove invaluable not only to the student but to the experienced surgeon desirous of improving his technique and familiarizing himself with various methods of outstanding surgeons in this field of ophthalmic practice. F. A. D.

A Standard Classified Nomenclature of Disease. Compiled by The National Conference on Nomenclature of Disease. Edited by H. B. Logie, M. D., C. M., Executive Secretary. The Commonwealth Funds, New York 1933.

This volume supplies a long felt need for a standard nomenclature. It will doubtless be widely received by institutions and the profession at large, as the representative organizations recognize its position. The United States Public Health Service has previously effected similar service and it is to be hoped that one or other of these systems of disease classification and nomenclature will find preference in the interest of uniformity. W. S. M.

Roentgenographic Studies of the Urinary System. By William E. Lower, M. D., F. A. C. S., chief of department of urology, former associate professor of genitourinary surgery, Western Reserve University, surgeon to Cleveland Clinic Hospital, and Bernard H. Nichols, M. D., F. A. C. R., chief of department of roentgenology, Cleveland Clinic. Price $16.00. C. V. Mosby Co., St. Louis, Mo.

This book gives a complete x-ray study of lesions found in the urinary tract. The plates are well reproduced and a study of them would be of great benefit to one who reads urological films.

The book also shows the value of cooperation between the roentgenologist and the urologist. J. B. W.

Lymphatics, Lymph and Tissue Fluid. By Cecil K. Drinker, B. S., M. D., professor of physiology, Harvard School of Public Health and Madeline E. Field, A. B., Ph. D., instructor in physiology, Harvard School of Public Health. The Williams and Wilkins Company, Baltimore. Price $3.00.

This book gives within a moderate amount of space a masterly summary of an important but clinically much neglected subject, recent additions to knowledge of the anatomy and physiology of the lymphatics and their practical considerations in clinical medicine. It is written by authors who have made notable contributions to the subject and have the power of clear exposition and is well illustrated. The lymphatics permeate all but a few regions of the body (the depths of the central nervous system, spleen, bone marrow, epithelium, cartilege, sclera) and the surface area of the lymphatic capillary bed equals or exceeds in amount that of the blood capillaries. Blood capillaries and lymph capillaries lie in close proximity and the tissue spaces between them, occupied by tissue fluid and connective tissue cells is extremely small, but the activities which go on in these tissue spaces have important physiological and clinical bearings. Not the least valuable part of the book is an unusually good index as well as an excellent bibliography. It can be heartily recommended to the practitioner who desires to keep up-to-date and prefers interesting to dry exposition of new knowledge. C. R. B.

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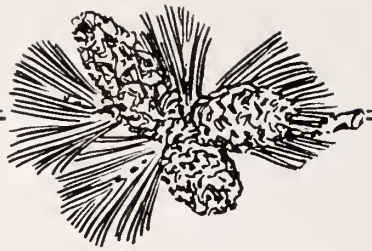

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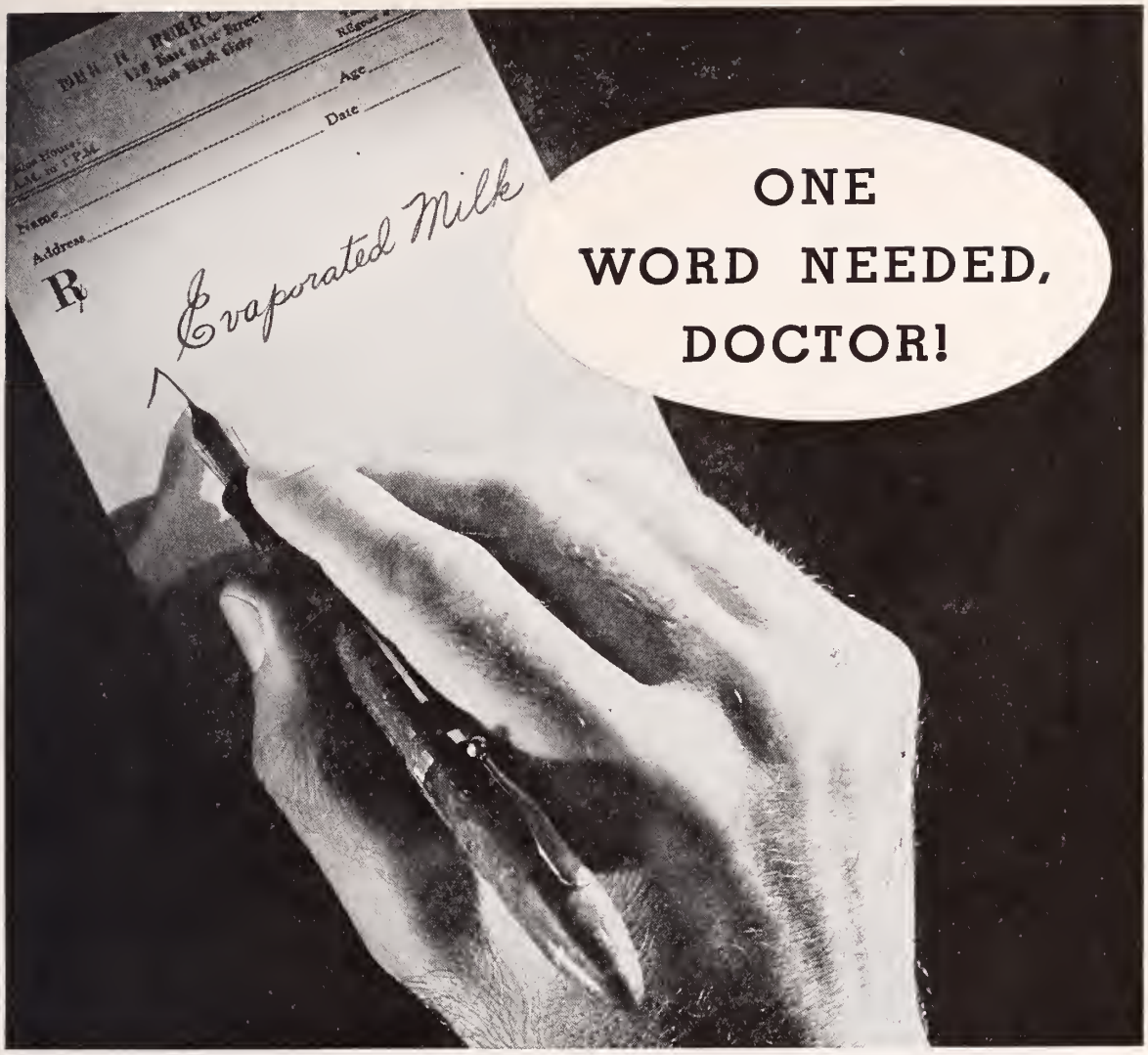

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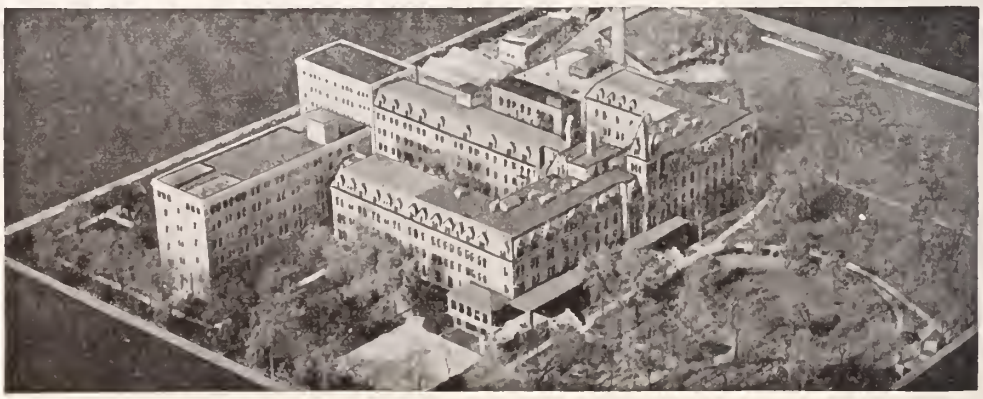

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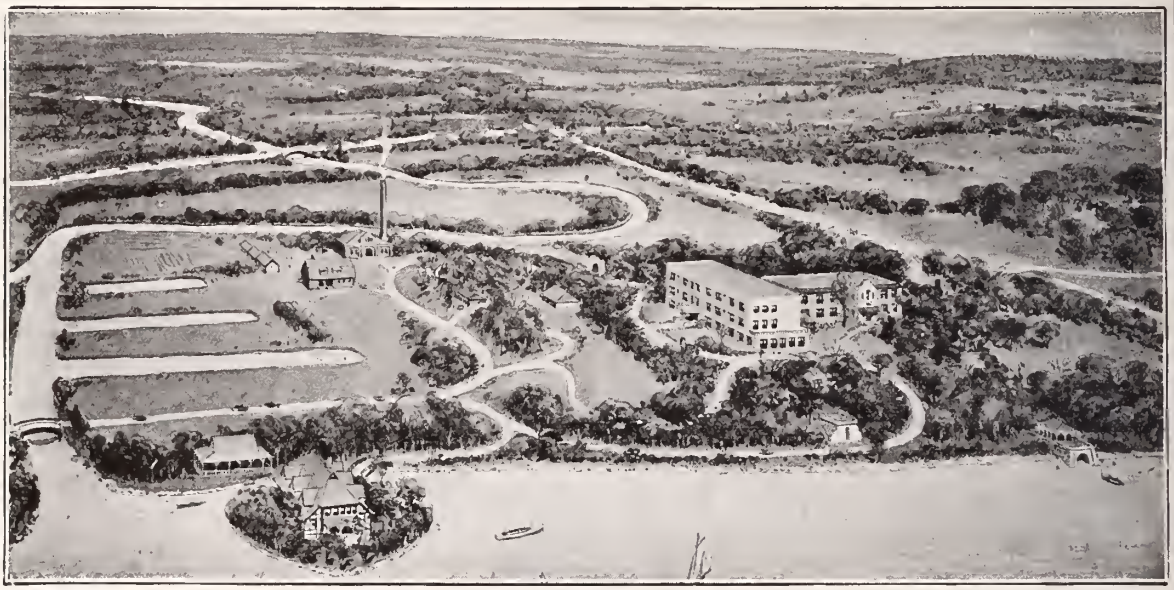

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The Wisconsin Medical Journal

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Occult Syphilis; A Neglected Factor in Diagnosis and Treatment*

By UDO J. WILE, M. D.
Professor of Dermatology and Syphilology
University of Michigan Medical School
Ann Arbor

In no other field of human pathology have the frontiers of our knowledge advanced with greater celerity than has occurred during the last two decades in the better understanding of the natural history of syphilis. The belated discovery of the infecting organism, the introduction of a unique biologic test in diagnosis, and finally the application of synthetic chemistry into treatment have each in turn stimulated interest and study to the end that today our knowledge of syphilis pathology and diagnosis is comprehensive and almost complete.

When we come to treatment, however, it must be admitted, that great as the above mentioned advance has been made, the therapeutic aspects of the disease have not kept pace with the diagnostic and pathologic frontiers. Treatment is still in a most fluid state and we are far from the last word as to how best to combat the marked pathologic changes so evident to naked eye, test tube, and microscope.

There are many factors which enter into what I believe must be the inevitable fluid status of syphilis treatment. For reasons which I will enter into later, the control of syphilis lies not in treatment, although this must be made more adequate, but in prevention, educative measures, and possibly ultimately through immunization.

The treatment of syphilis is beset by difficulties and multitudinous problems not paralleled by any other human disease entity. In its evolution, pathology, and from the economic standpoint, syphilis will stand comparison with no other disease, save tuberculosis. Both are chronic infectious granulomas, prone to recur, clinically curable, pathologically arrested, ubiquitous in distribution of invasion, and equally tissue destructive.

How vastly different, however, are these two in their therapeutic aspects. For tuberculosis, in whatever system or organ it takes place, irrespective of age and sex, certain fundamental principles can be laid down which are clear cut. Rest, dietary regime, sunlight and air are conditions which have shown themselves the essential factors which make for improvement or arrest rather than chemical or biologic germ sterilization.

For tuberculosis treatment, therefore, irrespective of the factors of age, race, sex, type of lesion present, fairly definite criteria for the achievement of clinical cure and pathological arrest are established and accepted. Standardization of treatment has therefore been the greatest factor in its control.

FACTORS IN TREATMENT

As it has been applied to syphilis, standardization has failed and will continue to fail except in so far as the broadest principles governing treatment are concerned. There is no disease in which it is more important to treat not the condition itself but the infected individual, and what might be an adequate treatment for one, may, in the light of certain contributory factors, be inadequate or even pernicious treatment in another. In the treatment of the syphilitic, the only constant factor is proper discrimination in the choice and combination of drugs, which are themselves not yet firmly established in our therapeutic armamentarium.

The intelligent approach to the therapy of the syphilized individual must take into account the age of the individual, the duration of the infection, the type of syphilis present, the system most seriously involved, the pres-

* Studies and Contributions from Department of Dermatology and Syphilology, University of Michigan Medical School, Service of Dr. Udo J. Wile. Presented before State Medical Society of Wisconsin, 1932. Revised to publication date.

ence of concurrent disease, the social status of the individual, and the background of previous treatment. To these, each of fundamental importance, I shall add later the subject of my thesis, namely, the occult or subclinical manifestations of the disease, which I believe to be a neglected factor of major consideration. What constitutes intelligent treatment for syphilis in one epoch of life is either inadequate or over treatment in another.

The syphilis of the newborn, with a high infant mortality, adds a real burden to the more normal risks of life and constitutes a major pediatric problem. Moreover we must distinguish immediately in this age group two fundamentally different types of cases; on the one hand those of prenatal developmental infection, on the other the acquired syphilis of the newborn, the infant or young child. Not only do these cases differ clinically, but their prognosis and their role in the spread of the infection is vastly different. Their treatment likewise differs in accordance with the type of disease present and the biologic differences between intra-uterine and postnatal infection.

At the other extreme of life is the senescent individual either with fresh infection or with a latent syphilis of many years standing. For obvious reasons arising not only because of the failure to tolerate energetic treatment with serious tissue damage, but because the senile individual is a different social problem with regard to dissemination, treatment must be expectant in many cases and in others if the cases are asymptomatic, and in the syphilis of long standing, in some instances treatment may be withheld.

The duration of the infection becomes at once an obvious factor in the determination of the type and kind and duration of treatment when one considers the general tendency of the disease to attenuate, the question of the fastigium of recurrence, the visceral damage incurred, the status of the individual with regard to marriage, as a past disseminator of his infection, or as a possible future source of infection to others. In this group one encounters the perplexing Wassermann-fast case so frequently asymptomatic, and individual cases each to be carefully analyzed as reflecting not only the individual's life expectancy but the relation of his infection to family and society.

The type of syphilis present and the system involved become self-evident factors of importance when one considers how much specialized treatment is necessary in the management of cardiovascular syphilis, of syphilis of the hepatic system, the syphilis, in which through obstruction the problem of surgery enters, syphilis of bone, and lastly syphilis of the nervous system; each one of which involves factors of special treatment and in some instances highly differentiated therapeutic procedures designed because of some special action upon the type of the tissue involved.

The presence of concurrent disease is a factor too often overlooked by the average clinician and the failure of its recognition often spells disaster for the patient. The not infrequent association of syphilis and tuberculosis, if the latter is open, constitutes a delicate therapeutic problem as does also syphilis when occurring in diabetes, in hypertension, in organic heart disease, and in other conditions in which one deals with an individual already damaged in the sites of syphilitic predilection by other morbid processes. I shall consider this question in greater detail in discussing syphilis as an occult factor in other disease processes.

The social status of the individual becomes a problem of far-reaching importance in determining the type of treatment and its duration. Time permits me only to talk briefly on this most important point. Here must be considered the individual's moral responsibility, his intellectual background as one who will accept lightly or with conscience the seriousness of his ailment. The irresponsible disseminator is, however, not only to be found among the conscienceless but is also encountered in the babe, the child, and in the large mass of floating ignorant individuals on whom the infection makes an impression only so long as it can be seen and felt. Control of the disease during the fastigium of infectiousness would be immeasurably easier if it were fortunately incapacitating and

painful during this period, instead of insidiously painless and consistent with life's ordinary activities.

The background of previous treatment is a factor closely related with those already mentioned but presenting special interest in the evaluation of tolerance to future therapeutic effort. It also brings to the front the question of over treatment and it also bears directly on the possibility of eliciting so-called serologic cure and the question of what constitutes adequate protection against recurrence.

SUB-CLINICAL MANIFESTATIONS

To these various factors, each in themselves constituting major considerations affecting prognosis and treatment but interlocking each with the other, must be added the factor of occult syphilis. Perhaps I can best define this factor as that form of infection, the lesion of which does not reach the clinical horizon. It may possibly be as well spoken of as the sub-clinical manifestations of the disease. By this it must not be assumed that the sub-clinical manifestations are in any way less serious than those which present themselves as clinical entities. On the contrary, in many cases the sub-clinical manifestations may constitute the major portion of the morbid processes and may be the outstanding factors in the prognosis in a given case. Their recognition is essential to its proper management.

So far as I know, although some attention to this phase of the disease has been given by competent syphilologists, little or nothing has been written concerning it.

I should like to discuss this phase of syphilitic disease as it is found, first, in an extraordinary unexplainable way as an interesting phenomenon in syphilis in women; second, as a factor when syphilis is found in the incidence of systemic disease of other nature; and lastly, the occult or sub-clinical syphilitic lesions in patients presenting late syphilitic sequelae.

A considerable literature exists regarding the differences between the sexes in the pathology, clinical course, and prognosis of syphilitic infection. The infrequency of cardiovascular syphilis in women, their apparent greater immunity of certain forms of neurosyphilis, especially the parenchymatous forms, and in general the milder course of the disease in the female have long been recognized as clinical observations.

Not only are the late manifestations in women more rare than in men, but even the earlier ones are often of an occult nature. The chancre itself is a far less frequent phenomenon in women than men as a clinical entity, and this of course must be due not to its absence but to its more evanescent character, and to a certain extent to the anatomical structures involved.

Of great interest in connection with the occult nature of syphilis in women is the large group of cases in which no manifestations of the disease have been recognized and in which clinical examinations fail to reveal preexistent or existent causes for a positive biologic reaction. Such are the cases of syphilis occurring in many women in whom the infection existed in the husband in a latent and partially treated case of some duration before marriage. It is the present custom to regard all such cases as potentially dangerous and requiring as energetic treatment as if the infection were seen as a fresh case from the outset. Such procedure is probably wise, but it cannot be gainsaid that the majority of these patients if untreated could go through many years of apparently normal existence carrying no sign of the disease other than that which occurs in the blood. In this group of course I am referring only to those which are completely asymptomatic regarding all systems. The clinical facts relating to a greater immunity toward syphilitic disease in women are borne out in a parallel way in autopsy studies. While a slightly larger percentage of late syphilitic disease is seen at post-mortem in the liver and in the adrenals in women than in men, these are not associated with a corresponding increase in clinical incidence occurring during life. On the other hand, both clinically and pathologically, latent syphilitic women seem extraordinarily free from the many elective signs of syphilitic disease in the heart and blood vessels, as well as those pre-

viously mentioned in the parenchyma of the cord and brain, as these occur in men. Hard physical labor and strain and stress of life do not altogether adequately explain this difference.

Of particular interest in this connection is the extraordinary difference in the selectivity of the Spirochaete for the male gonad with the almost absolute immunity of invasion in the female. Testicular syphilides, not only in the form of gummas, but of interstitial fibrosis, are among the most common findings in the late pathology of the disease. Their parallels in women in the form of ovarian lesions are never seen clinically, and are pathologic findings of the greatest rarity.

In recent years interesting studies have tended to show that an even greater degree of immunity occurs during the pregnant state than in the non-pregnant. It would seem therefore that sex itself contributes in some way toward greater susceptibility to syphilitic injury in men and to a lessened one in women.

FACTOR IN SYSTEMIC DISEASE

Turning now to occult syphilis as a factor in systemic disease, we approach a series of conditions which have become evident to us only since the introduction of the biologic tests in diagnosis. Generally speaking, the incidence of an old syphilis in association with systemic disease immediately becomes an interesting question in the evaluation of the syphilis as being casual or causal . Considering the wellknown mimicry of syphilis, the diagnostic problem is often a very nice one. This is particularly true in cases of syphilis with hepatic disease, gastric disease, cases of splenic anemia, and in cases of hyperthyroidism and aortic regurgitation. With regard to renal disease, my own experience has convinced me that very few cases of nephritis can be shown to be related to coexisting syphilis, that syphilis and hypertension when related are more apt to be casual than causal, and this is also true of diabetes.

Occult syphilis has been shown to be a factor of considerable importance in the development of carcinoma where this occurs in squamous epithelium, but is apparently unrelated where malignant neoplasms develop from columnar epithelium. Studies from my own clinic have shown cancer developing upon old syphilitic accidents and syphilitic residua such as keratoses and leukoplakia with greater frequency than in a non-syphilitic group. This is particularly true of the cancer of the tongue and oral mucosae, the cervix and vulva.

While in no way directly related, carcinoma and syphilis occasionally play a dual role in the liver and present a complicated diagnostic picture. I have seen four cases, in which, in a syphilitic cirrhotic liver, an enormous rapid increase in size, with nodulation and rapidly increasing icterus, led to the suspicion of cancer and the abandonment of the earlier diagnosis. Three of these at the post-mortem showed both syphilis and cancer. The latter was primary as a small shoe button-sized lesion in the caecum in two cases, in the sigmoid in the third, not demonstrable by x-ray. The fourth case died, without autopsy, but was so identical with the other three that we placed it tentatively in the same group.

Reference has been made before to the frequent association of tuberculosis and syphilis. In the majority of cases the latent tuberculous case presents no serious difficulty when managed as a fresh syphilitic infection. I have seen, however, a few cases in which an apparent latent tuberculosis seemed lighted up under an energetic syphilitic regime. A fresh syphilitic infection, however, in a seriously ill open case presents a therapeutic problem of the greatest delicacy. Reference must also be made to the clinical pathology of late pulmonary syphilis. According to our present criteria, a definite diagnosis of pulmonary syphilis can seldom be made during life except presumptively. In no other organ is mimicry so perfectly encountered. Not only can the entire pulmonary picture of tuberculosis be so closely simulated by syphilitic disease that a clinical diagnosis is impossible, but syphilis may present itself with the signs and symptoms of unresolved pneumonia, pulmonary abscess, and neoplasm. Occasional brilliant results

substantiate a presumptive diagnosis of syphilis under these conditions, following the institution of antisyphilitic regime, where the syphilis is suspected of being causal rather than a co-existent condition.

During the past twenty years in the wide goitre belt of the middle west, I have seen a number of cases of hyperthyroidism in association with syphilitic disease. For the most part these have indeed been merely the co-existence of two common diseases. We have, however, occasionally seen cases of pure syphilitic thyroiditis in the form of gumma in which in some instances tumor has been present alone, in others symptoms of hypothyroidism, and in still a smaller number symptoms of hyperthyroidism have occurred. Quite different, however, have been an interesting small number of cases in which, coincident with the onset of an early syphilis, preeruptive or during the eruptive period, patients have shown the abrupt onset of hyperthyroid disease. Some of these have been so gravely ill that operative measures were considered.

Without exception these cases have cleared up under antisyphilitic regime so promptly that we believe them to be definitely either the result of active syphilis of the thyroid (syphilitic thyroiditis), or as it seemed to us more likely, cases of acute hyperthyroidism occurring with syphilis as the insult precipitating in a potential hyperthyroid case the typical syndrome.

The intelligent treatment of syphilitic disease occurring either actively or latently in patients suffering with co-existent disease of other nature is not only an indication, but it may frequently be an important factor in the recovery from the associated condition; this is a prognostic possibility. Conversely, neglect of the occult syphilis which is co-existent with systemic disease of other nature, may be an important factor in the failure of patients to respond where such may be anticipated.

TREATMENT OF LATE LESIONS

When we approach sub-clinical syphilitic manifestations in their relation to late clinical syphilitic accidents, we bear directly upon the question of the success and failure of the treatment of the late lesions.

The marked tendency of late syphilitic accidents to manifest themselves as local dysfunctions in certain systems has led to a dissemination of effort in treatment dependent upon the particular system involved. The patient with tabes or paresis or other forms of neurosyphilis is seen and treated by the neurologist, the late eye syphilides by the ophthalmologist, the cardiologist claims for his own the cardiovascular cases, the internist sees the visceropathies, and the syphilis of bone is an orthopedic problem. For each, the case is apt to become a problem involving the individual system alone, when in fact in no instance is it more important to view the patient from the standpoint of all systems. Every patient with late sequelae presents a complex picture with clinical lesions as the striking feature, and sub-clinical or occult lesions in remote portions of the body as associated factors greatly influencing prognosis and treatment.

A few weeks of mixed treatment will perhaps suffice to improve or to relieve an external rectus palsy, or to resolve a gummous periostitis of the tibia. Iodide and rubs in moderation over a few weeks will frequently bring about extraordinary improvement in the sequelae following a mild cerebral thrombosis. They have little effect, however, upon the systemic infection which must be considered in each case as not only involving a local system by predilection, but which must be accepted as invading every structure of the body. It is far from my thought to emphasize that patients with clinical late syphilis should all be vigorously prosecuted with everything at our hands to influence the remote syphilides as well as those which present themselves in particular systems. Such treatment, if universally applied, would I am sure be occasionally provocative of great harm by damaging essential organs already injured and distorted. Emphasis, however, must be placed upon the fact that the neurosyphilitic is a patient with constitutional disease. For the moment the predominent symptoms present themselves as those of the nervous system. The patient with eye syphilis has visual or ocular dysfunction.

The co-existent occult syphilis in his heart and liver may be much more serious and a greater threat toward his life and existence than the clinical manifestations of his disease.

The patient with a cardiac syphilis is in the most precarious of all conditions. If he has suffered repeated attacks of failure, his immediate problem is a mechanical one and the treatment of his remote syphilis if too energetic may lead to his more rapid dissolution. The same thing is true of certain types of hepatic syphilis such as the pure interstitial types of syphilitic cirrhosis. Energetic treatment in hepatic syphilis in which gummas are present or in which those are associated with diffuse syphilitic hepatitis is frequently followed by brilliant recovery. In the syphilitic liver with extensive cirrhosis, however, in which treatment is too energetic, there frequently follows what many years ago I termed, "the therapeutic paradox." The patient improves with regard to his syphilis and becomes worse or dies of cirrhosis. The reason for this is not difficult to understand. The hepatic syphilis is but a single phase of the widespread constitutional disease, one phase of an extensive visceral syphilis. The improvement in general health, in the associated anemia, in the general vascular tone may be expected and usually follows energetic treatment. What happens, however, to the liver? The gummous masses in the combined form disappear rapidly and are replaced by scar tissue. The associated multitudinous microscopic syphilomas are likewise rapidly dispersed. In both instances the replacing scar tissue produces a more advanced degree of cirrhosis than was caused by the gradual progress of the disease process. At the end stage, therefore, one has to do not only with the disease itself but with the mechanical factors of scar tissue. What happens in the liver can be seen with equal frequency in the over-treated syphilized heart. I have repeatedly seen decompensation and failure occur following initial general betterment when treatment has been radically severe, where the indications called for more conservative measures.

The successful treatment of late syphilitic accidents calls for not only the accurate diagnosis and judicious management in the system bearing the immediate brunt, but a careful evaluation of the contributory factors which are the result of remote syphilis in other organs and tissues of the body. In many instances these may be demonstrable by searching clinical examination presenting themselves as asymptomatic lesions. Their complete absence, however, to careful search can in no way be accepted as evidence of their pathologic non-existence.

SUMMARY

Occult syphilis occurring either as an interesting selective sex phenomenon, or as an accompaniment of systemic disease of other nature, or lastly, as a sub-clinical factor in patent systemic syphilitic disease, is always an important factor to be considered in diagnostic and prognostic appraisal. Together with age, system involved, duration of the disease, background of previous treatment, social status, and other factors, it constitutes an unchangeable obstacle to uniformity of treatment, and makes for syphilis a disease not only impossible but undesirable of therapeutic standardization.

Cholecystitis; Conclusions Based on a Study of Five Hundred Operations*

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Although the subject of gall bladder disease has been very thoroughly discussed, there remain a number of unanswered problems. Recent developments in the fields of roentgenology and anesthesia present further questions of interest to the physician who assumes the early responsibility of diagnosis and treatment and to the surgeon who must decide upon the advisability and type of operation.

Cholecystostomy was the method of treatment for many years despite the fact that Lagenbrech demonstrated the merits of cholecystectomy in 1882. Many have proved the

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end results of cholecystostomy to be unsatisfactory, yet this operation is still advocated.

It is a fact that the results of cholecystectomy are more satisfactory than are those of cholecystostomy. To determine just how successful are the results of removal of the gall bladder is one of the purposes of this study. Chart I

CHART I

787 Cases Observed at Jackson Clinic 1921–'31

603 cases operated for gall bladder disease.
500 cases used in this study.
392 number of females.
108 number of males.

The material used in the preparation of this paper is based on an analysis of 787 cases of cholecystitis examined at the Jackson Clinic from 1921–'31. During this period there were 603 operations for disease of the biliary tract, the last consecutive 500 of which were selected for this study. Cholecystectomy was performed in every instance with the exception of those of acute cholecystitis in mild shock, in certain jaundice cases, or debilitation in the aged where it seemed safer to merely drain the gall bladder.

In this group there were 392 females and 108 males, whose average age was 44 years. The youngest patient was 18 years of age and the oldest 78. These two extremes are not unusual and many cases either younger or older have been reported in the literature. One of the most interesting was that of Sanders who reported doing a cholecystectomy in a child of four for a large cystic gall bladder where the diagnosis suggested was intussusception. The average age in his series of cases was the same, and Sanders calls attention to the fact that this age is considerably younger than that formerly reported, which fact he attributes to the increase in diagnostic accuracy.

The average weight of our group was 148 pounds which tends to corroborate Deaver's adage of "female, fair, fat and forty".

The studies of Graham and his co-workers, and the improvements of roentgenology have proved so valuable in the diagnosis of gall bladder disease that the number of cases coming to operation has greatly increased. A decade or more ago patients went to the operating table after unbearable attacks of colic, and only for the removal of stones. Now the indications for operation have so broadened that in the opinion of some the surgical pendulum has swung too far.

Laboratory tests are never infallible and during the period of development of the oral and the intravenous dye tests, diagnostic errors have occurred. With the perfection of these methods, our diagnostic armamentarium has been greatly enhanced and a much higher percentage of vague and obscure cases are coming to operation with resultant relief of symptoms. Lahey considers the Graham test the most valuable diagnostic laboratory procedure in gall stone cases. He believes the method should be correct in 80 to 90 per cent but is subject to errors, and should always be correlated with the clinical findings.

Since the introduction of the cholecystogram intravenous dye test in our clinic by Dr. J. N. Sisk in 1929 results have been obtained as shown in chart V.

A series of one thousand intravenous cholecystograms was finished during August, 1932. In this series, the result was such that 489 were pronounced normal; malfunction with no stones found, by x-ray, 341; malfunction with opaque stones, 53; malfunction with nonopaque stones, 117. Of this series, 231 were operated on. Eight of these cases, roentgenologically normal, were explored, and cholecystitis grade I was found in six, grade II in two. As is always to be expected, the non-functioning no stone cases on x-ray diagnosis showed the greatest discrepancy at surgery. In this series, the malfunction was confirmed in all but twelve cases, but nonopaque stones were found in 49. Of the 170 cases where stones were reported as seen on the x-ray film, 125 went to surgery, where the stones were found in 120. Leaving out the error of 49 instances in which non-opaque stones were found at surgery, but not seen on the x-ray film, the roentgenologic diagnosis was confirmed in 205 out of 231 instances, of which six were in that doubtful group of "grade I cholecystitis," an error of slightly more than eleven per cent.

These statistics indicate the great reliance we have come to place upon the diagnostic

value of the intravenous dye test when the method is correctly used.—Chart VI.

CHART II

Analysis of 500 Cases Gall Bladder Disease

244 complained of upper abdominal distress.
126 had gall stone colic.
330 gall bladders contained stones.
172 had indefinite complaints.
224 complained of nausea or vomiting.
82 mentioned jaundice.

CHART III

Analysis of 500 Operations for Gall Bladder Disease

254 had cholecystectomy only.
204 had cholecystectomy and appendectomy.
30 had cholecystectomy and operation for ulcer.

CHART IV

Operative Mortality Analysis

Number of gall bladder operations ---------- 500
Number of deaths ---------- 27
Mortality precentage ---------- 5.4%
Deaths include:
5 cases perforation with peritonitis.
3 with obstructive jaundice.
15 with multiple op's.
5 with acute empyema.
3 with hypertension.
19 were over 50 years.
8 were past 60 years.

CHART V

No. of Intravenous cholecystograms, 1929–1932 ---------- 1000
No. of these cases operated upon ---------- 231
Diagnosis confirmed at surgery ---------- 205
Diagnosis not confirmed at surgery ---------- 26
Percentage of error ---------- 11% plus

CHART VI

Number of non-functioning cases by the oral method checked intravenously ---------- 120
Normal function shown in this group by the intravenous method ---------- 61
Per cent of error by oral method as against intravenous ---------- 50% plus

EXTEMPORANEOUS LABORATORY AID

CHART VII

Pathological Analysis

366 Cases of Chronic Cholecystitis
330 Contained Gall Stones
26 Cases of Gangrene
12 Of Acute Empyema
20 Strawberry Type
6 Perforation
42 Acute Cholecystitis
4 Malignancy

CHART VIII

Diagnostic Methods of Importance in Gall Bladder Disease

1. Clinical History
2. Graham Dye Test
3. Physical Findings
4. Laboratory Tests
5. Inspection of Gall Bladder and Ducts
6. Inspection of Liver for Hepatitis
7. Palpation Gall Bladder and ducts

INDICATIONS FOR CHOLECYSTECTOMY

Many physicians and surgeons have felt that a good clinical history was the decisive factor in determining the indications for cholecystectomy. Such evidence is essential, but it is my belief that the history is only one of the important points.

Probably the most accurate proof of gall bladder disease is that determined by vision and palpation. On opening the abdomen the color and consistency of the gall bladder are apparent. The presence of adhesions, of pancreatitis, of stones, and most important the degree of hepatitis, is ascertained. I believe this latter sign is the most significant diagnostic criteria of gall bladder disease. It was shown by Graham, as well as by MacCarty and myself, that hepatitis and cholecystitis are commonly associated. This was determined by making a pathological study of sections removed from the liver and gall bladder at the time of operation. The close relationship of the two disease processes was so apparent that in spite of the clinical history, the surgeons who followed this work became skeptical of removing a gall bladder in the absence of hepatitis. On the other hand, despite the history, if hepatitis is marked, removal of the gall bladder is often indicated, particularly if this finding coincides with the cholecystogram.

Judd believes that removal of the gall bladder in these cases, even in the absence of marked pathological changes, is indicated since its removal must bring about a change by modifying the physiologic processes of the liver.

To return to an analysis of the 500 cases; 244 patients complained of some upper abdominal distress; only 126 or one out of four had gall stone colic, despite the fact that 330 of the gall bladders removed at operation

contained stones. In 172 cases (34 + per cent), the complaint was indefinite and not especially related to the gall bladder. 224 (44 + per cent) of the patients complained of either nausea or vomiting, and jaundice was mentioned by 82. Chart II.

OPERATIVE PROCEDURE

All the good results of cholecystectomy cannot be attributed to removal of the gall bladder since the appendix, a coexistent ulcer, or other possible sources of trouble may also be eliminated. In this group the gall bladder only was removed in 254, while in 204 both the gall bladder and appendix were removed. In 30 patients duodenal ulcer was present and was excised or a gastro-enterostomy or pyloroplasty was performed.

Giuseppe feels that appendectomy should always be performed when possible as a prophylaxis of gall bladder disease, since the source of infection of the latter he feels is from the appendix.

While we prefer to remove the gall bladder whenever possible, at times cholecystostomy may be an operation of necessity or an operation of choice. As pointed out by Estes when disease of the gall bladder is complicated by marked pancreatitis, diffuse cholangitis, or involvement of the common duct, the use of the gall bladder for drainage may outweigh the necessity for its extirpation, or it may be needed later for a cholecystenterostomy. Jaundice may be an indication for cholecystostomy. Chart III.

The problem of drainage following removal of the gall bladder is one that has concerned surgeons during recent years. Several, whose opinion is highly regarded, have advocated closure of the abdomen without drainage, among these being Judd, Lockwood and Sanders. The latter closed 174 cases and reported it was unnecessary to re-open the abdomen in a single instance nor had there been leakage of bile into the peritoneal cavity. The late Willy Meyer performed cholecystectomy in a large series without drainage and with excellent results. Then, he lost two patients that he felt might have been saved by drainage and as a result he returned to this method. In our own group, my brother Reginald and myself have continued the use of a small drain; while my brother James some years ago discontinued draining the majority of his cases. So far as the immediate results are concerned they indicate an average of five days shorter convalescence and a quicker wound-healing in the non-drainage type. Scarcely sufficient time has elapsed to determine whether or not this method will yield more favorable results in the long run. Drains increase the tendency to adhesions, and, although the patient is relieved by operation, he may occasionally complain of pains suggesting adhesions pulling the duodenum.

Of the cases in this series closed without drainage there were 70 of which 2 died. (2.8 per cent). In neither instance did the absence of drainage appear to be a decisive factor. There were 430 patients whose wounds were drained, of which number 25 (5.8 per cent) died. The risk in the latter was greater since all cases of empyema, gangrene, or rupture of the gall bladder are drained.

For many years I felt it was not safe to close a wound following thyroidectomy, but since 1928 I have closed over 80 per cent of my cases without drainage and without a single regrettable sequela. I have not had the same courage to omit drainage following cholecystectomy, possibly because many leaders of surgery as Willy Meyer, Sir Birkley Moynihan and others have tried this method and later abandoned it. In fairness to those who advocate primary closure, it must be admitted that some patients have complaints persisting after drainage that may result from adhesions. For illustration a large gangrenous gall bladder was removed from a middle aged man following a single acute attack. No stones were present in the gall bladder or the common duct. Although the patient made a good recovery, he has at times complained of a rather constant pain in the region of the wound. Repeated x-ray studies of the gastro-intestinal tract and analysis of the stomach contents are negative. He has never been jaundiced nor has he had colic. The x-rays suggest probable duodenal adhesions that undoubtedly explain this pain.

Suturing a flap of omentum around the tube or over the liver bed, as suggested by Judd, does not always seem to prove effective.

The argument has also been advanced by those opposed to drainage that drains are conducive to wound infection thus prolonging convalescence and predisposing to postoperative hernia, while those favoring drainage feel that the leakage of bile from the gall bladder bed or the stump of the cystic duct may result in fatal termination without the safety factor of a drain.

Gibbon states, "having lost one case from infection following bile leakage, I long ago abandoned closure without a soft rubber drain".

That a second operation is frequently indicated following cholecystostomy is shown by the fact that it was necessary to remove the gall bladder some years after drainage in 16 instances. In 4 of these cases cholecystostomy had been previously performed at the clinic. In practically all cases, drainage was done years ago before cholecystectomy became the operation of choice. Chart IV.

Our operative mortality for gall bladder disease has been lowered since 1929 when we began the routine use of spinal anesthesia. It has shortened the time of operation and has largely done away with chest complications so prone to develop after inhalation anesthesia. Elimination of ether has relieved all the vital organs and especially the liver and stomach of a sometimes fatal load. Postoperative dilatation of the stomach, persistent vomiting, prolonged hiccoughs, and even ileus are a rarity with spinal anesthesia.

Deaths occur, however, in spite of advances in surgery and anesthesia. The factors of age, obesity, debility, myocardial weakness, hypertension, pancreatitis, advanced hepatitis, perforation with peritonitis, or of prolonged jaundice must still be met; likewise the element of shock in the acute gangrenous form. It is in this type that spinal anesthesia contrary to a common conception has proved of great value when care has been taken to first build up the blood pressure with ephedrin, as suggested by my brother Reginald.

Among the causes of death were the following: cerebral hemorrhage, intestinal obstruction, pneumonia, peritonitis, uremia, obstructive jaundice following acute suppurative hepatitis, pulmonary embolism, empyema of lung, abscess of liver, cirrhosis and cardiac failure. In the list of 27 mortalities there were 5 cases of perforation of the gall bladder with peritonitis; there were 5 with empyema; 3 with obstructive jaundice; and 15 that required other surgery than removal of the gall bladder, a fact that I consider very significant. The risk appeared to be especially bad when a ventral hernia was repaired at the same time. There were two cases of marked obesity, and four in which myocardial weakness was recognized clinically before operation. Three had hypertension, one patient having a systolic pressure of 230. The youngest patient was 38, the oldest 70, and 19 were 50 years or over; 8 were past 60.

Stanton and Connell have called attention to rapid high temperature deaths following biliary tract surgery. In this group there was one case of this type.

PATHOLOGICAL STUDY

A pathological study of the gall bladder specimens showed evidence of chronic cholecystitis in 366. There were 42 cases of acute cholecystitis.

We do not prefer to consider an operation for cholecystitis as an emergency, but desire to operate between attacks. There are at times, however, definite and immediate indications for operation. In the presence of an acute fulminating process similar to that seen in appendicitis, when there is present a large tense gall bladder, a high white count and septic fever, surgical delay may result in disaster. Cholecystostomy, especially in the presence of shock, may be preferable to removal of the gall bladder in this type.

That the mortality rate in these cases is high is shown by the fact that five of the deaths in this group were of the acute fulminating type. Whether or not it is safe to wait has been well summarized by Lahey. He says, "In the patient in whom the temperature tends to come down, tenderness tends to become localized, spasm tends to disappear, and the general reaction continues favorable, we believe that it is safe to wait. If at the end of two, three, or four days, tenderness persists, temperature remains elevated, the white count continues high, and no improvement is discernible, then we believe that the

case demands preliminary drainage of the gall bladder with later cholecystectomy."

In 26 cases gangrene of the gall bladder was present and in 12 instances there was acute empyema. 36 were classified as subacute cholecystitis, and there were 20 of the so-called strawberry type. Six patients went to the operating table in a critical condition with rupture of the gall bladder and peritonitis.

RESUME' OF THE QUESTIONNAIRE

A resumé of the answers to a questionnaire mailed to the patients embracing this study was most enlightening. Many of the patients made one or more visits to the clinic following operation and others returned as a result of the questionnaire so that it was possible to more accurately tabulate the end results. A summary of the answers showed the following data:

Records studied	500	Free from colic	193
Died following operation	27	Free from gas and belching	179
Died from other causes subsequently	24	Free from jaundice	217
Letters returned unclaimed	250	Free from hernia or bulging wound	215
Answering questionnaire	250	Free from pain	162
No. Cured	178 or 71.2%	Attacks of colic	57
No. Improved	59 or 23.6%	Attacks of gas and belching	71
No change noted	13 or 5.2%	Attacks of jaundice	33
		Hernia or bulging wound	35
		Attacks of pain	88

Anyone who has made studies of questionnaires appreciates the problems that arise. Statistics can be made to give various interpretations. In studies of this kind, however, the surgeon is placed at a disadvantage, because trivial symptoms are often magnified particularly by the nervous individual. In this resume' the hopeless mental attitude of many suffering from the financial depression was evident. Subsequent observation of patients complaining of frequent spells of indigestion frequently showed this condition to be largely the result of nervous indigestion over failure of finances. Likewise many who felt that the wound was bulging or that a hernia was present were found to have well knit strong incisions, but unfortunately it was not possible to check most of these. I believe a majority of the reports of subsequent jaundice may be discounted, since many people fail to discriminate between a sallow color and jaundice. Nevertheless several instances in which stone in the common duct was either overlooked at the time of operation or subsequently developed undoubtedly occurred in this series.

The patients relieved of pain or who still suffered were the ones that proved of most interest. There were three that had come complaining only of pain below the right scapula. They had previously undergone treatment for neuritis, arthritis, etc. In every instance the cholecystogram showed a nonfunctioning gall bladder and in two the presence of stones. I removed their gall bladders with entire relief of symptoms.

The percentage of cures in this series is comparable to those reported by Dwyer and Dowling who analyzed 600 cases and found 79.7 per cent of their cases successful. Also to those of Sanders who reported 84 per cent cures.

There are many subjects of significance concerning gall bladder disease that time did not permit of discussion. The value of the pre- and postoperative care, the necessity of avoiding injury to the common duct, the importance of opening and draining the latter when indicated, the arguments pro and con regarding the preparation of jaundice cases, of the merits of the oral and the intravenous Graham dye test, of the liver functional tests and other subjects of prime interest.

The attempt has been made in this paper merely to draw deductions from those subjects which seemed of most importance and whose solution is as yet unsolved. If the end results of surgery of the biliary tract are to be successful, operation must be performed before the liver is irreparably damaged. Figs. 1 and 2.

CONCLUSIONS

1. Conclusions based on a study of 500 operations for cholecystitis are presented.

2. There were 392 females and 108 males. The youngest patient was 18 years of age and the oldest 78.

3. A summary is presented of *1,000* cases in which the intravenous method of cholecystogram was used.

Fig. I. Solitary gallstone, one of the largest in this series.

Fig. II. Multiple stones in a small contracted gall-bladder. In this type of case careful examination should be made of the common duct for possible stones.

4. Attention is called to the close relationship of hepatitis and cholecystitis as an indication for or against removal of the gall bladder.

5. There were 330 gall bladders containing stones, but only 126 patients complained of gall stone colic. 82 mentioned jaundice.

6. In 254 cases the gall bladder only was removed. In 204 the appendix was also removed and in 30 an operation for ulcer was performed.

7. 70 cases were closed without drainage with a mortality rate of 2.8 per cent. In 430 cases drainage was used with a mortality of 5.8 per cent. The latter group contained the most serious cases.

8. Spinal anesthesia is advocated, the method being used in 212 cases with a reduction of complications, particularly of the lungs and the gastro-intestinal tract.

9. There were 27 deaths, including 5 cases of perforation with peritonitis, 3 of obstructive jaundice, 5 with empyema of the gall bladder, and 15 that required multiple operations. 21 were past 50 years of age.

10. There were 366 cases of chronic cholecystitis, 42 of acute cholecystitis, 26 of gangrene, 12 of acute empyema, 20 of the so-called strawberry type, and 6 of perforation.

11. A resume' of a questionnaire is given. 250 answered or were examined. 237 were cured or greatly improved. 13 were not benefited.

12. 88 complained of pain at times. The possible factor of postoperative adhesions resulting from drains is considered.

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Diaphragmatic Hernia; Symptoms and Diagnosis of Traumatic Type, With Report of a Case*

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"Hernia of the diaphragm is of interest to surgeons and clinicians alike, partly because of the spectacular event so often connected with its acquirement or its repair, and partly because of its rarity." This sentence is quoted from remarks by Dr. Chas. H. Mayo.[1] My purpose in presenting this subject at this time is to increase your interest and stimulate your diagnostic acumen along lines which will be outlined. It is unlikely that the occurrence of diaphragmatic hernia is any greater today than it was a decade ago, but the recognition of cases has increased many fold, due, it seems, to the fact that more of us are looking for this condition, and also to the increased use of the Roentgen rays in routine physical examinations.

Among the earliest reports of diaphragmatic hernia (traumatic) were those by Ambrose Paré in 1610.

In the 66 years (up to 1920) Guy's Hospital records show only two cases of diaphragmatic hernia (traumatic).

In 1912 Giffin[2] states in the Annals of Surgery: "About 650 cases of diaphragmatic hernia have been reported, of which it would seem fifteen had been correctly diagnosed during life. It is safe to say however that the signs and symptoms of diaphragmatic hernia were often quite clear, but were not elicited because of lack of familiarity with them. If a history of severe trauma be elicited—a crushing injury to the lower thorax or upper abdomen; a severe twist with consequent strain upon the organs of the upper abdomen; a sudden doubling of the body with the chest between the knees; a penetration of tissues in the region of the diaphragm, as in a stab wound, the existence of a rupture of the diaphragm should be suspected."

Twelve years later Watson[3] writes as follows: "The symptoms of diaphragmatic hernia are often indefinite, and it is only since the advent of the Roentgen ray examerations with various clinical diagnoses. the condition during life." Gibson[4] in the Journal of the American Medical Association arrives at the following conclusion: "This diagnosis of diaphragmatic hernia without the assistance of roentgenology or fluoroscopy is difficult."

In a series of 60 cases reported by Ritvo[5] in 1930 several of the patients had one or more abdominal operations without relief. Several others had been advised to have operations with various clinical diagnoses. Three patients had the gall bladder removed, and two the appendix. One patient had an exploratory laparotomy and was informed that no pathologic condition was found. The seventh of this group had been operated upon three times in the past five years—the first time for the removal of a chronic appendix, then for a cholecystectomy, and finally for adhesions.

Truesdale[6] has this to say of the symptoms and physical signs of diaphragmatic hernia. "The sypmtoms of hernia of the diaphragm are odd because of their variety and complexity. Occurring with so many other affections they readily admit of erroneous interpretation. So fantastic are the chest symptoms and physical signs that a competent internist interpreted his observations in case number I as moderately advanced pulmonary tuberculosis. By others the attacks of cyanosis were thought to be due to heart disease and the cough to bronchitis. In case V the prevailing preoperative opinion was indigestion, obstinate constipation, and later acute obstruction, probably intussusception. In case VI the attacks of cough and cyanosis were attributed to pertussis. In case VII gastrointestinal upsets were thought to be due to dietary errors. In case VIII, the last physician called, one of six, alone suggested a Roentgen ray study. This evidence is indicative of failure to consider the possible presence of hernia of the diaphragm from the history and physical

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examination. In case XII, for example, the patient was found in a tuberculosis sanatorium—she had been sent there by examiners in one of our state clinics.

In adults the clinical picture of diaphragmatic hernia is often so bizarre and bears resemblance so closely to the symptoms of other diseases of the heart, lungs, stomach, and gall bladder and intestines that this deformity is not among the examiner's thoughts when he makes the diagnosis by elimination.

Morrison [7] in reporting his series of 42 cases states that all but one had been diagnosed clinically as ulcer or disease of the gall bladder.

Lacher[8] writes that every abdominal organ except genitalia, bladder, and rectum has been found in the thorax.

Many classifications have been suggested but the simplest one appears to be the best, namely, traumatic, direct or indirect; and non-traumatic, congenital or acquired. Due, perhaps, to the protection afforded the right diaphragm by the liver, the left side is affected approximately 25 times as often as the right.

A short review of the anatomy will refresh our memories of this structure. The trunk is divided by the diaphragm, or midriff, into two great cavities, the thorax and abdomen. The diaphragm is a muscular, tendinous structure, attached by its circumference to the ensiform cartilage, six or seven lower costal cartilages, the external and internal arched ligaments, and upper two or three lumbar vertebrae by two crura. It is inserted into a central trifoil tendon and points convexly upward, therefore increasing the vertical diameter of the abdomen at the expense of the thorax.

In moderate expiration this convexity reaches to the level of the fourth intercostal space on the right, and to the fifth on the left. This gives a general landmark for the base of the lungs and heart apex above, and the upper limits of the liver and stomach below.

In its development the diaphragm is formed by a dorsal part from the mesentery of the foregut, and from two lateral parts which spring centrally from the septum transversum and laterally from the body wall. These different portions may not fuse, thus leaving an aperture of communication between the pleural and peritoneal cavities.

Hernia of abdominal contents into the thorax may be through any natural opening which has weakened or dilated. This is the usual form of non-traumatic hernia, and frequently has a sac. It may also occur through a traumatic opening in the diaphragm, which may be a rent or tear in any part, but usually in the center of the left leaf.

Twenty years ago Carson[9] and Huelsman in an article on "Diaphragmatic Hernia Diagnosed before Operation" enumerated five physical signs of diaphragmatic hernia as follows: "(1) displacement of the heart; (2) drawing in of the abdomen; (3) intestinal noises in the chest; (4) absence of breath sounds and changes in percussion note; (5) changeable character of signs on change of position of patient as well as with the patient in the same position."

SYMPTOMS

Symptoms may be vague over a considerable period of time—the very mild cases having but few or slight symptoms, and the diagnosis is too often an accident of radiography or fluoroscopy.

A division of symptoms into two groups seems logical: First, the thoracic; second the abdominal.

In the first or thoracic group the complaint may be dyspnea and shortness of breath, especially upon exertion or after a heavy or rapidly consumed meal, and may be so severe as to prevent the patient from lying down. Cardiac pressure, evidenced by cyanosis, substernal pain, syncope, irregularity of heart action, and displacement, depending upon the amount of fluid or gas in the stomach or bowels. The pain mentioned above is usually referred to the left upper chest and shoulder, and may be mistaken for the referred pain of angina pectoris. Auscultation at the base of the lung reveals absence of respiratory sounds, which are present at the apex. The lower portion of the left thorax will be found resonant if the stomach and intestines are empty, but if

filled there will be dullness elicited. Cough is relieved by change of position and has been mistaken for pertussis.

In the second or abdominal group, symptoms are those of an indefinite gastric distress (colicky in character). Belching is not constant, but very annoying at times. Constipation is practically always present, and requires much care. Vomiting occurs with indiscretion of diet. Indigestion usually disappears when the patient learns how to regulate his diet. Intestinal obstruction may occur when a volvulus or kinking of the bowel takes place. Practically all of these symptoms are more common at night, and when the recumbent position is assumed.

Differential diagnosis: Among the diseases to be differentiated are carcinoma of the stomach, carcinoma of lower end of esophagus, peptic ulcer, gall bladder disease, and angina pectoris.

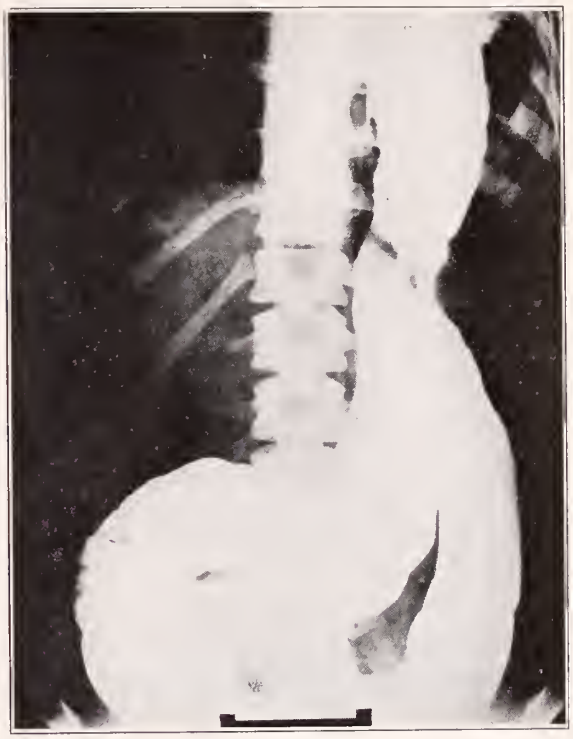
CASE REPORT

The patient is a woman aged 27 years who was in an automobile accident February, 1931, receiving a frontal fracture of the skull, together with severe burns of the face, eye, chest, and right knee, as a result of which she remained unconscious for a period of three weeks.

Shortly after regaining consciousness she complained of indefinite discomfort in the left upper abdomen and left chest, which condition did not improve with her general improvement.

Five months after the accident her symptoms were practically unchanged and it was suggested that she was becoming neurotic. Her complaint at this time being pain in the upper abdomen which is worse in the early morning hours, and on some days it is much better than on others. Taking food aggravates the condition, and lying down is generally impossible. There is shortness of breath occasionally, and she states that there seems to be a pressure in the left chest, with pounding and palpitation of the heart. In the upright or semi-recumbent position the symptoms improve noticeably. She wonders why she becomes so nervous at times. On account of an obtinate constipation, it has been necessary for her to use laxatives regularly.

Physical examination showed a "nervous type" woman, with extensive scars of burns on her face and body. Her weight was 123 pounds, the pulse rate 82 per minute, temperature 98.4 degrees, and the blood pressure 100 systolic over 70 diastolic. Heart sounds were best heard to the right of the sternum. The lung sounds were absent in the lower left chest, but present in the region of the apex. Peculiar gas sounds were heard in the left chest.



Case Report
Barium enema showing colon extending upward to second intercostal space. Taken five months after accident.

X-ray examination of chest showed part of the stomach and intestines in the left lower chest. The lateral position of the diaphragm is depressed to the level of the tenth interspace, posteriorly. The heart and mediastinum are displaced towards the right. The right diaphragm is in normal position, and shows normal motion. Examination by means of the barium meal shows a normal esophagus. Immediately after entering the cardia, the barium is seen filling the stomach, the greater part of which is above the diaphragm. In the prone position, the highest point of the stomach is at the level of the second anterior intercostal space. In the upright position, it reaches to the fifth intercostal space. Loops of small intestines are seen above the diaphragm beside the stomach. Examination five hours later shows no gastric residual.

Examination of the colon by means of barium shows about sixteen inches of colon (splenic flexure, part of the descending and transverse colon) above the left diaphragm. The herniation takes place in the median half of the diaphragm, and the opening of the hernia must be large.

Diagnosis: Large left diaphragmatic hernia.

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Injuries to the Heart and Aorta*

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Although injuries to the heart and its coverings do not appear often in the literature and no one doctor, unless he be in a large community, has opportunity to see many such cases, yet such injuries not infrequently occur, and if they do not result in immediate death, often cause partial or permanent disability with death months or years after the injury.

"The superficial position of the heart and pericardium, directly behind the sternum and the adjacent cartilages, exposes them to danger from injuries to the anterior chest wall. With or without injury to the ribs, or even without obvious external bruising, an external blow may produce very serious damage to the intrathoracic structures."[1]

The mechanism may be explained somewhat as follows:

The bony thorax is not a rigid structure, but can be compressed both laterally and antero-posteriorly to a varying degree depending on the age of the person and the resilience of the cartilaginous rib-ends. In full inspiration sudden compression of the chest finds the heart caught and held between the inflated lungs. A sudden violent blow on the chest, whether over the heart or not, may injure the heart particularly if it is in diastole. It may rupture the myocardium, a valve or the root of the aorta.

All such injuries have been reported. Further, violent blows over other parts of the body without injury to the chest wall have caused rupture of the heart.

In 1886 Bernstein[3] collected 123 cases and reported three which he had personally observed. His search of the literature revealed the first case of purulent pericarditis from injury reported by Blancard in 1688. The first case of traumatic aneurysm was reported by Testa in 1813. This was a 55 year old man who fell backwards from a tree. The aneurysm did not appear until sometime after the injury, and nine months after he was hurt it was as large as an egg, was visibly pulsating, and had eroded the right fourth rib.

There were several cases of acute pericarditis following fist blows over the heart. A number of cases lived for several years after injury, and at autopsy adherent pericardium, rupture of chordae tendinae, tricuspid and mitral valves, mitral stenosis, aortic insufficiency and stenosis were found. All these lesions were considered to be the results of injuries.

Breschet, in 1826, reported the case of a 19 year old gondolier who fell against the side of his boat. The acute pain in the chest quickly disappeared. Six years later he had pains in his side, dyspnea, cough and palpitation in the right chest. Two years later he had another attack with constant heart pain and attacks of dyspnea. In a fainting spell he fell in the water and was drowned. This was ten years after the injury. At autopsy there was chronic adhesive pericarditis and aneurysm of the heart (site not given).

Bernstein also reports two cases from Veterinary Medicine. The first was a cow which was violently rammed in the ribs by an ox. Death followed several days after the injury. At autopsy the endocardium in many places was cloudy, slightly swollen, grayish yellow in color, with delicate thrombotic covering. The pathological diagnosis was recent endocarditis.

The other case was that of a horse which was kicked in the chest by another horse five weeks before being observed by the reporter. Immediately following the injury

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there was difficult breathing which became worse and worse. Edema of the chest wall and extremities set in. Death occurred five weeks after injury. At autopsy the heart was enormously enlarged, the mitral and tricuspid valves were both insufficient. There was passive congestion of all the organs. The author (Lustig) considered that the dilatation must be looked upon as the cause of the insufficiency and this was due to the shock of the injury.

All authors who have reported upon traumatic heart disease call attention to the many ways in which the heart can be injured without or with puncture of the ribs. In reading the literature one comes across every variety of injury. Furthermore, all authors bring out the fact that it is not absolutely essential that the blow or shock be over the chest. Under such conditions the resulting heart affection is assumed to be based on some previous heart lesion or arteriosclerosis.

Heimann[4] says that trauma injures the heart in two ways, (1) causes inflammation (pericarditis, endocarditis), (2) mechanical lesions, rupture, tearing of valves. Often these two effects are combined. That blows over the heart of various kinds produce pericarditis is spoken of by all authors. The resulting adhesive pericarditis may or may not embarrass the heart. Verrucose endocarditis has followed a blow over the heart which ruptured an aortic valve. Biggs in 1890 reported one of the first of such cases where rupture of an aortic valve was followed by bacterial endocarditis.

In order of frequency the aortic valves are most commonly ruptured, next are the mitral where usually the chordae tendinae are torn from their attachments to the valves, then the tricuspid valves, and last and rarely the pulmonic valves.

A sudden rupture of one or two aortic valves produces violent symptoms. There is a tearing sensation in the chest accompanied by rapid heart beat and collapse. The picture is quite comparable to that produced experimentally in dogs by tearing or cutting a cusp by running a hooked knife into the heart through the carotid artery.

That typical mitral stenosis can be produced by trauma is shown in a case reported by Heimann. The subject, a boy, suffered a crushing injury to his chest at the age of ten. Marked deformity of the thorax was produced. There never was rheumatic fever or any allied disease. He lived for about eight years dying of heart failure. At autopsy the peculiar character of the fibrosis of the mitral valve established without doubt the traumatic origin of the mitral lesion.

No attempt has been made to list all of the cases reported in the literature. That the condition is not so uncommon is shown, by the fact that in 1881 Barrie[5] reported on 100 cases. In 1896, Bernstein[3] reported on 126 cases. Kahn and Kahn have seen a number of cases of various injuries so that one cannot say that the condition is rare. At the present time there can be no doubt that automobile accidents are producing many unrecognized cases of heart injury. The obviously broken bones which must be repaired direct attention away from the heart and the enforced rest may well be the saving of the victim's life so far as the development of heart weakness is concerned.

An interesting and important point comes up especially when the question of compensation for injury is brought forward. That is, how long a time can elpase between the alleged injury and the symptoms, disability or death.

In the reported cases one finds many cases where the author feels that although even several years elapse between the accident and death from heart disease, the accident must be blamed for the ultimate death. More specifically Bernstein has carefully analyzed 126 cases in respect to this question. He found:

Immediate result of trauma or continuation of the immediate symptoms	85 cases	67.6%
After an interval of one month	22 cases	17.5%
After an interval of one year	6 cases	4.7%
After an interval of more than one year	9 cases	7.1%
Without known interval	4 cases	3.1%

He then analyzed the 42 autopsied cases with the following results, the time between the injury and death varied from three days to twenty years:

INTERVAL BETWEEN INJURY AND DEATH IN 42 AUTOPSIED CASES (BERNSTEIN)

(A) Less than one month in 10 cases
(B) Less than one year in 8 cases
(C) More than one year in 20 cases
(D) Not given in 4 cases

Further analysis revealed the following lesions in these cases:

	A	B	C	D	Total
Endocarditis	3	2	10	1	16
Myocarditis	0	0	0	0	0
Pericarditis	5	2	2	1	10
Endo and Myocarditis	1	1	2	0	4
Endo and Pericarditis	0	1	4	0	5
Peri and Myocarditis	1	1	2	1	5
Pancarditis	0	1	1	0	2
	10	8	21	3	42

Another important point in respect to the question of compensation is the state of the patient prior to the injury. All authors agree with Bernstein who says that little stress is to be laid on the previous state of the patient's health. If he were able to work and were without symptoms, we must attribute every increase of the heart trouble to the injury. Even a slight trauma may upset the delicate balance of a heart with diseased valves. For we know that without any external conditions such hearts may go along for years.

Dufour[6] in 1896 produced rupture of the aortic valves in normal dogs by blows on the chest wall with a mallet. He showed that it was during diastole that rupture occurred. Rubino in 1892 injected dogs intravenously with virulent cultures of staphylococcus pyogenes aureus and albus. Following the injections alone the pericardium was never affected. On the contrary if cold were placed over the heart area or if the chest were struck repeated blows with a small hammer, pericarditis or diffuse purulent myocarditis was produced in one-half the cases with staphylococcus albus but not with staphylococcus aureus. Bernstein says that compression of the dog's thorax over the heart has led to increased rate, irregularity and increase in heart stroke. Above and below the heart compression has no effects.

Ziemssen[7] reported the case of a woman with an exposed heart who developed extrasystoles when light digital compression was made at the auriculo-ventricular ring. Strong compression produced delirium cordis.

Aneurysm of the aorta following upon violent blow over the heart has been known since the time of Vesalius[8]. "The essential pathology consists of a split of the intima and inner portion of the media; a dissecting aneurysm may follow with healing or with a rupture; a saccular aneurysm may form, or the wall of the aorta may rupture completely."

CASE HISTORY

A case illustrating this lesion is as follows:

Case 1: Mrs. J. G. (seen in consultation with Dr. Gilbert Mueller, Milwaukee) was riding in the rear seat of an automobile on the 13th of November, 1931, at 7:30 A. M., when there was a collision and she was thrown forward striking the front of her chest violently against the back of the front seat. She was stunned but not unconscious, and noticed pain beneath the sternum immediately. The pain extended along the base of the right lung anteriorly to about the mid-axillary line also along the base of left lung. She noticed a bruise of her right hip with ecchymosis. The pain beneath the sternum was most severe. It was aggravated by respiration and caused a "choking sensation." She was taken at once to the County Emergency Hospital where she was superficially examined, and, because she said she felt well enough to go home, she was allowed to go after about three quarters of an hour. No x-ray was taken,—there seemed no special indication for it. She went home, prepared breakfast but could not eat. By noon she felt so bad she went to bed. There were weakness and oppression beneath the sternum. Late that night she suddenly had an attack of violent dyspnea, felt she was going to die. Her doctor was called who found her cyanotic and gasping for breath, with a rapid almost imperceptible pulse. She gradually grew better. She remained in bed for three days. There was marked soreness and stiffness of the chest. She could get to the lavatory with difficulty. On November 18, 1931, she was brought to Columbia Hospital for x-ray of the chest. She went home and returned to bed. On November 23, she was admitted to Columbia Hospital. Her complaint then was shortness of breath on least exertion, palpitation of heart, and constant pain beneath the lower sternum.

She had never been seriously ill in her life, had borne six children, there were no miscarriages, and previous to the accident she was perfectly well. On physical examination she was a stocky well-developed and nourished woman, lying quietly in bed with no distress. Wassermann of blood was negative. Spinal fluid was normal in all respects. Blood count and urinalysis were normal. The whole interest centered about the chest. The pulse was 96 regular, B. P., 155/60. The respirations were shallow, the chest was symmetrical. There was broad dull-

ness in the upper chest extending to right and left of manubruim 4–5 cm. In the fourth right intercostal space, the dullness extended 6 cm. From the midline, the dullness then continued obliquely to the left so that at the diaphragm it was at the sternal margin. The apex beat was made out in the fifth interspace, 15 cm. from the midline. There were no definite murmurs although M-I had a muffled quality. At the base A2>P2 and aortic sound was somewhat muffled. No bruises were seen on the chest. The percussion appearance suggested an aneurysm arising from the ascending arch. The x-ray picture confirmed this diagnosis. By fluoroscope, there was no very definite pulsation of the huge tumor. On lateral view the aorta seemed very wide as far as the diaphragm.

COMMENT

It was considered that the blow fractured the aorta just above the valves, produced a large blood clot between the media and adventitia, then dissected upward to the mid-transverse aorta and downward to the diaphragm. There was no pericardial friction at any time, but she complained of pain behind the ensiform cartilage. This may have been due to the stretching of the aortic coats just at the diaphragmatic opening. After three weeks she was discharged, but even to date she occasionally has sudden attacks of collapse with cyanosis and rapid pulse, although in general she seems fairly well.

That this is an aneurysm is rendered probable by comparison with a proved case of aneurysm of the ascending aorta in a man, the x-ray film kindly loaned by Dr. M. F. Rogers. It will be seen that the pictures are almost identical.

As an illustration of the result of a blow not over the heart but violent enough to disrupt the equilibriam in a workman with luetic aortic regurgitation, who was not aware that he had any heart trouble, I cite the following case:

SECOND CASE

M. L., a workman in an automobile body factory, 52 years old, was struck violently in the right side just below the ribs by a heavy iron bar while at work. He was in considerable pain, was not unconscious but had to stop work and went home. The next day he tried to work, but his heart was beating so fast and he was so short of breath that he could not do his ordinary work. He went to bed at home for several weeks, when he seemed to feel better and tried to work again, Sept. 29, 1931. He worked only three nights when his feet began to swell, his abdomen grew large, he was short of breath and weak. He had to go to bed again where he remained until June, 1932. During this time he had attacks of nocturnal dyspnea, there was constant stomach distress, palpitation of the heart, edema of the legs and ascites. There was also pain in the side for several months.

I first saw him some time in November 1931 at which time he was in bed complaining of the above symptoms.

He had always been in good health, had never been absent from work on account of any signs or symptoms on the part of his heart. As a young man he served in the German Army, and while he denied syphilis, his blood Wassermann is 4+. He has two healthy children. His wife has had no miscarriages. On examination, he was a strongly built, muscular man above the average height. There was an icteric tint to his skin. He was slightly propped up in bed and was quite dyspneic. The pupils and other reflexes were normal. The chest heaved with every pulsation, and the vessels at the root of the neck throbbed at every systole. The apex beat was seen and felt in the sixth interspace 15 cm. from the midline. At the apex there was a presystolic thrill and a systolic push. On auscultation there was a loud low-pitched presystolic rumble followed by the first sound, and a soft systolic murmur transmitted as far as the mid-axilla. There was a soft diastolic murmur along the left border of the sternum. P2 was clear but A2 was replaced by the murmur. There was also a short systolic murmur at the aortic area transmitted to the vessels of the neck. The pulse was typically collapsing. B. P. 160/40. The rate was 100 and regular.

There were mucous rales in the bases of both lungs. The liver was enormously enlarged and smooth. There was dullness in the flanks and the legs were edematous beyond the knees.

Under treatment he gradually improved so that by June 1932 he was able to take a short walk out-of-doors. However, he had a return of his dyspnea, swollen liver and edema following a little too much exercise. At present he is quite comfortable and able to walk several blocks without distress.

COMMENT

There can be little doubt that this man had syphilitic aortitis with aortic insufficiency for an indeterminate period before he was injured. The blow on the side, although not over the heart, broke the equilibrium of his circulation, and caused decompensation. As has been noted within, blows of violence not over the heart have caused rupture of the valves and of the heart itself. The fact that this man had heart disease before the injury does not alter the fact that from the time of the blow he has had heart failure. No one can say for how many years he might have done his work had he not had the accident.

It was stated above that cases of bacterial endocarditis have been reported following blows over the chest. The endocarditis may develop on a healthy ruptured valve or upon a valve already the seat of previous disease. The following case illustrates the latter sequence of events:

THIRD CASE

Case 3: G. H., a young man 20 years old, remembered himself no illness in his life. From his mother it was learned that at the age of five he had an attack of acute rheumatic fever and at eight years old he was in bed for 3–4 months with a "heart attack." Following this attack, his tonsils were removed. He never knew that he had anything the matter with his heart and has always done all kinds of work without any distress. His work was at present a drug store clerk. His maximum weight was 136 pounds.

On Sept. 13, 1931, he was riding in an automobile which was struck by another automobile. He was temporarily knocked unconscious and had some lacerations and abrasions over his body. He at once felt his heart fluttering and became weak. A doctor found that he had auricular fibrillation. Under treatment, the rhythm became regular but the pulse rate continued rather rapid. He was kept in bed two months. I saw him when he had been up about eight days. He felt weak but seemed to have recovered from the accident.

Examination revealed a youth 5′ 8″ tall, weighing 126 lbs. The pulse was regular, collapsing, 124 to the minute. The heart was slightly enlarged with typical signs of aortic regurgitation. The temperature and respiration were normal. The blood pressure was 160/80. It was also noted that the finger-ends were slightly clubbed. X-ray examination of the heart showed only slight left ventricular hypertrophy. His rapid pulse was considered to be only apprehension. At the time it was thought that he would be able to return to work in another week. How wrong this opinion was is shown by the subsequent course.

On May 10, 1932, he was seen again and gave the following history. Since last examination (Nov. 23, 1931) he has been up and down suffering from weakness, fever off and on, sweats frequently and recurring painful and discolored swellings over his skin in various places. These swellings would appear as lumps under the skin, were very tender, and in a few days became like bruises. Some were on the finger and toe pads. One 2mm. tender, red spot was still on the volar surface of the tip of the middle finger of the right hand. There was a distinct pallor of the mucous membranes. No petechiae were seen. The finger ends were distinctly clubbed. His weight was 117½ lbs., pulse 104 regular, temperature 98.6°. A squeaky systolic murmur was now audible at the apex transmitted to the axilla. The spleen was easily palpable. The leucocytes were 15,000. There seemed no question but that he had subacute bacterial endocarditis.

Since then he has been running a characteristic course, gradually going downward.*

COMMENT

This case shows two of the conditions resulting from injury, auricular fibrillation and bacterial endocarditis. One might argue that the aortic lesion predisposes to implantation with bacteria, and many persons spontaneously develop this condition. This is quite true, but in this case the first shock produced such a disturbance in the heart that auricular fibrillation resulted, and following the return to normal rhythm, the valves were already infected. The fact that he had aortic regurgitation enters into the situation only as a *locus minoris resistentiae.* People with such lesions live and do hard work for years. There is no telling how long this boy would have lived had he not had the accident.

There are cases in the literature of bacteria being implanted on ruptured valves in a previously healthy heart. Whether he was struck over the heart or not has little bearing in the case. Saphir and others have reported rupture of the heart when the accident blow was over the hips or the thighs or other parts of the body.

SUMMARY

Injuries to the heart from external violence, excluding foreign body wounds of the heart, are probably not so uncommon. A review of the literature reveals that such injuries have been known for at least two and a half centuries and the knowledge of traumatic aneurysm dates back to the early part of the sixteenth century. At times the blow causes only a pericarditis with resulting synechiae of the two layers and the heart is not seriously embarrassed. At times ecchymosis beneath the visceral pericardium or larger hemorrhages into the myocardium result from chest blows. Rupture of valves, especially the aortic valve, is not so infrequent, leading to rapid dilatation with its consequences, and also to implantation of bacteria on the damaged valve cusp.

* Patient has recently died.

It is of particular interest that serious blows, on the body away from the heart area or chest itself, have been followed by symptoms of heart failure which may not show themselves for months after the injury. This condition to which all authors agree has already given rise to the question of compensation of workmen. It can be readily imagined that such a case might expose sharp differences of opinion on the part of medical witnesses. The age of the individual assumes importance as well as the continuous progression of symptoms following the injury.

All authors are also agreed that if a man is able to carry on his daily work as any well man does, that he is unaware that he has a heart lesion, be it valvular or other, an injury which leads to heart failure is to be looked upon as the cause of the failure even though there was an abnormal heart in the man's body. In an apparently well man, compensation is established for his heart, and no one knows for how many years he will go on free from all symptoms. A blow, a sudden shock disturbs the delicate balance between the ventricles, may cause acute dilatation of one ventricle, so that the resulting symptoms must be considered to be the direct result of the injury. In other words the state of the man's heart at the time of injury has no bearing on the connection between the injury and a resulting series of heart symptoms, provided that the man was to all intents and purposes well and could carry on his daily life as any normal man.

Finally, it is to be borne in mind that most serious injuries can happen to the heart where there is no fracture of ribs or sternum and where there is no skin discoloration or other evidences of chest injury. Full diastole of the heart is the period when most injuries to the organ occur, for it is then that the relaxed muscle filled with blood can be most easily damaged by sudden compression.

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The Early Orthopaedic Treatment of Infantile Paralysis*

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The orthopaedic treatment of poliomyelitis is concerned not only with correcting deformities, but with preventing them. It should begin, not after deformities are present, but as soon as the patient is paralyzed. Rest is the greatest single factor in treatment, and physiological rest is obtained only by proper splinting. Good care will do much to lessen the severity and duration of tenderness. Irreparable damage to weakened muscles may result from over-stretching them—and this overstretching is prevented by proper splinting. Most contractures may be prevented by early splinting and constant supervision of the posture in bed.

* Presented before State Medical Society of Wisconsin, 1932. Revised to publication date.

THE ACUTE (TENDER) STAGE

If the paralysis is extensive, the patient should lie on a firm mattress which does not sag in the middle. Weak springs may be improved by laying table leaves or similar boards between the mattress and the springs. Foot drop may be simply prevented by placing a box or a board upright at the end of the bed and holding it firmly against the feet. If the knees sag into "back knee" in spite of the firm mattress, they must be supported by a folded towel or small blanket. Slight flexion is preferable to hyperextension.

The recently paralyzed arm should be supported by sandbags and pillows at right angles to the body, rotated somewhat out-

ward, with the elbow flexed to 90°, and the wrist bent slightly backward. The patient with a tender arm will soon become accustomed to whatever position is first assumed and resent any attempted moving. It is well, therefore, to start with this routinely desirable position, and maintain it until muscle tests later indicate a change. Early testing of the power of tender muscles serves no purpose and is not only painful to the patient but is actually *harmful* to the muscles themselves.

During the tender stage, the patient should be handled as gently as possible. The skin should be kept clean, but bathing should not be vigorous enough to cause pain. Massage is not to be thought of for many weeks. In all of the nursing care, the position should be disturbed as little as is consistent with the prevention of bedsores. Heat often relieves the tenderness, and is of benefit in stimulating circulation. A heat lamp with a carbon filament is convenient. Hot moist applications are also good. Whatever method is used, one must be careful not to overheat the part. Water bottles and electric pads are undesirable because of their weight. After a few weeks warm baths are grateful if the patient can be easily transferred to a large tub.

As the muscles lose their tenderness the patient may be turned. With the toes hanging over the end of the mattress there is no tendency to foot drop, and there is no discomfort or deformity caused by the weight of the bedclothes. Lying on the abdomen is particularly desirable in cases with weak abdomen and back muscles, and is effective in counteracting the beginning of scoliosis. In this position there is no tendency to hip flexion deformity. An existing contracture of this type may often be corrected suprisingly well by regular periods of lying prone with a twenty-pound sandbag on the buttocks. (Fig. 1) *But it is better to prevent than correct deformities.*

These simple measures are not long sufficient to maintain the correct positions, however, and splints are necessary. A simple, metal, right angle splint is commonly used to prevent foot drop. It is cheaply made of heavy iron wire with a sheet metal foot plate.

Fig. I. The prone lie with a sandbag on the buttocks.

If a good deal of infantile paralysis is treated a variety of sizes may be kept on hand for immediate use. For the occasional polio a splint may be quickly supplied to measure by a bracemaker or blacksmith. The metal frame is covered with towels, which may be changed when soiled. The cloth conforms to the shape of the calf but does not cover the heel. Metal loops project at the angle and support the splint so that there is no danger of pressure on the heel. A strap over the instep holds the foot securely in place.

Applying the splint to the leg is a simple matter if there is no deformity. The foot readily comes to a right angle and is strapped securely but not too tightly in place. If there is already some foot drop, the angle of the splint may be temporarily changed to conform to the foot. Then as the contracture yields, the splint is again gradually bent to a right angle. Later the angle may be increased if muscle tests show that the calf muscle is weaker than the dorsiflexor group. The tightness of the towels is so adjusted that the heel does not rest on the bed. It is important to have the foot plate considerably longer than the foot so that the splint will hold up the weight of the bedclothes.

For general use, a simple wire splint is to be recommended. A flat foot or club foot is a frequent deformity of infantile paralysis, however. Such a splint is then a good temporary measure but should soon be replaced by one which will hold the foot turned inward or outward.

Plaster of paris is excellent material for this special splint. Knitted stockinette

Fig. II. The Hubbard orthopaedic tub.

forms a soft, smooth foundation. A suitable size is rolled and applied to the leg. For the greatest efficiency the splint is not otherwise padded except for a small disc of felt which is cut for the tip of the heel. A reinforcement is made by laying folds of one plaster bandage back and forth on a smooth surface. The layers are well rubbed together for strength. When completed, the reinforcement is cut about one-third through on either side of the heel. With the felt pad in place over the tip of the heel, the plaster is quickly moulded to the leg before it begins to set. Overlapping of the cut edges at the heel avoids wrinkles and adds to the strength of the splint. Circular turns of plaster are then applied in the usual manner. The splint need not be heavy. Two six inch bandages in addition to the reinforcement are usually sufficient for an adult, and one is plenty for a child.

During the application of the plaster the assistant supports the knee with one hand, and by holding the toes with the other, keeps the foot in the correct position. While the plaster is setting it is moulded to conform to the body contours. If the splint fits accurately it is more comfortable and there is no danger of pressure sores.

When the plaster has set the front half of the cast is trimmed away, leaving a posterior shell. The redundant stockinette is folded back over the edges and secured with plaster of paris or adhesive. The completed splint should be dried several hours before it is used. It should be perfectly smooth inside. The pad in the heel is securely embedded and forms a cushion at this pressure point. An elastic cotton bandage holds the splint in place without danger of constriction.

If the paralysis of an arm lasts more than a week or two, an aeroplane splint should be supplied for use in bed, and later when the patient sits up. The arm is comfortably and securely held at a right angle to the body, slightly forward flexed, and with the elbow more or less than a right angle as indicated by the relative power of the triceps and biceps. Additional splints for the fingers may be added if necessary. This outfit is worn day and night and removed only for bathing. Even then the arm is not allowed to hang down at the side but is supported in the same position by the attendant or the edge of the tub.

THE CONVALESCENT STAGE

Only when the muscle tenderness is entirely gone can exercises be started. Gentle movement under water at a temperature of 95° to 98° F is an ideal beginning. (1) The water warms cold muscles. It buoys the extremities so that gravity is counteracted and free play of the individual muscle groups

is allowed. The danger of over-fatigue is lessened. Later the resistance of the water builds up muscle power. Exercise of the arm is permitted in a special orthopaedic tub which is so shaped that a physiotherapist may stand near the patient and accurately control the movements without straining her back. (Fig. 2) There is room for full motion of the hips yet the tub is sparing of water because it is narrow at the center.

If the patient is almost entirely paralyzed, so that he cannot complete the arc of motion, he must concentrate on the motion while the physiotherapist completes the arc for him. Only one muscle group is exercised at a time.

While the patient is still confined to bed, sling suspension exercises are well combined with those in the tub. The extremity is placed in a padded sling which is hung from a frame or the ceiling. Under the supervision of a physiotherapist or a trained mother the legs may be exercised. Overdevelopment of already strong muscles at the expense of weak ones must be avoided.

For work on the individual muscles the physiotherapist uses a broad table with a padded, leather-covered top. Motion is always controlled by the physiotherapist who aids or resists the patient as required. With the patient on his back, hip exercises may be performed with slight resistance from the physiotherapist. One must be careful to avoid straining the knee backward. Knee exercises on the table require the patient to lie on the affected side, which is opposite to the rule in the water. This position is also good for developing hip muscles with friction of the table top offering resistance to a partially recovered muscle.

If a physiotherapy department is not available, the later treatment may be carried out by the well trained visiting nurse or mother at home. A child is given a warm bath and simple under water exercises in an ordinary tub. With children, muscle-training is easier on the kitchen table than in bed. The leg is first warmed with a heat lamp, because feeble muscles cannot work well when cold. Then the leg is gently massaged. The light strokes are mainly with the heel of the hand. Massage should always be away from the hand or foot, that is, toward the heart. Then powder is sprinkled on the smooth surface to eliminate friction, and the exercises performed with gravity largely eliminated.

After a few months of physiotherapy, more activity must be permitted. Swimming and walking in the water may be allowed earlier than walking with braces. Small tanks or indoor pools may be adapted for the purpose. More active movements under water prepare the patient for swimming. Later come the actual motions of swimming with the patient lying on a board or plinth. When the form is mastered, the patient is supported by an air ring or an over-head sling and allowed to practice the strokes in deep water.

The time to allow walking varies greatly. It would be ideal if the patient with extensive paralysis of the lower extremities could be kept from walking for a year or more, but circumstances alter cases here as in all medical treatment. Braces should be worn when the patient first gets up. They have three main functions.

Most important at first is the protective one. Muscles which are weakened by poliomyelitis will soon become tired and overstretched if they receive the whole weight of the body. Braces share the strain of weight bearing and when there is a padded ring at the hip the weight of the body is borne directly on the brace. Then some patients who would otherwise be confined to bed or a chair because of weakness, are able to walk when braces act as artificial legs. A third function of braces is to prevent deformity. Drop foot, back knee, and knee flexion as a result of paralyzed muscles are all potential deformities. If a patient with a back knee or a drop foot is allowed to go without a brace the deformities will become much worse. By wearing a long leg brace with the knee slightly bent and the foot held at a right angle, he is able to walk with the foot and knee in good position. One cannot emphasize too often that in all of orthopaedics, the best treatment is to prevent rather than correct deformity.

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Ectopia Viscerum, Associated With Placenta Praevia Centralis: Case Report

By EDGAR HABECK, M. D.
Milwaukee

Mrs. B., age 18, para II reported for prenatal care July 20, 1932, having had her last menstruation March 5, 1932.

Her 22 months old boy, weighed 6¼ pounds at birth, and was now a perfect specimen. This previous labor was normal and spontaneous. There was no history of venereal infection, and her husband was well. The patient had a tonsillectomy in 1923, no previous accidents, no other operations, and no serious past illnesses.

Her heart and lungs were negative to physical examination, pulse 88, B. Pr. 90/50, blood Wassermann negative, thyroid normal size, height 5′ 1″. Her initial weight of 109 pounds increased to 124 pounds at the seventh month of gestation. Decalcification of her teeth was marked and upon my advice she consumed two quarts of milk daily, plus three tablespoons of Cod Liver Oil fortified with Viosterol, plus a general plain diet. The urine was normal throughout gestation and the blood pressure remained as above. Pelvic measurements: Interspinous 20 cm.; Intercristal 25 cm.; Boudeloque 17.5 cm.; Intertrochanteric 31 cm.

The only abnormality found in addition to her marked decalcification was a breech presentation. In attempting to correct this into a vertex, without an anesthetic, on October 21, 1932, the fetus seemed unusually firm in its position. The fetal heart tones were 140, left, and at the umbilicus. On this occasion the patient became unusually faint following this version maneuver. The possibility of a partially detached placenta occurred to me and prohibited further version attempts. However, the absence of pain and bleeding per vagina, and persistent strong fetal heart tones, overshadowed this presumption.

On November 11th the patient noticed a large amount of blood escaping per vagina without pains or contractions. Rectal followed by a confirmatory vaginal examination at the Deaconess Hospital disclosed profuse blood clots and hemorrhage: The cervix admitted one finger and the placenta could be felt at the internal os.

Fig. 1

In performing a classical Cesarean section, this date, extreme difficulty was encountered in delivering the fetus, (head at fundus) due to its firm attachment to the placenta praevia centralis. Both were delivered en masse. Maternal recovery uneventful. (How disastrous might not have been an attempted external and forceful version under anesthesia.)

The fetal monstrosity, Ectopia Viscerum, was unusually interesting because of its close and firm attachment to the placenta praevia and its membranes—there being an absence of the umbilical cord. The herniated abdominal contents were in close contact with the fetal surface of the placenta, and the membranes were attached to the margins of this large herniated area. This male fetus with miniature genitalia weighed four pounds, fourteen ounces. Head structures were normal. The neck was abnormally stocky. Upper extremities normal, the left lower extremity had an exaggerated pes planus deformity, the right lower a talipes equinovarus. The thorax was one-half normal length and dissection revealed an absence of the diaphragm. The entire abdominal contents, including the liver were eviscerated, and only covered by the membrana re-uniens. The anus was imperforate and the umbilical cord absent.

The placenta was firmly attached to this mass of abdominal contents, lying at a distance of two inches from them. The thin membrana re-uniens was continuous with the placental membranes. The umbilical vein and arteries were imbedded in these membranes at the periphery of the abdominal herniated mass.

(Continued on page 724)

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EDITORIALS

DIABETES AND THE DEPRESSION

THOUGH the results of hard times are always reflected in an increased death rate from tuberculosis and diseases favored by undernourishment and poor living conditions, there is one disease that invariably shows a declining death rate during and right after a depression and the longer it lasts the lower the death rate goes. Then with a return of prosperity up it goes again. There was a sharp drop in deaths from diabetes mellitus during and right after the war much more noticeable in Europe than America. Then with the return of prosperity up to the boom years 1927 and 1928 a sharp upward trend was observed. Now we are witnessing a downward movement in deaths from diabetes.

It has been noted by many observers that the States supporting a predominating rural population as a rule show much lower death rates than urban centers. South Carolina, Montana and North Dakota, to take three rural States as examples, show death rates over a twenty year period of six or nine per 100,000 in 1910, increasing slowly to rates of 8 to 18 per 100,000 in 1931; whereas metropolitan and urban centres have increased from rates of 9 or 10 per 100,000 to rates as high as 25 and 28 per 100,000. Urban Wisconsin had a rate of 28.4 in 1928 and 25.9 in 1929 while rural Wisconsin during the same years showed death rates of 18.1 and 14.7 per 100,000.

It is an interesting speculation to try to determine the cause of this difference.

In the first place deaths of rural people in urban hospitals are not charged back to the towns from which they come, but in a personal communication from Louis I. Dublin, Statistician of the Metropolitan Life Insurance Co., this is not considered great enough to account for the disparity. Neither is the influx of retired farmers to cities held responsible.

What is true, however, a fact that all students of diabetes accept, is that the increased consumption of food, particularly rich foods, increases the deaths from diabetes. Do the farmers eat less than city dwellers? No, I think they eat more, but they burn their food up in a life of great physical activity utterly foreign to the urbanite.

Race may be an important factor. Nebraska, though chiefly a rural state, has a relatively large death rate from diabetes. It has not fallen below 21 per 100,000 during the four years, 1928 to 1931. But Nebraska's 65% rural population is overwhelmingly foreign or of foreign parentage; Scandinavian, German and Bohemian. These races are more liable to diabetes than are the English or the races of southwestern Europe.

Insulin has had no effect in checking the ever increasing death rate from diabetes.

Why should it? What it has done is to postpone death from diabetes some years.

Yet diabetes is a preventable disease or largely so. The secret of its prevention lies in greater physical activity and less indulgence on the gastronomic side. If you would have it in two words they are these, Girth Control. H. P. G.

IS IMMUNIZATION AGAINST TUBERCULOSIS A HELP OR HAZARD?

THE fight against tuberculosis continues to reveal many points at issue. Statistics leave no room for doubt about the decided improvement in morbidity and mortality during the past 100 years. The discovery of the tubercle bacillus raised hopes of eliminating this disease by immunological methods and proponents of this method of attack are active at this time, particularly those workers engaged in immunizing with the BCG vaccine. Practical work with other bacterial diseases, such as small pox, diphtheria, typhoid, to mention only the outstanding, have demonstrated the value of protective immunization. To state that similar immunization in tuberculosis is or is not of value will usually start a heated argument among authorities in this field. The use of BCG vaccine (an attenuated form of the tubercle bacillus) in this country has not received a hearty reception because of this very decided difference of opinion. Doubts are expressed regarding the safety of the procedure itself, its efficacy in preventing subsequent serious tuberculous infection, and perhaps most important of all does it not destroy a protective barrier which exists in the non-immunized individual?

Recently Stewart* has reviewed the work at the Lymanhurst School for Tuberculous Children with respect to this question; "Does a primary tuberculous infection afford adequate protection against consumption?" In a very painstaking and critical analysis of 84 cases of consumption in children discovered in 10,000 examined (which report should be read by every thoughtful physician) the following represent a few of the conclusions they have made.

"No child allergic to tuberculin has been found during the period of study (10 years) in whom a second crop of lesions typical of primary tuberculosis has developed. Apparently the human body can experience the benign primary form of the disease only once." They remind us of the accumulated experience of a large body of authorities that infants and children have great capacity to overcome even severe primary tuberculosis. They infer from this that the uninfected nonallergic individual has remarkable inherent capacity to conquer and repair the ravages of primary tuberculous invasions of the body.

"When new tuberculous infiltrations appear in the lungs of children who previously had positive tuberculin reactions, these newly developed lesions are roentgenologically and clinically characteristic of reinfection pulmonary tuberculosis or consumption." In other words the individual who becomes sensitized to the tubercle bacillus develops the more malignant type of reaction.

"Follow-up studies over a period of ten years at Lymanhurst indicate that primary tuberculous infections are distinctly detrimental in that they alter the normal resistance to tuberculosis present in the uncontaminated human body in such a manner that, instead of developing the benign primary type of tuberculosis, the patient is doomed thereafter to develop consumption if successfully reinfected. The only method by which consumption can be prevented is by preventing tuberculous infections." This opinion is at variance with the idea frequently encountered even within the profession, that a "slight touch" of tuberculosis is a good thing in protecting the individual against serious infection.

Regarding attempts to produce positive immunity to the disease they state, "Active immunization against tuberculosis with attentuated bacilli may not be a safe procedure if this method immunologically duplicates the changes that accidental human contact infection provides."

Whether immunization against tuberculosis is a help or a hazard will depend upon further critical analysis such as is being carried out at the Lymanhurst School. The reduction of exposure to the tubercle bacillus itself is a common goal among all workers in tuberculosis, and such ideals should be supported by every member of the profession and the laity as well. The advocates of immunization, however, believe that infection is inevitable and hope to provide a greater degree of resistance against casual exposure to the disease. Work of the type reviewed will provide the answer. J. H.

* J. A. M. A. April 8, 1933.

THE PRESIDENT'S PAGE

SOME PROBLEMS OF HEALTH INSURANCE

ONE of the principal difficulties confronting those who are studying the problems of the cost of medical care is the unsettled financial status of the nation. The rapidly shifting economic and social relationships make it apparent that any scheme however well thought out may disappear in the quicksand of a new order. As has been frequently stated, the problems associated with the cost of medical care are essentially not of a medical nature. They are problems relating to sociology and to economics, neither of which is an exact science. The social theories championed by various schools of thought are based on individual opinions rather than on demonstrable facts.

Earning a livelihood through the practice of medicine has become increasingly difficult not only because of the troubled times, but because of an oversupply of physicians. The marked decrease in hospital occupancy throughout the country has presented a problem of serious proportions within the last two years. Both of these conditions have helped accelerate the efforts of those demanding some change in the system of payment for medical care. Throughout the country a large number of health insurance schemes and so-called hospital pre-payment plans have been attempted and a great amount of material has been accumulated through various studies.

In considering the matter of health insurance, it should be remembered that one cannot sidestep the principle of insurance by declaring in favor of some plan of wider distribution of the cost of medical care or by calling insurance by some other name. The basic idea in practically all pre-payment schemes is the same and is essentially the principle of insurance. Several other points should be mentioned. It has been found that health insurance of a voluntary type has been difficult to sell. In other words, the market is not as anxious for this type of coverage as many physicians and laymen have been inclined to believe. Furthermore, standards must be set up under any insurance system and, as it usually works out, the standard for minimum performance becomes the maximum standard. As in public utilities, rates become objects of attack and of competition making for a cheapening of service. The widespread application of the principle of health insurance to medical practice has always led to compulsory health insurance under government control and would undoubtedly do so here. As Dr. Olin West has pointed out, the professional relationship of private physician to his patient has a social value which must be seriously considered when one is weighing the advisability of radical changes in social organization. He believes that widespread governmental schemes of medical service have a tendency to undermine those benefits which society itself should wish to have safeguarded.

The theories of health insurance are most alluring. The difficulties encountered when attempts are made to apply these theories to medico-social problems make men hesitate to subscribe to them. Observing various physicians studying the problems of health insurance one is reminded of the story of the highbrow music critic who was asked to report a recital of modern music for his newspaper. At first hostile, he gradually relaxed to the danger point. Finally, he leaped to his feet shouting, "Let me out of here before I begin to like the damned stuff." Regardless of our opinions for or against health insurance, the widespread interest which has been manifested in it seems to me to demand a statement from organized medicine in order that certain essential relationships between the physician and the public may be preserved. This statement should not be a commitment to the principles of health insurance. Following the example of the British Columbia Medical Association, we should set forth the main principles to be followed if and when health insurance comes.

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SOCIETY PROCEEDINGS

POLK

Dr. H. C. Caldwell of St. Croix Falls was the host to the members of Polk County Medical Society at his home on August 17th. Following the dinner, Dr. W. S. Middleton of Madison presented a discussion of "Coronary Disease" and Dr. Harry B. Zimmerman of St. Paul gave a discussion of "Carcinoma of the Breast". At the close of the professional papers the following matters were brought before the Society for discussion:

Collection rates for the Polk County Professional Bureau; Free Child Health Week; Efforts to retain the present Welfare Commissioner.

There were two special meetings called during the month of August. On August 14, the Society held an x-ray clinic at the Arveson–Diamond Clinic in Frederic. The new "Shock Proof" equipment of the General Electric X-Ray Corporation was demonstrated and technique troubles discussed.

On August 22, a joint meeting of the Society and the dentists in the County was held at Dr. J. A. Riegel's cottage on Deer Lake. This meeting was called to formulate a definite program for the "Free Child Health Week" to be held during the month of October. After a lengthy discussion the program decided upon was the immunization against diphtheria, smallpox vaccination and extraction of indicated teeth. G. B. L.

TREMPEALEAU–JACKSON–BUFFALO

On the 22nd day of June the Tri-County Dental Society had a joint meeting with the T–J–B County Medical Society at the Arcadia Country Club. The speakers were Drs. E. C. Rosenow and P. S. Hench of the Mayo Clinic. The subject of the meeting was, "Focal Infections", and the talks were illustrated by slides.

The Independence meeting, August 17th, proved to be one of the largest in recent years, when twenty physicians assembled at the village hall to discuss medical economics. Preceding the meeting, Dr. C. F. Peterson and Dr. G. F. Stack furnished a chicken dinner at the Hotel.

The Merrillan meeting, September 15, also was well attended. Dr. J. W. Lowe entertained the members at his home, and a sumptuous dinner was served. The meeting was held at the high school building where the doctors were addressed by Dr. J. B. MacLaren and Dr. Albert Rector, both of Appleton, Wisconsin. The subject was, "The Outagamie Plan."

Membership in the Tri-County Medical Society is increasing. R. L. M.

WALWORTH

Dr. E. H. Mensing of Milwaukee addressed a meeting of the Walworth County Medical Society which met at the Landmark on September 12th for a dinner meeting.

WINNEBAGO

The Winnebago County Medical Society held its monthly meeting in September in the staff room of Mercy Hospital, Oshkosh. Dr. F. Gregory Connell, Oshkosh, addressed the society on "Peptic Ulcer" and illustrated it with slides.

FIFTH COUNCILOR DISTRICT

The Fifth Councilor District meeting was held at Two Rivers on Thursday, September 7th. There was a large attendance of physicians and their wives at both the afternoon and the evening meetings.

The following program was presented.

"Differential Leucocyte Count as an Aid in the Diagnosis and Prognosis of Disease" by W. D. Stovall, M. D., Madison.

"Late Surgical Treatment of Birth Injuries—A Motion Picture Demonstration" by Carl Henry Davis, M. D., Milwaukee.

"Diagnosis and Treatment of Peripheral Vascular Disease, (Arterio-sclerotic occlusions, Buerger's Disease, Raynaud's disease, etc.)—Lantern Slides by G. de Takats, M. D., assistant professor of surgery, Northwestern University Medical School, Chicago.

Following the dinner, Dr. R. H. Jackson, Madison, past-president of the State Medical Society, gave a talk with motion picture demonstration on "Sacroiliac Strain with Attendant Sciatica," and Col. J. W. Jackson of Madison told about "The Life of a Cowboy, out Where the West Begins."

Dr. E. C. Cary of Reedsville was elected president and Dr. A. C. Radloff of Plymouth was reelected secretary of the Fifth District Society. A. C. R.

SIXTH COUNCILOR DISTRICT

Upwards of two hundred physicians attended the annual meeting and banquet of the Sixth Councilor District Society, held at the Hotel Northland in Green Bay on the afternoon and evening of September 9th.

Dr. E. G. Nadeau, Green Bay, President of the Brown–Kewaunee–Door County Medical Society, opened the afternoon session, and then turned the meeting over to Dr. Stephen E. Gavin, Fond du Lac, councilor for the sixth district. The following scientific program was presented:

"Premature Detachment of Placenta," by Dr. F. H. Falls, professor of obstetrics, University of Illinois.

"Diagnosis and Treatment of Cancer" by Dr. Max Cutler, director of the Tumor Clinic of Michael Reese Hospital, Chicago.

"Chronic Sacroiliac Sprain and Sciatica" by Dr. Reginald H. Jackson, Madison.

"Injuries to Soft Parts" by Dr. Dean Lewis, Baltimore, President of the American Medical Association.

During the course of the dinner which was held at six-thirty o'clock, the following physicians were called upon for impromptu remarks: Dr. Dean Lewis; Dr. S. E. Gavin; Dr. Reginald H. Jackson; Dr. Stanley J. Seeger, President of the State Society; and Mr. George Crownhart, Secretary.

Dr. Ralph Hamill, professor of psychiatry at Northwestern University, was the principal speaker at this banquet, his subject being "Children."

THE WOMAN'S AUXILIARY

Mrs. Eben J. Carey, Milwaukee, *President*
Mrs. Rock Sleyster, Wauwatosa, *President-elect*
Mrs. George H. Ewell, Madison, *Secretary*
Miss Ruth Buellesbach, Madison, *Executive Secretary*
Mrs. R. G. Arveson, Frederic, *Treasurer*
Mrs. Walter A. Ford, Sheboygan, *Press and Publicity Chairman*
Mrs. James Blake, Hopkins, Minn., *National President*

PRESIDENT'S ADDRESS*

By Mrs. James Blake, National President
Hopkins, Minn.

Members of the Auxiliary to the American Medical Association:

It is a great privilege to live in this momentous period of our world's history. Nations, states and individuals discard old customs, laws and conventions. Even the sacred ethics of the medical profession are being questioned by a skeptical world. On the heels of an era of unprecedented prosperity, and unbridled speculation comes a period of depression from which we have not as yet emerged. No individual escapes, no group or organization is immune. Only the good, like royal metal, should pass unscathed through the revolutionary fires. Each one of us can contribute her share toward that end by steadfast adherence to her ideals, even though this does seem to be an era of rapidly changing ideas and ideals. It is good for us to come together for these annual meetings and discuss our problems. Everyone of them is of interest and importance to the members of our Auxiliary. It is well for us to consider them carefully, decide for ourselves what is the right and honest course to pursue. The weight of our united opinion is powerful, and I have the conviction that standing together, deciding our problems very honestly, fairly and unselfishly we can find a solution for all our Auxiliary questions.

In our democratic plan of medical and auxiliary organization, the County Medical Society is the basic unit. It is the only door through which admission may be secured to the State, and American Medical Association Auxiliary. It is the sole judge of the applicant's membership qualifications. It is the local representative of the State and National Organization. It is the most important unit and therefore has certain very definite and grave responsibilities.

When the County Society Auxiliary fails, the State and National groups fail. The State Auxiliary is strong, active and achieving, only when its component County Auxiliary units seriously assume and discharge their responsibilities. The parent organizations are dependent upon their basic units. Too often, I believe, is this fundamental fact overlooked or ignored by the members and officers of both State and County Auxiliaries.

I am a firm believer in state's rights. I am going to stress the educational program, the public relations program, the advance of Hygeia for each individual state, and a system of press and publicity work among members of neighboring State Auxiliaries.

Right now we all realize the Auxiliary picture is changing almost by leaps and bounds—it is hard to keep pace with the times, but State by State and each County with its State joining in working plans, our picture can be kept to its true color scheme. Our brushes must never be idle, our color tubes ever ready to tint-daub or even splash on the paint. Our committee chairwomen are all skillful artists in their line of work, and will be ever ready to suggest the right shade of blue-red green or brown you are needing, to make your state picture worth the painting.

I believe every State and County President should make a systematic search for wasted effort in her county organization, should try to fill gaps—eliminate all overlapping in program of work. It may be regarded as axiomatic that wherever mass activity or interest is concerned, a group must either *lead* or be *led*. I firmly believe there is no third possibility. The lead in all things which medicine has close contact, and in which medical science or practice plays the vital role, should be taken by medical organizations and their lay representatives, the Auxiliary.

* Read before the Wisconsin State Auxiliary meeting, Milwaukee, June 14, 1933.

Our imperative need today is an undistorted sense of values, constructive thought, logical reasoning and sound judgment, combined with common sense and "team work." We as "doctor's wives" know that to no one is life level all the way—there are depths to go through, and heights to climb, and we need courage and inspiration. In offering you your national chairwomen, I assure you they are ready with inspiration if you will supply the courage to forge ahead.

If, as Shakespeare has remarked, "All the world's a stage and all the men and women merely players" thereon in a drama of mixed tragedy and comedy—let us resolve to "Act well our part, for there all honor lies." And as the curtain rolls down on our very pleasant, happy and profitable Milwaukee meeting, let us each remember our own State, our own County—every state and every county, in this great country of ours, is our stage. You, all Auxiliary members, and I, are the players. The drama is waiting for us to take our parts. The curtain is slowly rolling and unfolding a new year. As your stage manager you will always find me ready to prompt your work, shift the scenery, start the orchestra or any other thing I can possibly do to help make this year one continuous success for all of us.

A MESSAGE FROM THE PRESS AND PUBLICITY CHAIRMAN

To the Members of the Woman's Auxiliary:

The return of fall brings with it a resumption of meetings by the county auxiliaries and plans for the year are being discussed and decided upon.

With the inspiration of the recent national convention at Milwaukee, enthusiasm, ideas and work should go hand in hand to make this a most successful year. The plans you make and the things you do are of interest to all of us, and passing along the story of your achievement may bring a splendid new idea to someone else and it will do much to keep alive the bond of fellowship among us.

These columns are for your use and much of their value will depend upon your contributions.

May I count on each county chairman to write up the events of her particular group and send them regularly to me, remembering to give programs in detail with speakers' names and other interesting data.

All national news is to be published in the Bulletin of the American Medical Association which is sent without charge to Fellows or can be obtained for the subscription price of fifty cents per year from the Journal of the American Medical Association.

Let me remind you again that it is only as you become regular readers of state and national news that you grow in that much to be desired state known as "auxiliary minded"!

With all good wishes for the coming year, I am

Cordially,

(Mrs. W. A.) Marietta Ford,
2108 North 6th Street,
Sheboygan, Wis.

OFFICERS, DIRECTORS AND COMMITTEE CHAIRMEN OF THE WOMAN'S AUXILIARY TO THE STATE MEDICAL SOCIETY OF WISCONSIN 1933–34

President:
Mrs. Eben J. Carey,
2028 North 51st Street,
Milwaukee, Wisconsin.

President-elect:
Mrs. Rock Sleyster,
1220 Dewey Avenue,
Wauwatosa, Wisconsin.

Treasurer:
Mrs. R. G. Arveson,
Frederic, Wisconsin.

Secretary:
Mrs. George H. Ewell,
2024 Kendall Avenue,
Madison, Wisconsin.

Directors:
Mrs. Henry Gramling, Milwaukee, Wisconsin.
Mrs. Fred. C. Nause, Sheboygan, Wisconsin.
Mrs. Charles R. Bardeen, Madison, Wisconsin.

Chairmen:

Program:
Mrs. Oscar W. Friske,
760 West Grand Avenue,
Beloit, Wisconsin.

Organization:
Mrs. T. Ochsner Nuzum,
932 Mineral Point Avenue,
Janesville, Wisconsin.

Press and Publicity:
Mrs. Walter A. Ford,
2108 North 6th Street,
Sheboygan, Wisconsin.

Public Relations:
Mrs. James C. Sargent,
2924 North Stowell Avenue,
Milwaukee, Wisconsin.

Hygeia:
Mrs. Fred C. Nause,
2432 North 5th Street,
Sheboygan, Wisconsin.

Archives:
Mrs. F. A. Leighton,
Sheboygan Falls, Wisconsin.

Parliamentarian:
Mrs. R. H. Bitter,
Oakland Avenue,
Oshkosh, Wisconsin.

ROCK COUNTY

The portable piano which was provided for Pinehurst Sanatorium of Janesville through the efforts of the Rock County Auxiliary was dedicated the latter part of September. The program consisted of a vocal solo by Miss Jeanette Jenson and piano numbers were played by Robert Shepherdson and Mrs. O. W. Friske, all of Beloit.

The piano is small enough to be taken from floor to floor so that bed patients may enjoy programs.

FIFTH COUNCILOR DISTRICT MEETING

A meeting of the fifth councilor district of the State Medical Society held at Two Rivers on September 7th was the occasion for a meeting of the wives of physicians also. Bridge played during the afternoon, followed by a delightful drive through the city provided entertainment until the dinner hour, for the physicians and their wives. Very interesting talks were given by Dr. Reginald H. Jackson and Col. J. W. Jackson, both of Madison.

SIXTH COUNCILOR DISTRICT MEETING

Old Fort Howard hospital at Green Bay was a scene of loveliness, Saturday afternoon, Sept. 9th, for the tea in honor of wives of physicians who came to the city for the Sixth District medical meeting. Fall flowers and candlelight gave rich color and warmth to the rooms of this historic old house, and antique silver service added to the quaint atmosphere. A large bowl of grey artemesia and pink and white cosmos in the center of the living room was the admiration of all guests.

As the women arrived at the hospital building after a drive to historic points of interest around the city, including the Porlier-Tank cottage where Mrs. T. J. Oliver told them of the history of this century old structure, they wrote their names in the guest book offered by Mrs. P. R. Minahan. Indoors they were greeted by Mrs. Francis T. Blesch, custodian of the hospital, and Mrs. E. E. Prichard, regent of the D. A. R. chapter which has done so much to restore its furnishings. Mrs. Blesch later gave an informal talk telling the visitors of the significance of the hospital.

Wives of local physicians were hostesses, Mrs. W. Webber Kelly and Mrs. G. J. Goggins of De Pere pouring at the tea table, assisted by Mrs. I. E. Levitas and Mrs. Frank Wochos of Kewaunee, and Mrs. B. Dana of Kewaunee pouring coffee, assisted at this table by Mrs. A. J. McCarey and Mrs. A. O. Olmsted. Other hostesses were Mmes. E. G. Nadeau, O. A. Stiennon, R. M. Carter, E. S. Schmidt, E. S. McNevins, T. J. Oliver, W. E. Fairfield, Norbert Kersten, R. E. Minahan, J. R. Minahan, F. S. Rudolf, R. L. Cowles, C. J. Chloupek, M. H. Fuller, L. Milson, and W. P. Tippet.

Cars for the sightseeing drive were provided by a committee headed by Mrs. L. D. Quigley and composed of Mmes. W. C. Comee, C. S. Williamson, H. S. Atkinson, and F. L. Crikelair. A committee to arrange a golf match for the women who cared to play was composed of Mmes. W. P. Tippet, chairman, F. J. Gosin, W. J. Decker, O. W. Saunders, and J. J. Robb.

NEWS ITEMS AND PERSONALS

Mrs. Julia R. Lansdowne, wife of Dr. F. B. Lansdowne, Kenosha, died on August 15th at her home. She had been in ill health for three months with a heart ailment.

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Dr. Charles A. Wright of Delavan has leased his home to Dr. Joseph D. Warrick of Chicago, who will operate a private sanitarium there.

—△—

Dr. and Mrs. Norman O. Nelson of Madison left early in October to spend the winter in Florida.

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Thirty-two relatives gathered at the home of Dr. and Mrs. George W. Post of Milton to celebrate their fiftieth wedding anniversary the latter part of August. Following the picnic dinner a program was given and a purse presented to the honor guests.

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Dr. C. M. Gleason of Manitowoc read a paper on "Our Glands and Ourselves" before an open meeting of the Manitowoc Forum.

The State Medical Society broadcasts on Tuesday, Wednesday, Thursday of each week at 9:45 a. m., over a hook-up of Stations WHA, Madison, and WLBL, Stevens Point. The subjects for September were:

Sept. 5.	School Days are Here again.
Sept. 6.	Sinus Trouble.
Sept. 7.	Laennec the Listener.
Sept. 12.	The School Lunch.
Sept. 13.	The Heart in Childhood.
Sept. 14.	Accidental Poisoning.
Sept. 19.	Sickness and Character.
Sept. 20.	Diphtheria.
Sept. 21.	The Sneezing Sickness.
Sept. 26.	Quarantine and Isolation.
Sept. 27.	Those "Troubled Feet."
Sept. 28.	Boys and Girls.

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Dr. W. W. Kelly, Green Bay, addressed a meeting of the local American Legion Post. Dr. Kelly discussed the N. I. R. A.

Dr. J. Newton Sisk of Madison spoke on "Medical Relief in Dane County" over station WIBA on Sept. 13th.

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Members of the Society from out of the city who visited the office of the State Society during the past month included the following: Drs. J. W. Powers, J. O. Dieterle and James C. Sargent of Milwaukee; Dr. V. B. Mauricau of Peoria and Dr. Frank Treskow of Helenville.

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The following newly licensed physicians have opened offices or have become associated with other physicians:

Dr. L. P. Gaillardet and Dr. W. A. Olson, both of Greenwood, have formed a partnership to practice medicine and surgery. They will also carry a complete line of drugs.

Dr. Archie H. Tax has opened an office in the First National Bank building at New London.

Dr. H. E. Van Riper, former chief resident physician of the Children's Hospital at Cincinnati and instructor of pediatrics in the University of Cincinnati during the past year, has joined the Dean Clinic staff at Madison. He will specialize in infant feeding and diseases of children.

Dr. E. G. Barnet, formerly of St. Paul, Minn., has opened offices in the Mead-Witter Block, Wisconsin Rapids, to specialize in the practice of eye, ear, nose, and throat diseases.

Dr. John M. Welsch, a graduate of the University of Wisconsin Medical School in 1932, has opened an office in Beaver Dam.

Dr. Adolph M. Hutter, who served as resident physician in the department of internal medicine at the Wisconsin General Hospital, has opened an office in Fond du Lac for general practice and internal medicine.

Dr. Erwin P. Ludwig, who recently completed internship in Kansas City, is practicing at Berlin, Wisconsin.

Dr. Frank J. Naylen, a graduate of Marquette University School of Medicine in 1933, has opened an office at 47 South Main St. Fond du Lac.

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Dr. and Mrs. J. G. Hirschboek of Forestville accompanied by the Rev. H. Schmidt of Rosiere, left the latter part of September on a motor trip through Canada.

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Dr. Paul L. Eisele of Ripon addressed the Rosendale Center Woman's Club on "Public Health."

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Plans for the erection of a hospital at Darlington have been completed and construction will begin soon. The building will consist of eleven rooms and contain offices of two physicians. It is expected to be ready for occupancy by January first.

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Dr. C. D. Neidhold of Appleton was the speaker before a meeting of the Appleton Lions Club. His subject was "The Romance of Medicine."

Dr. E. G. Nadeau, Green Bay, attended the annual meeting of the American Academy of Ophthalmology and Oto-Laryngology held in Boston in September.

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Dr. and Mrs. W. D. Stovall of Madison returned from a visit at the home of Dr. Stovall's mother, Mrs. J. P. Stovall of Sardiss, Miss.

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Dr. and Mrs. F. G. Geist, Madison, were guests of Mrs Geist's parents, Mr. and Mrs. James Stewart of Boston during September.

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Members of the State Medical Society of Wisconsin have been invited to attend the annual meeting of The Society of Plastic and Reconstructive Surgery to be held on October 16, 17, and 18 in New York City under the auspices of the New York Academy of Medicine; New York Hospital and Cornell University Medical College; Institute of Ophthalmology Columbia Medical Center; New York Postgraduate School and Hospital; Sydenham Hospital, and Manhattan Eye, Ear and Throat Hospital.

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Dr. W. F. Lorenz, Madison, has been appointed chief surgeon of the Wisconsin National Guard with the rank of colonel, according to an announcement by Governor Schmedeman in September. Dr. Lorenz succeeds Dr. Gilbert E. Seaman, Milwaukee, resigned.

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Mr. J. G. Crownhart, Secretary, attended the annual conference of state secretaries held under the auspices of the American Medical Association at the Palmer House in Chicago, September 22 and 23.

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Dr. and Mrs. C. K. Schubert, Madison, visited in New York City in September.

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Dr. M. H. Fuller of Green Bay has begun a series of lectures to student nurses of St. Mary's Hospital on treatment and surgery of the eye, ear, nose and throat.

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MILWAUKEE

Drs. Harry Foerster, John L. Garvey, and Thomas L. Tolan returned to Milwaukee following the Labor Day holidays from a hunting and fishing trip in northern Wisconsin and Michigan.

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Dr. and Mrs. F. J. Schubert and sons, Thomas and James, returned to Milwaukee on September 8th after having spent the summer at their country home at Lake Beulah.

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Dr. E. L. Belknap and family enjoyed a brief holiday at Frankfort, Michigan. They returned shortly after Labor Day.

Dr. and Mrs. Solomon Baumgarten returned to Milwaukee early in September from a trip to Denver, Colorado.

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The Wauwatosa Common Council, at a meeting held on September 5th, appointed Dr. Norbert F. Dettmann to the position of school physician. Dr. Dettmann succeeds Dr. Griffith S. Jones, who had held this position for the past nine years.

Under the recent ruling of the Council the school medical staff in the future will come under the supervision of Dr. E. F. Peterson, who is the health officer of Wauwatosa.

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Radio health talks, sponsored by the State Board of Health and delivered by Mr. Theodore Wiprud, Executve Secretary for the fall, winter, and spring seasons were resumed late in September.

The following talks were broadcast over the Milwaukee Journal Radio Station, WTMJ, during September and October:

September 28. Shopping for Health.
October 6. Are You Superstitious?
October 13. The Eyes Have It.
October 20. Your Superior Child.
October 27. Shall I Reduce?

These talks were delivered on Thursday afternoons at 1:45 P. M.

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Mrs. John L. Yates, who spent several weeks at the Yates' summer home in Nova Scotia, returned to Milwaukee about the middle of September.

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Dr. and Mrs. Wilbur LeCron and daughter, Peggy, returned to their Milwaukee home early in September from a trip through northern Wisconsin.

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Plans are nearing completion for the first postgraduate course to be given by The Medical Society of Milwaukee County during the fall, winter, and spring season, 1933–34.

The Educational Committee, which sponsors the courses given throughout the year, plans to get under way with the postgraduate course in urology in November.

As in the past local men will be chosen as instructors, and all Society members will be invited to participate. These courses have proved to be very popular and more and more physicians register for each one given. Heretofore an outside speaker—a man specializing in the subject to be studied—has been invited to deliver the opening address to which all physicians who have registered for the course are invited, after which the large group has been divided into smaller units and assigned to local instructors.

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Through the splendid cooperation of the members of the Medical Society, a very comprehensive list of subjects for discussion before lay audiences has been compiled for distribution among lay organizations such as service clubs, parent-teacher associations, church guilds, etc.

The Speakers' Bureau, which has been in operation for the past several years, has steadily gained in popularity, and with the opening of schools and clubs which have not held meetings throughout the summer, many requests are received daily at the executive office for speakers. Already a number of speakers have been placed, and requests for speakers in advance as far as the month of April, 1934, are on file.

Members have responded willingly and graciously to the request of the Educational Committee which sponsors the Speakers' Bureau, and with the new and revised subjects and the enlarged list it is possible to supply the demands of organizations for any subject which they desire to have discussed. Speakers who have served in this capacity have been enthusiastically received, and from the letters of appreciation which follow their addresses, the Educational Committee and the Society feel well repaid for having inaugurated this Bureau.

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Dr. and Mrs. Walter Blount left on September 16th for a week's motor trip through the East.

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When the American Occupational Therapy Association met in Milwaukee during the week of September 10th, the following out-of-town physicians were in attendance: Dr. Joseph Doana, Philadelphia; Dr. Rush Dancan, Baltimore; Dr. William A. Byran, Worcester, Mass.; Dr. John F. Coulter, Chicago; Dr. Horatio F. Pollock, Albany, N. Y.

These men were guests at a dinner party given in their honor by Dr. and Mrs. Carl Henry Davis on September 11th.

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Dr. and Mrs. Paul Rupp left Milwaukee on September 16th by motor for their camp in northern Wisconsin.

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At a meeting of the Kiwanis Club, held on September 13th, sound motion pictures carried the message of the American College of Surgeons. The movies presented talks by Dr. Franklin H. Martin and Dr. Malcolm T. MacEachern, directors of the College.

This program was presented in conjunction with the Annual Convention of the American Hospital Association, which was in session in Milwaukee from September 11th to the 16th.

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Dr. John P. Koehler, Commissioner of Health of Milwaukee, was host to Dr. W. W. Walker, of the Commonwealth Foundation, New York, and Dr. Michael Davis, of the Rosenwald Foundation, Chicago, on a tour of inspection of health centers, during their attendance in Milwaukee of the American Hospital Association meetings.

Miss Louise Quick, daughter of Dr. and Mrs. Edward Quick, sailed on September 13th, for a year's study at the Sorbonne, Paris.

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Dr. D. W. Roberts was the guest speaker at the meeting of the American Interprofessional Institute, held on August 28th. His subject was "Keeping Mentally Fit." He also addressed the parents and teachers of Lake Bluff School on this subject.

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Dr. J. J. Grimm and Mrs. Grimm left on September 16th for Vienna, Austria, where they expect to remain until February.

Dr. Henry Vogel will assume the office of health commissioner during Dr. Grimm's absence.

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Dr. Nelson M. Black and son, Nelson Black, Jr., formerly of Milwaukee, now of Miami, Florida, were Milwaukee visitors during the early part of September.

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Dr. J. A. Murphy and family enjoyed a short vacation in St. Louis, Missouri, during the latter part of September.

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Dr. and Mrs. Roland Cron left Milwaukee on September 11th for a short vacation in Quebec.

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Dr. and Mrs. Henry O. McMahon returned to Milwaukee on September 13th, from a trip to Columbus, Ohio.

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Dr. and Mrs. E. L. Baum and Dr. and Mrs. E. L. Tharinger will leave early in October for a hunting trip in northern Wisconsin.

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Milwaukee physicians appearing on the program of the American Hospital Association meetings, held in Milwaukee during the week of September 10th, were Drs. Herman C. Schumm, Walter P. Blount, and James C. Sargent, president of The Medical Society of Milwaukee County.

Dr. Sargent discussed the Report of the Committee to Study the Reports of the Committee on the Costs of Medical Care, presented by Dr. Michael M. Davis, medical director of the Julius Rosenwald Fund, Chicago, at a meeting held on September 12th.

At the Teaching and Public Hospital Section, which held a meeting on September 14th, Dr. Sargent spoke on "A Private Physician Looks at the Public Hospital."

Dr. Schumm was Chairman of the Children's Hospital Section which met on September 14th.

Dr. Blount presented a paper, "Orthopedic Treatment in Infantile Paralysis," at the September 14th meeting.

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Dr. T. L. Harrington, appearing for the Speakers' Bureau, sponsored by the Educational Committee of The Medical Society of Milwaukee County, addressed the Ruth Guild of the Nazareth Church on September 14th, on the subject of "Tuberculosis and the Neglected Age."

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The Fifth Annual Meeting of the Central Association of Obstetricians and Gynecologists was held in Milwaukee October 5, 6, and 7.

Dr. Carl Henry Davis discussed the paper, "Interpretation of Weight Changes During Pregnancy," given by Dr. Howard H. Cummings, Ann Arbor, Michigan.

"Calcium Deficiency in Pregnancy, A Clinical Research," presented by Dr. A. M. Mendenhall of Indianapolis, was discussed by Dr. Roland S. Cron.

"The Inauguration of an Obstetrical Service in a General Hospital" was the title of a paper read by Dr. Albert H. Lahmann.

ELEVENTH COUNCILOR DISTRICT MEETING AT SUPERIOR

Picture taken of members in attendance at the Eleventh Councilor District meeting held at Superior on August 3rd. New officers of this district are Dr. C. H. Christiansen, Superior, President, and Dr. Hugh F. Ringo of Montreal, Secretary. Dr. F. G. Johnson of Iron River is Councilor of the Eleventh District.

BIRTHS

A son to Dr. and Mrs. Bernard P. Churchill of Milwaukee on August 27th.

A son to Dr. and Mrs. Geo. H. Jamieson of Racine on September 3rd.

A daughter to Dr. and Mrs. Joseph C. Dean, Madison, on September 25th.

MARRIAGES

Dr. G. L. McCormick, Marshfield, to Miss Victoria A. Mason also of Marshfield on September 7th in St. John's parsonage at Marshfield. Immediately following the ceremony, Dr. and Mrs. McCormick left on a two weeks' trip to northern Wisconsin and Canada. Dr. McCormick has been a member of the staff of the Marshfield Clinic for the past several years.

Dr. Victor H. Cremer, Tomah, to Miss Delia Mae Goethe, also of Tomah on Thursday, August 31st.

Dr. E. J. Haberland, Milwaukee to Miss Irene Pamperin, daughter of Mr. and Mrs. Paul Pamperin of La Crosse, Wisconsin, on September 5th.

Dr. Raymond J. Dalton, Milwaukee to Miss Joan M. Lauderdale on September 23rd in Milwaukee.

Dr. Robert T. McCarty of Appleton to Miss Clara Ewens of Milwaukee.

DEATHS

Dr. Frank C. Studley, Milwaukee, died suddenly of cerebral hemorrhage on September 23rd while he was completing testimony in the courtroom of the County Judge in Marinette.

He was born in New York City in the year 1869 and was a graduate of Lawrence College, Appleton, and of Columbia University College of Physicians and Surgeons in 1893. After completing his course there, Dr. Studley studied at Heidelberg in Germany. From there he came to Milwaukee and began general practice. In the year 1904, Dr. Studley, together with former Governor F. E. McGovern, started the Riverside Sanitarium in Milwaukee for nervous and mental diseases. Later it became known as the Shorewood Hospital-Sanitarium of which he served as medical director. In the World War he served as a volunteer in the medical corps.

He served as past president of the Milwaukee Academy of Medicine, the Medical Society of Milwaukee County and the Wisconsin Neuro-Psychiatric Society. He was a member of the Medical Society of Milwaukee County, the State Medical Society, and was a fellow of the American Medical Association.

Surviving him are his widow; his son, Dr. William H., resident physician of the Shorewood Hospital–Sanitarium; two daughters, Mrs. W. E. Jackson, Milwaukee, and Mrs. D. H. Kirkpatrick of Los Angeles.

Dr. John T. Elliott, Rhinelander, died of heart disease on September 20th.

He was born in the year 1871 at Seaforth, Ontario. He was a graduate of University of Toronto Faculty of Medicine in the year 1900 and had practiced in Rhinelander for the past twenty-seven years.

He is survived by his widow and one son.

Dr. James C. Reynolds, Lake Geneva, died on September 4th at his home.

He was born at Exeter, Wisconsin, July 17, 1849. He was a graduate of Rush Medical College, Chicago, in 1870. After five years of practice in South Dakota, he spent a year at Bellevue Hospital, New York City, and in 1876 came to Lake Geneva to form a partnership with his father. He served as a member of the Wisconsin assembly for two terms in the years 1884 and 1886 and in 1888 was elected to the state senate, serving a four-year term.

Dr. Reynolds is survived by one son.

SOCIETY RECORDS

New Members

A. W. Overgard, Stanley.

R. C. Halsey, Lake Geneva.

T. J. Hardgrove, 4803 W. National Ave., Milwaukee.

Louis Brachman, 308 W. North Ave., Milwaukee.

Robert F. Purtell, 758 North 27th St., Milwaukee.

J. C. Schroeder, 1222 South 16th St., Milwaukee.

David L. Williams, 16 No. Carroll St., Madison.

J. W. Keithley, 406 E. Grand Ave., Beloit.

Wm. H. McGuire, 19 E. Milwaukee St., Janesville.

Ernest O. Ronneburger, Cambria.

Changes in Address

C. W. Osgood, Evansville to 7805 W. Chestnut St., Wauwatosa.

H. C. Werner, Mendota to 19 East Street, Fond du Lac.

YOUR CARD FOR THE DIRECTORY

This month an information card is being sent from the headquarters office of the American Medical Association to every physician in the United States and Canada. The information thus secured is to be used in the compiling of the thirteenth edition of the American Medical Directory. The directory is prepared at regular intervals in the Biographic Department of the American Medical Association. The last previous directory appeared in 1931. This volume is one of the most important contributions of the American Medical Association to the work of the medical profession in the United States. In it as in no other published directory, may one find dependable data concerning physicians, hospitals, medical organizations and activities. It provides full information concerning medical colleges, specialization in the field of medical practice, memberships in special medical societies, tabulations of medical journals and medical libraries and, indeed, practically every important fact concerning the medical profession in which any one might possibly be interested. Therefore, those who receive this card should fill it out and return it promptly whether or not any change has occurred in any of the points on which information is requested. Should any reader fail to receive a card before the first of October, he may aid by writing at once to the headquarters office, stating that fact and indicating such changes as he may desire in the information published in the 1931 issue of the directory.

Physicians Invited to Attend Twenty-Fifth Anniversary Meeting of Wisconsin Anti-Tuberculosis Association

A two-day program with a jubilee dinner will mark the twenty-fifth anniversary of the Wisconsin Anti-Tuberculosis association to be held in Milwaukee on Friday and Saturday, October 27 and 28.

The meeting, with the exception of the dinner, which will be held at the Plankinton hotel Friday night, will be held at the W. A. T. A. headquarters at 1018 North Jefferson street.

The Friday morning session, at which Dr. J. Gurney Taylor, president of the W. A. T. A. will preside, will include a meeting of the association staff in which the guests will participate; the annual report of Dr. H. E. Dearholt, Executive Secretary, and the association's annual business meeting.

Need of tuberculosis education; treatment of tuberculosis by surgery and tracing tuberculosis to its source are the three topics to be discussed at the Friday afternoon meeting. Among those who will give papers on the above subjects will be Dr. E. J. Carey, Marquette University; Miss Theressa Belknap, Deaconess hospital, Milwaukee; Dr. Oscar Lotz, Milwaukee; Miss Sophie Yoerg, Superintendent of Milwaukee Children's hospital; Dr. William A. O'Brien, University of Minnesota, and Dr. R. H. Stiehm, University of Wisconsin.

The main topics for the Saturday morning session are the sanatorium, and the child and tuberculosis. On the program at that time are Dr. Robinson Bosworth, Municipal sanatorium, Rockford, Ill.; Dr. James A. Evans, Oak Forest sanatorium, Onalaska, Wis.; Miss Edith Foster, Milwaukee, Mrs. Katherine Sullivan, State Board of Control, Madison, the Rev. A. J. Schuh, La Crosse, and Dr. A. A. Pleyte, Milwaukee.

Sectional meetings for sanatorium superintendents, trustees and nurses are planned for Saturday afternoon.

The medical profession and others interested in public health work are invited to participate in the meetings.

TENTATIVE ANNUAL MEETING PROGRAM

Friday Morning—October 27

Dr. J. Gurney Taylor, presiding

1. Staff Meeting.
   Staff Reports
2. Executive Secretary Report.
3. Business Meeting.
   a. Minutes.
   b. Report of Recording Secretary—Dr. Charles Stoddard.
   c. Report of Treasurer — Mr. Edmund Fitzgerald.
   d. Appointment of Resolutions Committee.
   e. Report of Nominating Committee.
   f. Election of Officers.
4. Luncheon—to be served out of building.

Friday Afternoon—October 27

Dr. Louis M. Warfield and Dr. T. L. Harrington presiding

1. Need of Tuberculosis Education.
   a. "In Medical Schools"—Dr. E. J. Carey, Dean of Marquette University Medical School, Milwaukee.
   b. "In Nursing Schools"—Miss Theressa Belknap, Sup't. of Nurses, Deaconess Hospital, Milwaukee.
2. Treatment of Tuberculosis by Surgery.
   a. "Medical Demonstration"—Dr. Oscar Lotz, W. A. T. A. Staff.
   b. "Practical Demonstration with Children"—Miss Sophie Yoerg, Sup't, Milwaukee Children's Hospital.
3. Skit.
4. Tracing Tuberculosis to Its Source.
   a. "Medical Standpoint"—Dr. Wm. A. O'Brien, Associate Prof. of Pathology, Univ. of Minnesota, Minneapolis, Minn.
   b. "School Standpoint"—Dr. R. H. Stiehm, Student Health Service, Univ. of Wisconsin, Madison, Wis.

Board of Directors Meeting—immediately following program. Place—?

Movie—"Power of the Penny"

Friday Evening—October 27

7:00 P. M. Jubilee Dinner, Sky Room, Plankinton Hotel.
Speaker—Dr. M. P. Ravenel, Professor of Preventive Medicine, University of Missouri, Columbia, Mo.

Saturday Morning—October 28

Dr. George Williamson, Neenah, presiding

1. The Sanatorium.
   a. "The Ideal Sanatorium"—Dr. Robinson Bosworth, Sup't, Rockford Municipal Tuberculosis Sanatorium, Rockford, Ill.

b. "What our Wisconsin Sanatoria Need as I See It"—Dr. James A. Evans, Medical Director, Oak Forest Sanatorium, Onalaska, Wisconsin.

2. The Child and Tuberculosis.
   a. "The Children of the Unemployed"—Miss Edith Foster, Unemployment Relief, Industrial Commission, Madison, Wis.
   b. "The State's Foster Children"—Mrs. Katherine Sullivan, State Board of Control, Madison, Wis.
   c. "Experience in One Child Caring Institution" —Father A. J. Schuh, St. Michael's Orphanage, La Crosse, Wis.
   d. "The Next Step"—Dr. A. A. Pleyte, W. A. T. A. Staff.

Saturday Afternoon—October 28.

Sectional meetings for sanatorium superintendents, nurses, sanatorium trustees, and others if desired.

Interstate Meets at Cleveland, October 16th to 21st

The annual meeting of the Interstate Postgraduate Assembly will be held at Cleveland October 16th to 21st. The program will be presented at the Public Auditorium with morning sessions from eight until noon, afternoon sessions from one to five and evening sessions at seven. Post meeting clinics will be given in Cleveland hospitals on Saturday, October 21st.

Wisconsin officers of the Association include Dr. Arthur G. Sullivan, Madison, Director of Exhibits; Dr. G. V. I. Brown, Milwaukee, Speaker of the Assembly; Drs. Sullivan, Brown and John M. Dodd, Ashland as Trustees and Dr. John L. Yates, Milwaukee, member of the Committee on Medical Research and Advancement. Special rail rates of a fare and a third have been granted for the meeting. Certificates of the rate must be obtained when purchasing tickets to Cleveland in order for the reduction on the return trip to be obtained.

Child Health Survey of Polk County

By MR. GEORGE B. LARSON
Secretary, Polk County Medical Society
Frederic

The Polk County Health Survey in the fall of 1932 was developed partly as the result of a similar campaign on a lesser scale in one of our neighboring counties, but mainly as a public health measure sponsored by the medical and dental professions themselves to instruct and improve the general health of the school children of the community.

As such a program needed financial backing and no money was available, it was decided to meet with the County Council of the American Legion to enlist their interest and support in the project to secure funds from the County Board and create public interest. A joint committee from the Polk County Medical Society and the dentists of the County met with the Legion and the Superintendent of Schools and developed the idea. To avoid any public suspicion of a mercenary motive by the doctors and dentists, the American Legion decided to sponsor the program, supply the necessary materials and agreed to allow us to use their name in the publicity.

An executive committee of three was appointed at this meeting to carry the program through; one member from the American Legion, the County Superintendent of Schools and the Secretary of the Polk County Medical Society. This committee secured the necessary appropriation from the County Board to purchase supplies, such as tongue depressors, sanitary bibs, sterilizing solutions, printing and stationery. No compensation was paid to the members of either profession for time, traveling expenses, nurses or sundry supplies. Some idea of the contribution of the men may be gained from the fact that during the survey a total of 2,500 miles was traveled in going to the schools to examine the children.

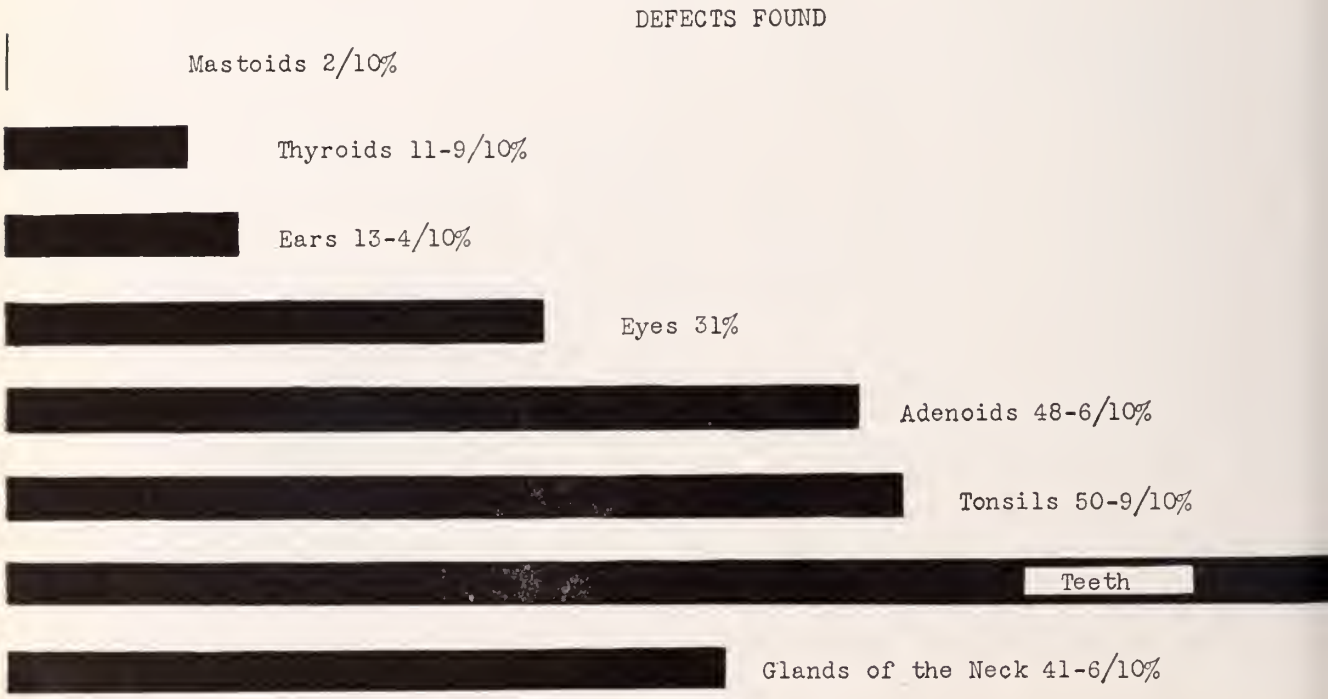
A small publicity program was carried on during the summer through the newspapers, talks before teachers institutes and parent-teacher meetings. The publicity explained to the lay public the scope of the survey would cover only the teeth, eyes, ears, nose and throat. Particular emphasis was placed on the fact that an examination of this type

would detect only the gross defects and secondly, that the members of the Polk County Medical Society and the Polk County dentists donated their services free of charge.

At the talks given before the teachers institutes, history cards, explanatory letters and eye charts were given to the teachers. Members of the Society instructed the teachers in the use of the eye charts for the examination of the children's eyes. A standard method of rating the hearing ability of each child was discussed and the teachers instructed in the procedure. (Did not prove to be an entirely satisfactory method, due to the inexperience of the teachers.) The teachers were instructed to take the history cards with them to distribute to the children on the first day of school. The history sections, which included the written permission for the examination, were to be filled in by the parents. When these cards were returned to the teachers the children's eyes and ears were examined and the results recorded.

The physicians and dentists in the County were arranged in "teams", of one dentist and one physician, and assigned certain territories by the executive committee. The "teams" did not examine the schools in their own localities but were sent to the opposite end of the County, to avoid criticism from the laity to the effect that the physicians and dentists were examining their own patients for the purpose of "drumming up business". Each "team" was given a map of the County with the locations of the schools they were to examine plainly designated. In this way the committee distributed the number of children that each "team" examined and arranged the territories in the smallest area possible. Each pair examined approximately 600 children.

The history cards were collected by the examiners and turned over to the executive committee. Letters were mailed out to the parents explaining why the survey had been made and informing them of the defects found in their children and suggested that they take the child to their family physician or dentist, whichever was indicated. A copy of the individual reports was given to the superintendent of schools, who in turn gave the information either to the school principals or the Red Cross for follow-up work, to see that the gross errors were corrected. If the parents could not afford to have the defects corrected either the Red Cross or the Welfare Department took over the urgent cases.



If this tired, worried, over-worked mother were using Pablum for her babies' cereal feedings, she could have slept that extra much-needed hour instead of losing her temper while her children clamor for breakfast. For she can prepare Pablum in an instant, directly in the cereal bowl, simply by adding water or milk of any temperature—salt, cream and sugar for the older child and herself.

Getting up an hour earlier in the morning is an inconvenience for most persons, but for the mother of young babies it is a hardship, sometimes almost tragic, frequently nullifying the best-planned pediatric advice.

This is especially true in the case of the nursing mother whose supply and quality of breast milk are affected by emotional shocks resulting often in agalactia and sometimes giving rise in the baby to diarrhea, colic, and even convulsions. Furthermore, the mother's emotional stress brings about a train of behavior on her part which is reflected in the child's psychologic reactions so that a vicious circle of bad habit formation is set up.

From this angle, the recent introduction of the pre-cooked form of Mead's Cereal, known as Pablum, assumes new importance in the doctor's psychological handling of both mother and child, quite aside from its nutritional value.*

Because Pablum can be prepared in a minute, the mother can sleep the extra hour she would otherwise be compelled to spend in a hot kitchen cooking cereal. Added rest means better poise, so that petty annoyances do not bring jaded nerves. Prompt feedings prevent many childhood tantrums, and a satisfied baby usually eats better and enjoys better digestion and growth.

*Like Mead's Cereal, Pablum represents a great advance among cereals in that it is richer in a wider variety of minerals (chiefly calcium, phosphorus, iron, and copper), contains vitamins A, B, E, and G, is base-forming and is non-irritating. Added to these special features, it is adequate in protein, fat, carbohydrates, and calories. Pablum consists of wheatmeal, oatmeal, cornmeal, wheat embryo, yeast, alfalfa leaf, and beef bone.

MEAD JOHNSON & COMPANY, Evansville, Indiana, U.S.A.

Please enclose professional card when requesting samples of Mead Johnson products to cooperate in preventing their reaching unauthorized persons

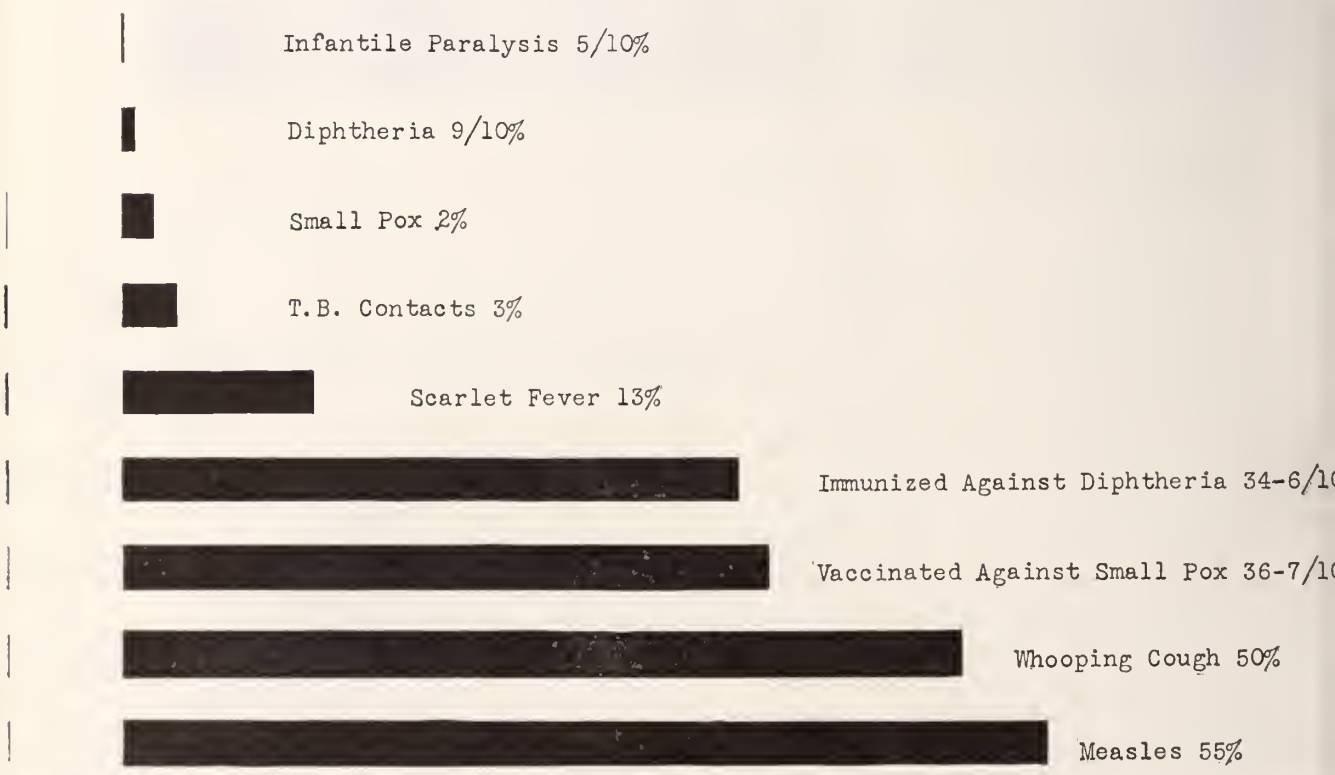
EDUCATIONAL EFFORT

At the close of the survey, talks were given in the County telling the various groups of the findings of the survey, especially with regard to the sanitary conditions of the schools and general health information. Suggestions were made to school authorities of items that could be instituted at small cost, such as screening, garbage disposal, regular scrubbing of the school building and outhouses, reseating of children with defective sight and hearing and improving the lighting conditions of the schools.

The Woman's Auxiliary of the Polk County Medical Society made the tabulation of the findings of the survey, and were paid a small amount of money which was used to place "Hygeia" in every school in the County. The graphic chart shows the findings of the survey:

To demonstrate to the parents and the general public that the physicians and dentists did not do this work for a mercenary reason and to show them that we are interested in preventive medicine the joint committee of the Polk County Medical Society and the Polk County dentists decided to put on a "FREE HEALTH WEEK", in the month of October. During the week we intend to immunize for diphtheria and vaccinate against small pox free of charge and extract such teeth as are indicated and where the parents have signified their wish to have the work done. This clinic will be held in eleven different towns throughout the County and each member will serve one or two days during the week to carry out the program. In conjunction with the "HEALTH WEEK", the Polk County Chamber of Commerce, through their Child Welfare Committee, will carry on an advertising campaign and have one day set aside as "penny day" to raise funds to defray expenses of the immunization and vaccination and extractions.

CHILDHOOD DISEASES



Results determined from a tabulation of 4,770 cards

PORTRAIT OF A LADY WHO LOVES A DOCTOR

The very big smile on this very little lady is a greeting to her doctor. She has quite a case on him. And he, shameless fellow, on her. But the course of their love is studded with pitfalls. For when clinical thermometers, tongue depressors, and medicine come in the door, love is likely to fly out of the window.

You can imagine then how gratefully he (and so many of his fellow physicians) welcomed an innovation like Parke-Davis Haliver Oil with Viosterol-250 D! Given in dainty drops instead of terrifying teaspoonfuls, it has simplified and solved the troublesome question of how to administer vitamins A and D scientifically and at the same time *pleasantly.* And it has removed an important threat to the affection that exists between so many doctors and their little patients. As you know, Parke-Davis Haliver Oil with Viosterol-250 D is Council-Accepted. It contains not less than 80 times the vitamin A potency of a standard cod-liver oil testing 400 U. S. P. units per gram. It is equal to Viosterol-250 D in vitamin D potency. Supplied in 5-cc. and 50-cc. vials with dropper and in 3-minim capsules, boxes of 25 and 100. You are invited to write our Medical Service Department, at Detroit, for a sample box of capsules and literature.

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PARKE, DAVIS & CO.

DETROIT, MICH.

The World's Largest Makers of Pharmaceutical and Biological Products

For the coming year the Medical Society intends to have another health survey and broaden its field of examination. If arrangements can be made to secure the material we hope to give every child, who will submit, either a von Pirquet or Mantoux test. It is our hope to make our School Health Survey an annual affair as our contribution to preventive medicine.

POLK COUNTY STUDENT HEALTH SURVEY Date.....
Name ..... Age.... Sex..... Wt..... Hgt.....
Address .....
Teacher's Name .....
School Designation .....
Family Physician .....
HISTORY (To be filled out by parents or guardian)
Underline All Contagious Diseases Had by Student

1. Chicken Pox—Diphtheria—Infantile Paralysis—Measles—Meningitis—Mumps—Scarlet Fever—Small Pox—Whooping Cough.
(Answer Questions Below Yes or No)
2. Has student been vaccinated against——
Small Pox?..... Against Diphtheria?.....
3. Have Tonsils and Adenoids been removed?.....
4. Has student lived in the same house or had any contact with any person who has had Tuberculosis or Consumption?.....
5. Has student ever had any serious illness?.....
Serious Accident?..... Serious Operation?.....
6. Does student have frequent headaches?..... Sore Eyes? ..... Frequent Sore Throat?.....

.....
(Parent's or Guardian's Signature)

Dental OPERATIONS INDICATED

Permanent Teeth

8	7	6	5	4	3	2	1	1	2	3	4	5	6	7	8
8	7	6	5	4	3	2	1	1	2	3	4	5	6	7	8

Deciduous Teeth

5	4	3	2	1	1	2	3	4	5
5	4	3	2	1	1	2	3	4	5

Normal-Occlusion		—No decayed	
Mal "		Deciduous teeth	
—good		—No infected	
Ability to masticate—fair		—No decayed	
—poor		Permanent teeth	
Tongue coated		—No infected	
Calculus		—Deciduous—	
—good		Extractions	
Care of teeth—fair		—Permanent	
—poor			

Remarks:

Examiner .....

First Year Examination Date.....

1. General Appearance .....
Right..... Left.....
2. Eye and Ear (By Teacher) Eye Ear
Right..... Left.....
3. Eyes General, Strabismus..... Marginal Blephoritis.....
Any gross abnormalties?.....
4. Ears General. Discharge?..... Wax Impaction?.....
Mastoid? .....
5. Nose. Obstructed breathing?..... Discharge?.....
6. Throat. Tonsils and Adenoids .....
7. Glands of Neck .....
8. Thyroid .....
9. Deformities .....
10. General Comment .....

Second Year Examination

Third Year Examination

INITIAL LETTER TO PARENTS

Balsam Lake, Wisconsin,
September 1, 1932.

Dear Parents:

It is human nature for parents to be interested in the welfare and success of their children, but success in school, as in life, is often dependent upon the individual state of health. Moreover, neglected health in childhood, beside handicapping the child in his school work, oftentimes sows in him the seeds of future chronic ailments which may hamper him seriously in the struggle of life. Therefore, the health of a child is of the utmost importance. It is important to the child himself, to his parents and to society at large, and whatever can be done to improve it is certainly a worthy effort.

Large cities, recognizing the importance of child health, provide free medical and dental examination to school children, but until recently this has been denied to rural schools. It is now beginning, however, to be adopted in rural districts and Polk County will have an opportunity this year to secure its benefits.

Polk County Council of the American Legion in cooperation with the County Chapter of the State Federation of Womans Clubs, The Polk County Chapter of American Red Cross, the local Doctors and Dentists Association, the State and County Departments of Education and the State Branch of the National Congress of Parents and Teachers have therefore decided to foster and promote an effort to bring about periodic physical examination of school children in Polk County without cost or obligation of any kind to parents or school boards. A physical examination for every school child from the first through the twelfth grades will be given by reputable doctors and dentists for the purpose of locating defects in the eyes, ears, nose, teeth and throat. Clinics will be held in every school in Polk County during the month of September and all parents are urged to have their children examined. A detailed statement of the examination will be mailed to each parent. The free physical examination is not compulsory. However, in order to cooperate fully with parents in this public health survey of the children of the county it will be necessary that the blanks attached to this letter be signed by the parent, providing the parent desires his children examined. No child will be examined unless parental authority is thus given.

Very sincerely,

J. H. Spencer,
Polk Co. Council of Am. Legion,

George B. Larson,
Sec. Polk Co. Medical Assoc.,

P. J. Lynch,
Co. Supt. of Schools,
Polk Co. Public Welfare Comm.

A BLEND OF *Finely Powdered, Dehydrated* SPINACH, TOMATOES, CARROTS and IRRADIATED YEAST, *Specially Prepared for Infant Feeding*

ACCEPTED AMERICAN MEDICAL ASSN. Committee on Foods

BioVegetin

In recognition of the desirability of vegetables in infant feeding, BioVegetin offers to physicians the opportunity to incorporate into the infant dietary a vegetable mixture that provides the benefits of fresh vegetables with the certainty that the exact prescribed quantities will be fed.

BioVegetin is a palatable, finely powdered mixture of dehydrated spinach, tomatoes, and carrots, to which has been added Vitamin D in the form of specially treated, powdered, irradiated yeast by Steenbock Process under license from the Wisconsin Alumni Research Foundation.

BioVegetin provides the vitamins A, B, C, G and the minerals Calcium, Iron and Copper naturally contained in these vegetables, together with the added Vitamin D. The mixture of BioVegetin with milk offers these vitamins in protective quantities for the bottle-fed infant. Easily added to the milk mixture, BioVegetin affords a simple and safe means of giving vegetables to the very young infant. The vegetable fibre is finely divided to prevent gastro-intestinal irritation.

As determined in clinic and laboratory, BioVegetin affords protection against scurvy and rickets without the supplementary feeding of other vegetables, orange juice, cod-liver oil or related products.

The vegetables in BioVegetin are dehydrated by a special process and represent 16 to 25 times their weight in fresh, bulk vegetables. The constancy of the Vitamin D content is under the supervision and control of the Wisconsin Alumni Research Foundation.

The yeast has been carefully auto-claved to destroy its viability, thereby preventing fermentation.

Doctor: May we send you sample of BioVegetin?

COMPARATIVE CHEMICAL ANALYSES

Each 6½ gram ration of BioVegetin contains a quantity of vitamin C equal to that in 22 cc. of fresh orange juice and 933 Steenbock units of vitamin D, the equivalent of 15½ teaspoonfuls of plain cod-liver oil or 1½ teaspoonfuls of 10-D cod-liver oil or 12 drops of 250-D Viosterol in oil.

	BioVegetin	Fresh Tomatoes	Fresh Spinach	Fresh Carrots
Moisture	10.0	94.3	88.2	90.0
Ash	6.1	0.5	1.0	1.0
Iron (Fe)	0.013	0.0004	0.0026	0.006
Calcium (Ca)	0.51	0.011	0.067	0.056
Copper (Cu)	0.0012	0.00007	0.00012	0.00007
Fat	3.4	0.4	0.3	0.4
Protein	20.0	0.9	2.1	1.1
Crude Fibre	6.5	0.6	1.0	1.1
Carbohydrates	53.4	3.9	3.2	9.3
Calories, per oz.	94	6.5	6.8	12.7

The ease with which BioVegetin can be incorporated into the milk mixture (or the boiled water allowance of breast-fed infants) contrasts most favorably with the problem of feeding the supplementary orange juice, cod-liver oil, cooked and strained vegetables, and the difficulty of cleaning and preparing the latter.

BioVegetin

500 NORTH DEARBORN ❖ PRODUCTS INCORPORATED ❖ CHICAGO ❖ ILLINOIS

WISCONSIN REPRESENTATIVE: CLARE G. NEWMAN, 2301 E. JARVIS, MILWAUKEE, WIS.

BioVegetin is with the new Byrd Expedition to the South Pole

I (do / do not) give my permission to have a physical examination made of my child's eyes, ears, nose, teeth, and throat with the understanding that I shall not be obligated in any way to pay for such services.

Dated _____ 1932.

_____
Parent's name.

_____
Address.

REPORT OF FINDINGS TO PARENT

December 1, 1932.

Dear Parent:

Your child, together with every other rural and village school child in Polk County, has been examined for defects of the teeth, eyes, ears, nose and throat. Varied health programs have been conducted by various counties throughout the state, but Polk County is the first county to have a combined medical and dental examination, in all of their schools. This health inspection of the school child is our part of the program of the White House Conference of school children.

It has been shown that the health of the rural school child is inferior to that of the city school child, and also that the rural school child does not have the school health services of the city school child. This survey that has just been completed is a step toward a rural school health service equal to that of the city schools. You must realize that this inspection this year was not complete and that there might be some defects missed by the examiners and that any information relative to your child's health should be only an indication and a warning. With the examination of seven or eight thousand children, there are bound to be errors.

You are not obligated in any way to have the defects corrected; we are simply advising you of these defects in order that you may guard the health of your child. The White House Conference on Child Health expressed the thought briefly, "We can do much to help the nation and the children over the present emergencies. But the greatest service, in the long view, is the endowment we can give to the next generation in health and character."

In the examination of your child, the examiners found the defects shown in the table below.

If you are interested in determining the accuracy of the above listed defects further examination will be necessary for a definite and complete diagnosis.

Very truly yours,
Polk County Child Health Survey Committee,

P. J. Lynch,
J. H. Spencer,
Geo. B. Larson.

Name of Pupil _____
Dist. No. _____ Town_____
1. Eyes _____
2. Hearing _____
3. Tonsils _____
4. Adenoids _____
5. Glands of Neck _____
6. Thyroid _____
7. General appearance _____
8. General statement _____

Teeth:—
1. Permanent teeth decayed _____
2. Baby teeth decayed _____
3. Teeth that need to be removed _____
4. Condition of teeth _____
5. Miscellaneous _____

THE JOURNAL BOOK SHELF

BOOKS RECEIVED FOR REVIEW

The History and Epidemiology of Syphilis. The Gehrmann Lectures, University of Illinois. By Wm. Allen Pusey, A. M., M. D., LL. D., professor of dermatology emeritus, University of Illinois; sometime President of the American Dermatological Association and of the American Medical Association. Price $2.00. Charles C. Thomas, Springfield, Ill.

Public Health Nursing in Industry. Prepared for the National Organization for Public Health Nursing by Violet H. Hodgson, R. N., assistant director, National Organization for Public Health Nursing. Price $1.75. The Macmillan Co., 60 Fifth Ave., New York, N. Y.

The Technic of Local Anesthesia. By Arthur E. Hertzler, A. M., M. D., Ph. D., professor of surgery in the University of Kansas; surgeon to the Halstead Hospital, Halstead, Kansas; to St. Luke's Hospital and St. Mary's Hospital, Kansas City, Mo.; and to the Providence Hospital, Kansas City, Kans. Fifth Edition. Price $5.00. C. V. Mosby Co., 3523 Pine Blvd., St. Louis.

A Text-Book of Physiology. By William H. Howell, Ph. D., M. D., Sc. D., LL. D., emeritus professor of physiology in The Johns Hopkins University, Baltimore, Twelfth edition, thoroughly revised. 1132 pages with 308 illustrations. Cloth, $7.00 net. W. B. Saunders Company, Philadelphia and London.

The Diseases of Infants and Children. By J. P. Crozer Griffith, M. D., Ph. D. Emeritus professor of pediatrics in the University of Pennsylvania; consulting physician to the Children's Hospital,

Exclusively Engaged
in providing

Professional Protection

Thirty-four Years
of

The Medical Protective Company
of Fort Wayne, Ind.
Wheaton : Illinois

Philadelphia; consulting physician to St. Christopher's Hospital for Children; consulting pediatrist to the Woman's, the Jewish, and the Misericordia Hospitals, etc., and A. Graeme Mitchell, M. D., B. K. Rachford, professor of Pediatrics, College of Medicine, University of Cincinnati. 1155 pages with 281 illustrations. Cloth $10.00 net. W. B. Saunders Company, Philadelphia.

BOOK REVIEWS

Any scientific publication reviewed in this column may be obtained for inspection. Orders for such inspection should be directed to the Medical Library Service, 424 N. Charter Street, Madison, Wis.

A New Approach to Dietetic Therapy. By Eugene Foldes, M. D., formerly assistant professor of medicine, University of Budapest, Hungary. Richard G. Badger, 100 Charles St., Boston, Massachusetts.

This volume is an elaborate expansion of the idea that retention of water and salts in tissues is the sine qua non of a number of pathological states, such as epilepsy, eclampsia, migraine, angina pectoris, asthma and hay fever, gout, hypertension, and that it is also a factor in several other morbid conditions. First the water and osmotic balance is studied in terms of the different physiological processes and organ groups. Then a section takes up at length the disease entities, and finally a portion is devoted to circumstantial protocols of the cases the author has treated. The bibliography is unusually extensive but it does not include mention of certain work by others which competes for approval in the same fields, e. g., Fay's work in dehydration therapy for epilepsy.

The essence of the diet is the use of liberal amounts of protein, slight restriction of carbohydrates, more marked limitation of fats, use of meats in such a way as to furnish abundant nucleoprotein, some thought to the adequacy of vitamin and mineral supply, and limitation of total water intake to about 1 liter daily. Calorie supply is slightly lower than on unlimited diets. For the physician accustomed to the American diet habits and their correction according to the newer knowledge of nutrition, this offers nothing new unless it be a slight water limitation. The benefits claimed may well have come from the use of a rationally planned diet which allowed reduction of weight slowly.

From the point of view of the intensive student in scientific medicine the volume is disappointing in its lack of thorough logic and rigorous thinking. Fact, hypothesis and partial conclusions are mixed in a confusing way. E. L. S.

Obstetrics & Gynecology. Edited by Arthur Hale Curtis. M. D., professor and head of the department of obstetrics and gynecology, Northwestern University Medical School; chief of the gynecologic service, Passavant Memorial Hospital, Chicago. With 1664 illustrations. Volume II. W. B. Saunders Company, Philadelphia. 1933. Per set, cloth, $35.00 net.

Volume II of "Obstetrics and Gynecology" written by American teachers under the editorship of Arthur H. Curtis is in every way equal to the high standard of excellence set by Volume I. In a work of this scope the authors have the great advantage of presenting their topics with the thoroughness and completeness which they deserve, and it is safe to say that in each incidence this has been admirably accomplished.

In a volume of such uniform excellence it is difficult for the reviewer to comment upon a few featured chapters, but two subjects without doubt are worthy of special mention. Watson's chapter on Puerperal Infection and Thrombophlebitis is a masterly presentation of a most difficult subject. It should be read by every physician who is responsible for the rendering of obstetric care in any form.

The lamented William P. Graves contributed the section on Uterine Myomata, and it is without doubt the best presentation of the subject with which the reviewer is familiar. Beautifully illustrated by the hands of the author himself and presented in the charming style of literary composition of which he was a master, this contribution will be a worthy monument to that great gynecologist and equally great man.

The reviewer wishes to again call attention to the excellent make-up of the two volumes of the series that have been published so far. The illustrations are generous in number, wisely chosen and excellently reproduced and the mechanical make-up is in every way worthy of the contents. J. W. H.

Essentials of Prescription Writing. By Cary Egleston, M. D., assistant professor of clinical medicine, Cornell University Medical College, New York City. Fifth edition, revised. 155 pages. Cloth $1.50, net. W. B. Saunders Co., Philadelphia and London.

The fifth edition of "Essentials of Prescription Writing" by Cary Eggleston has undergone comparatively few revisions. Amplification of the chapter on Vehicles allows the prescriber greater latitude in selecting agents of disguise for unpleasant medicines.

The manual covers the subject completely and concisely and, being of pocket size, is convenient for either the physician or the medical student.

Public Health Nursing in Industry. Prepared for the National Organization for Public Health Nursing by Violet H. Hodgson, R. N., assistant director, National Organization for Public Health Nursing. Price $1.75. The Macmillan Company, 60 Fifth Ave., New York, N. Y.

In the preface of this book the author enumerates the objectives and purposes of the book which, briefly stated, are to point out the potential field of public health nursing in commerce, trade and industry. From this statement and the method of treating the subject we gather that the author intends to give the

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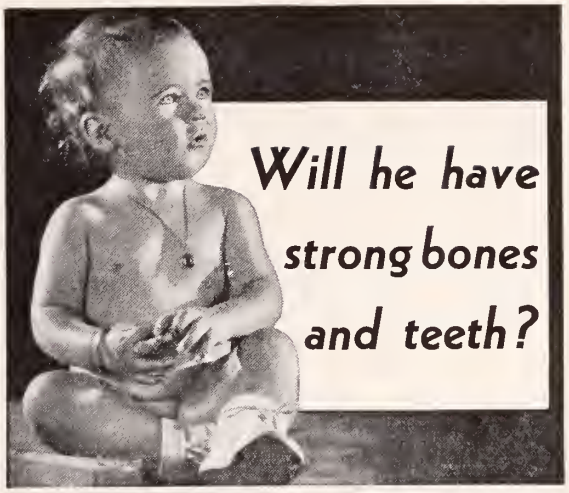

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inexperienced nurse or interested social worker a point of view. The early chapters are devoted to a discussion of company organization and administration which, it is pointed out, is necessary for the nurse to understand in order to comprehend the problems throughout the industry. This is followed by a chapter on medical organization in industry. The discussion is general. There are diagrams illustrative of the type of medical organization which constitute the nucleus for all industries. In this section various methods used to secure employees' aid such as: Workmen's compensation act, mutual benefit associations, group insurance, and so forth, are briefly discussed.

In the second half of the book under the heads of: Principles, Practices and Procedures much space is given to a discussion of human relations. The importance of cooperation is emphasized and the personality required to become a successful nurse in industry is dwelt upon. Not much space is devoted to the discussion of individual or special techniques. There are, however, chapters on such subjects as: Accidents and Illness, Care and Prevention; Industrial Poisons; Diseases Related to Industry.

The opportunity for the nurse to extend her training beyond the care of the individual sick into the field of prevention is clearly presented. W. D. S.

A Text-Book of Physiology. By William H. Howell, Ph. D., M. D., Sc. D., LL. D., emeritus professor of physiology in The Johns Hopkins University, Baltimore. Twelfth edition, thoroughly revised. 1132 pages with 308 illustrations. Cloth, $7.00 net. W. B. Saunders Company, Philadelphia and London.

It is unnecessary to review in detail a book so long and so favorably known as Howell's Text-Book of Physiology. The new 12th edition keeps up the high standard of all its predecessors. The great merit of this text-book has always been that it presented in readable and orderly form what might be termed the fundamental framework of physiology. It does not stop with this, however, for the brief historical introduction, the summaries of present day tendencies in research and the reference foot notes are of the greatest possible value to the research worker as well as the medical student. The chapters on muscle, vitamins and organs of internal secretion have been largely re-written. There are many references to literature as late as 1932. This book by virtue of its readability should be of particular value to the practitioner who wishes to keep informed of the advances in one of the underlying subjects of all medicine. W. J. M.

The Technic of Local Anesthesia. By Arthur E. Hertzler, A. M., M. D., Ph. D., professor of surgery in the University of Kansas; surgeon to the Halstead Hospital, Halstead, Kansas; to St. Luke's Hospital and St. Mary's Hospital, Kansas City, Mo.; and to the Providence Hospital, Kansas City, Kans. Fifth edition. Price $5.00. C. V. Mosby Company, 3523 Pine Blvd., St. Louis.

The fifth edition of this book repeats the previous attempts to set down one individual surgeon's method of ridding himself of what he terms "the pestiferous anesthetist". Frequent references to general anesthesia make it clear that the author is not familiar with a very superior product of the anesthetist's art. The attitude of the author that toxicity from procaine need not be feared is apt to mislead others less skillful in its use. Very inadequate mention is made of the generally recognized prophylactic value of derivation of barbituric acid, and no thorough description is given of the treatment of procaine toxicity, both of which might well be included in a test on local anesthesia technique.

The addition of chapters on spinal and intravenous anesthesia have not improved the present edition since both are misleading. The former, for instance, leaves the reader with the impression that spinal anesthesia is safer than general in cases of cardiac decompensation and that the incidence of postoperative pulmonary complications is less with this technique. Such statements are not in accord with statistical observations of several large clinics. The lack of value of the chapter on intravenous anesthesia is illustrated by the two last sentences, "Amytal is the ideal anesthetic for cautery work about the mouth. However it must be remembered that the drug is an *hypnotic only* (italics ours) and its use alone in doses large enough for complete anesthesia is hardly justifiable".

For the surgeon who is handicapped by a lack of available skilled anesthesia this book describes in much detail how one surgeon has been able to furnish for his patients, pain relief by means of infiltrating the tissues with various local anesthetic drugs. R. W.

Frontiers of Medicine. By Morris Fishbein, M. D., editor, Journal of American Medical Association and Hygeia, the Health Magazine. The Williams and Wilkins Company, Baltimore, 1933, in cooperation with the Century-of-Progress Exposition.

The monograph by Dr. Fishbein is an interesting volume by reason of its combined historical and general informative character. To the reviewer there has always been a wide breach between the scientific insight of the medical reader and the broad general information of the lay reader. To bridge this gap in a single volume demands the qualifications of such a publicist and journalist as Dr. Fishbein. However, even he apparently meets with certain difficulties, as for example on page 134 he carefully defines the esophagus as "the tube which carries the food to the stomach" and elsewhere discusses very glibly the functions of the reticulo-endothelial system without hesitating to enlighten the bewildered lay reader. The internist will take strenuous exception to the references to percussion as "thumping". Likewise, it seems rather an unfortunate statement that "electrocardiogram transforms the movements of the heart";

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Advertisements for this column must be received by the 25th of the month preceding month of issue. A charge is made of $2.00 for the first appearance of copy occupying 1 inch or less of space and $1.00 for each succeeding insertion of the same copy. Kindly accompany copy with remittance to cover number of insertions desired. Advertisements from members of the State Medical Society will be accepted without charge. Such copy will be taken out after its second publication unless otherwise requested. Where numbers follow advertisements replies should be addressed care Wisconsin Medical Journal.

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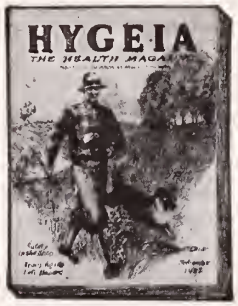

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and again that we are now capable by objective methods to measure the functional capacity of the heart. The optimism relative to the utility of chaulmoogra oil in the treatment of leprosy is scarcely justified in the light of the more recent observations. It is also erroneous to infer that arteriosclerosis leads to an elevation of the blood pressure regardless of all extenuating circumstances. The recent work of physiologists has given a subsidiary function to the liver as the seat of bile formation. In the main it is an excretory organ for this material. The author's inference relative to the relation of alcoholic over-indulgence to cirrhosis of the liver (page 153) is not subscribed to by most pathologists today. The medical man's difficulty in divorcing his technical information from a text which must have a wide general circulation is conspicuous on page 182, where the listing of the barbituric acid derivatives would tax not only the average medical man but even the pharmacologist.

In general, the historical section of the text is much more interesting and more truly directed toward the lay reader's capacity than is the latter portion of the book. The choice of Hippocratic quotations is particularly good. More of the prognostic signs might have been included, but in general the aphorisms are aptly chosen. In the development of the historical background of medicine, one might anticipate a greater attention to such details as the Hammurabi code. Objection is voiced to the qualifications of Avicenna as of superior merit. He was essentially a compilator and in no sense ranked with his fellow countryman, Rhazes, as a contributor to the medical advance. In the development of physical diagnosis, the foundation stones in the clinico-pathological observations were laid in Paris by Bichat; and the true father of modern clinical diagnosis, Corvisart, is likewise unmentioned in the text. He revived the methods of Auenbrugger and by his vigorous application of the same rightfully earned the above title. All of the great leaders of the French school of the early 19th century were his students. Laennec was truly the greatest of this group. Louis, however, was more widely influential than any other member of this school and deserves particular eminence by reason of his development of the numerical method rather than by any other field of special endeavor. Dorothy Dix unquestionably earned great credit for her effort in the betterment of the treatment of the insane; but Benjamin Rusch far antedated her in this movement in America. The reviewer was particularly pleased to find due credit given to Crawford W. Long for his observations in the field of anesthesia.

Pointed as are the criticisms of the text above made, it is a very interesting although sketchy outline of the Frontiers of Medicine and will deservedly have a wide circulation. It is obviously impossible for any two individuals interested in the history of medicine to agree upon the relative merits and space to be given to certain individuals and subjects. It is, however, felt that the scope of the presentation is rather broad for the inclusion of such detailed matters as therapy, and much of the subject matter in this direction is so highly technical as to deny an adequate appreciation of its significance to the lay readers. It is hoped that this text book, along with others of the same general order dealing with the history of medicine, may excite in the medical reader a curiosity and a desire for wider information in this field. W. S. M.

Histopathology of the Peripheral and Central Nervous Systems. By George B. Hassin, M. D.

This book was written to supplement the rather inadequate treatment of neuro-pathology in the manuals of neurology and psychiatry. The book is primarily a descriptive pathology. Only occasional reference is made to clinical symptoms. The author also avoids any general discussion of the many problems suggested. He appears to be most interested in presenting the facts of structural disturbance that occur in the nervous system.

The material is well organized, well written and adequately illustrated. It is presented in three sections. Part one deals with diseases of the peripheral nerves, part two with diseases of the spinal cord and the third part with diseases of the brain. Subheadings classify the diseases of each part as inflammatory, degenerative, traumatic and neoplastic.

The book appears to have been written primarily for the neuro-pathologist. He will find a good bibliography appended to each chapter and a description of staining technique as employed in the author's laboratory. The book should also serve as a good reference work to student and practitioner who are interested in comparing the structural changes with the disturbed function of the nervous system. O. M.

ECTOPIA VISCERUM

(Continued from page 697)

The case here reported is unique in its abnormalities, and few like cases associated with placenta praevia have been reported. Extensive references and bibiliography of the few similar cases can be found in the presentation of a similar case report by Mills and Walpert in the American Journal of Obstetrics and Gynecology, January 1926, vol. X, No. 1.

ATTENDANCE RECORD IN ERROR

In the September issue of the Journal, the record of attendance for meetings of the House of Delegates indicated that Dr. E. L. Bolton, delegate of the Outagamie County Medical Society, was present at the first session but absent at the combined second and third session. This record was in error for Dr. Bolton was in attendance at all sessions of the House.

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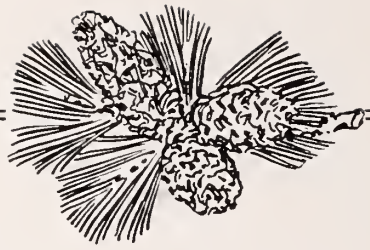

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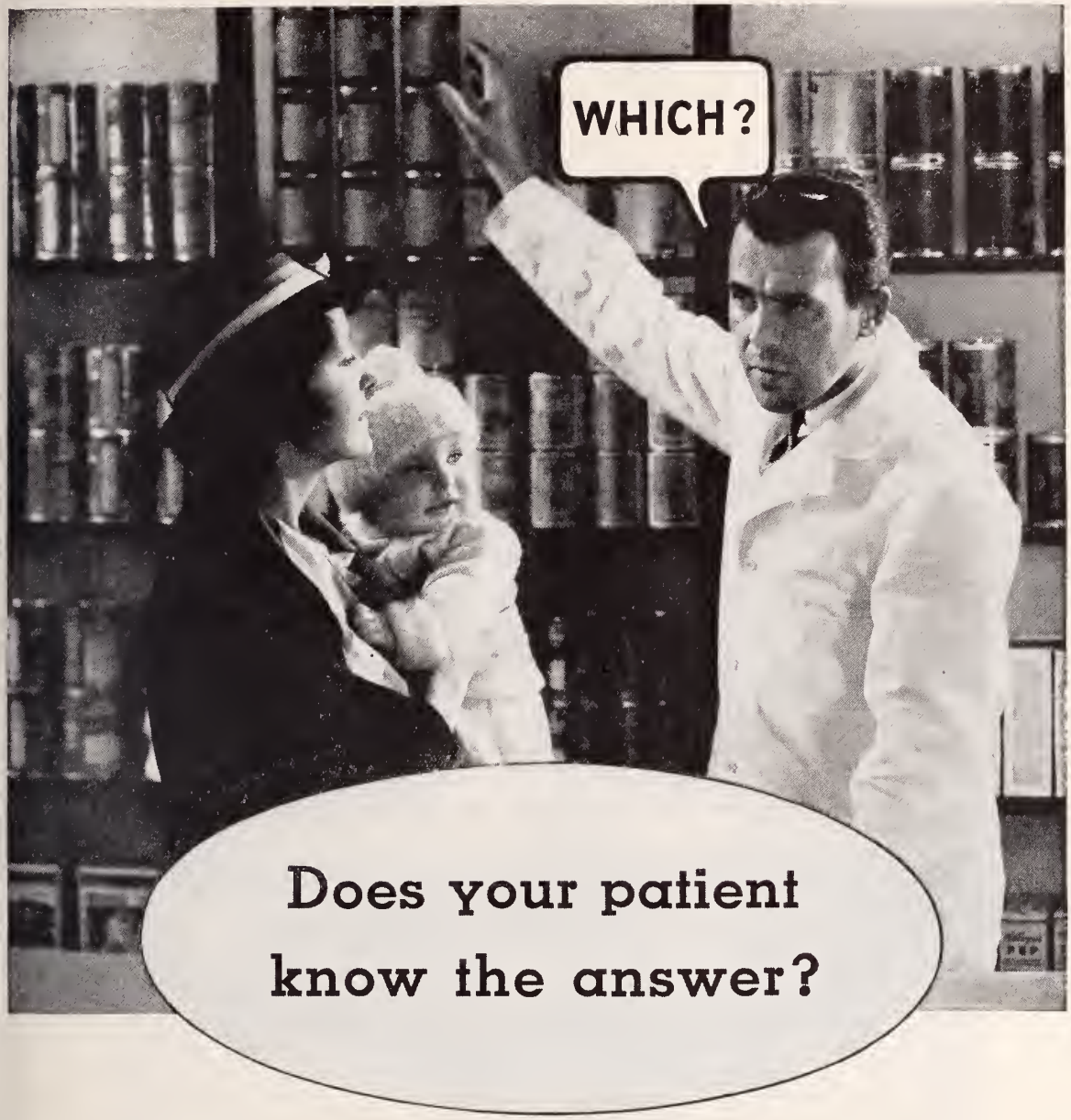

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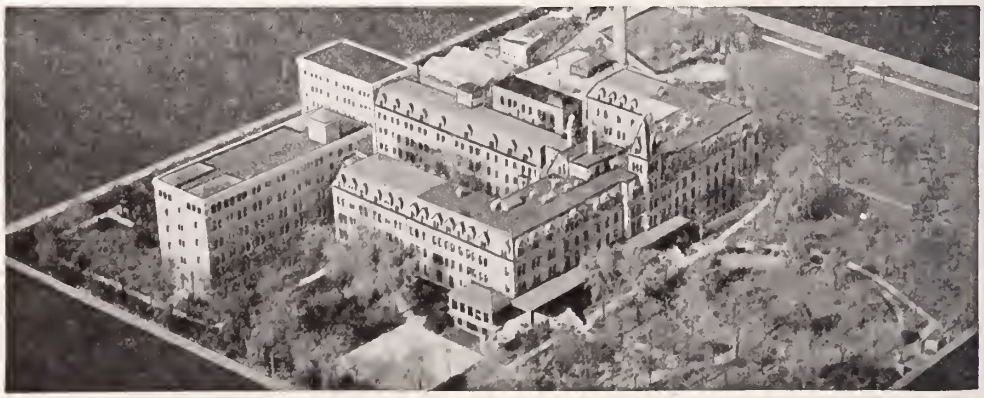

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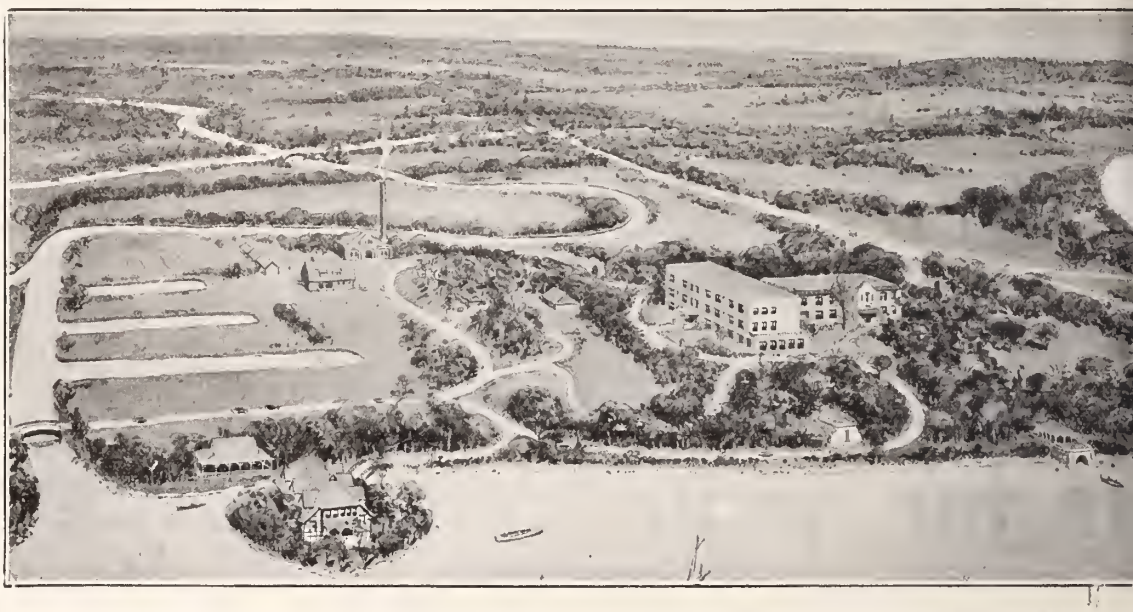

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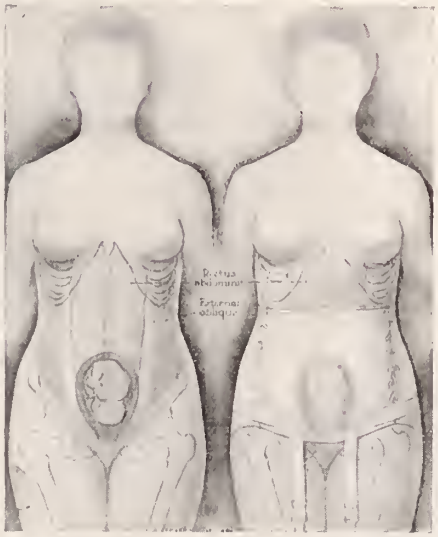

Anterior view in five months' pregnancy showing relation of fetus to bones and superficial muscles of abdomen. Figure at right illustrates influence of supporting garment on structures.

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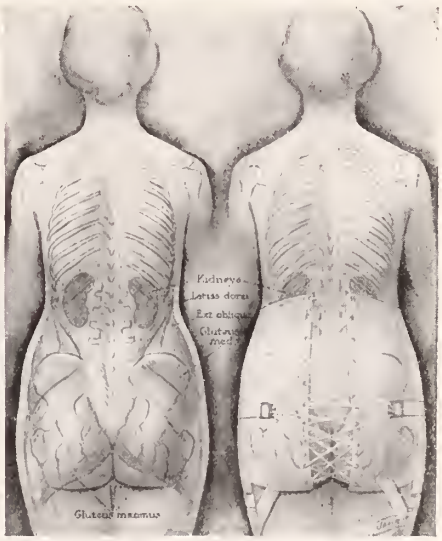

Posterior view of female figure showing lumbar and gluteal muscles, kidneys, etc. Figure at right indicates support given to these structures by Camp physiological maternity garment.

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"The Foundation and Early History of St. Bartholomew's — the First Hospital in London"*

By RICHARD E. SCAMMON
Dean of Medical Sciences
University of Minnesota, Minneapolis

I am somewhat overwhelmed with this introduction. It proves very well, perhaps, the old adage "jack of all trades and master of none."

I was somewhat relieved, however, when your President mentioned the fact that I had at one time indulged in statistics. For I read the very careful calculations of a fellow statistician who computed at great length that if all statisticians were laid out cold, end to end, it would be a good thing. (Laughter)

This series of remarks which have been made regarding me, in a way, perhaps, requires a bit of answer. I do not think anybody has to apologize any longer for reading detective stories. We all do it. As a scholar, I would like to express my opinion regarding detective stories. If Scotland Yard does not appear by the time you have reached the twenty-fifth page, if there is not an inquest by the end of the second chapter, drop it and try another. (Laughter)

It is true that I have been a good deal interested in cathedrals and that I have recently had some interest in medieval hospitals. As for cathedrals, I am inclined to remember a story told by Alexander McCosh who was a fine old Scotchman who preceded Woodrow Wilson as President of Princeton.

Alexander McCosh was known for his open speech and on one occasion a visitor addressed chapel, and the visitor prayed for the student body. This was received with respectful silence. He prayed for the board of trustees. This caused little comment. He then prayed for the instructors and the tutors, and there was a ripple across the student body. Alexander McCosh greeted the speaker afterwards and he said, "Why were you such a fool as to pray for the teachers and tutors?" Now there is nobody that will pray for a dean. He must go to a cathedral and make his own peace with the powers that be. (Laughter)

It is true that I am interested in medieval history and medieval life, but that interest in medieval history and medieval life is not an interest in a thing which is really dead and embalmed. I have a strong feeling that the pulse of life ran very strong a millennium ago, that in that period were confined a series of episodes, a series of events, of accomplishments, of undertakings, which are of the greatest value to us in interpreting our own life.

Medieval times were not times of quiet, of tradition, and of stagnation. They were times of activity. They were times of active change. They were times of new ideas — perhaps of old ideas, socially, economically and intellectually. One cannot turn to medievalism without realizing that there was fresh, pulsing life in Europe, at least, at that time.

I have chosen out of that medieval period to speak to you about the development of a typical medieval structure, a typical medieval institution — St. Bartholomew's Hospital, ostensibly because it told a tale.

My real reason for choosing it was because I became interested in the founder of it. Several years ago I was in London and I noticed that running across all the billboards was a picture, and this picture showed a man in monk's habit with his hands thrown up, and he said, "I, Raher, gave my all for St. Bart's 800 years ago." And that was used as the chief propaganda for raising money to support that old hospital.

It seemed to me that an individual with a sufficiently vivid personality to form the

* Presented before 91st Anniversary Meeting, State Medical Society, Milwaukee, September 1932.

keynote for continuing an institution of service nearly 1,000 years after his death was well worth getting acquainted with. So it was through my study of Raher that I got into the subject of St. Bartholomew's hospital.

St. Bartholomew's hospital is not the oldest hospital in England. There probably were one or two established before it, but it is the oldest one in existence, and it is the oldest one of which we have a definite and a clear history.

OLD LONDON

The history is linked up with London, and it is practically impossible to follow it without knowing something about the background of London. When any person speaks of London one has to very carefully define which London they are talking about. A city 2,000 years old has been represented by a dozen different phases. There was a prehistoric London, at least three Roman Londons, a London under the Anglo-Saxons, and the Danes. A Norman London, the London of the Tudors, destroyed by the great fire. The London of the days of periwigs, and the Eighteenth Century, which ran into Victorian London, which in turn is now being replaced by a modern city, and the city we are dealing with is London along about the year 1,000.

London was always a Roman city, practically from its establishment. It is probably one of the oldest Roman cities in the world that remained Roman. As a matter of fact, London was Roman for almost 1,000 years. We have been taught in our school history that the departure of the Romans from England meant the departure of Rome. This was not the case with London. It remained the center of tradition, the center of Roman culture, the center of Roman thought, for hundreds of years thereafter; gradually becoming changed, gradually becoming Anglicized, but it was still Roman.

This continued up to sometime in the Ninth Century when it was pretty badly destroyed by fire, and a reconstructed city began which forms the picture on which I must base my story.

London, as I have said, had been in existence for one thousand years. It had undergone a series of changes, but the old city of London remained essentially the old Roman city in outline. It was the largest Roman city aside from Rome that existed in western Europe. It was surrounded by extremely heavy walls, and those walls were never lost. They were rebuilt from time to time and they form an outline which still can be traced in parts of the city.

Three things really remain of old Roman London up until the time of the invasion of the Norman. First, the wall itself. It was a constant protection against invasion, built up from the Roman wall, supported by the innumerable additions at every raid which was made on the city. Second, is a series of docks, because London was a great commercial city and the great maritime city of Europe all through the early Middle Ages. And third, London Bridge, which has been in its location in one form or another for almost 2,000 years.

London was attacked again and again during the period, we will say, from 500 to the year 1000. It was taken several times, but its experience when it was taken was the experience that practically every Roman city had. Although it was captured, the people who captured it practically never settled in it. They left the city itself to the few remaining inhabitants, so London at the time in which we are dealing with it, really consisted of three parts. First, the remains of the old Roman town, badly broken down unquestionably, but still with a general outline of a typical Roman camp.

To the north were the Anglo-Saxons, who, although they had taken the city, never settled in it. To the west was a settlement of Danes and Norwegians, who have also taken the city in turn, but who had never settled in it.

Anyone who follows the London streets today, and the churches, can trace perfectly definitely these regions. Practically all our churches in these regions carry Norman and Danish names. The streets still carry, if you will trace them back, the names which have evidently come from Scandinavian communities.

There were three divisions then of the city and in between was a great open space which had never been occupied, and that region was known as Smithfield. Smithfield is nothing but a corruption of "smooth field." It was a huge area of marsh and fen, unfit to settle, unoccupied at the time. It was never invaded apparently in any military operation, but lying as a wild bit of territory immediately to the north of this city.

We can imagine that London, then, at the time of which I am speaking, which would be early in the Eleventh Century, was a town showing remains of the Roman settlement, showing two or three settlements of invaders, having a population of 20,000, still having a traffic along the Thames, and still having a good many connections with continental Europe.

THE NORMAN INVASION

The story which I am going to tell deals with London after the Norman invasion. We have been taught in our history books that the Norman invasion was a very independent thing, that England changed in character, that a group of Normans came to England, that they conquered the country, and that they completely modified the population. That is not so. Normans and English were very much the same. They were made up very largely of a mixed stock, which is very much like our own. They were partly British, they were partly Scandinavian, they were partly North German, and the Norman invasion of England was little more than a dynastic change.

Something happened to England when the Norman invasion took place. Perhaps twelve or fifteen thousand people came into England, but they acted as a leaven which for the next 100 years produced an outburst of energy which is almost inconceivable. That energy extended into all lines, it extended into buildings, government, it extended into the social life, and in 100 years the country was practically transformed by this stimulus which apparently occurred at that time.

In seventy-five years there were built in the city of London close to 150 structures. These structures were so solid that their remains are present today. The average thickness of their walls is from twelve to sixteen feet. Every stone was brought from the hills above London, floated down the river on crude rafts, pulled up by men, by ropes of leather, hoisted into place, built up with a cement which had to be made miles away, and finally the structure was completed. An almost incredible amount of work and energy went into this city at that time. Nor was that work uninterrupted. In that period of seventy-five years London participated in six bloody, foreign wars, and sent men to them. It supported a very elaborate foreign government. It conducted an annual expedition against the Scots, which apparently took very much the form of a winter sport. It had a complete social revolution in its government, so at the first, the mayor, which we think now was a very conservative form of government, which was absolutely new in medieval periods, took a place.

In this seventy-five years the structure was completely rebuilt, with its church which men said would never be completed (St. Paul's), with a public edifice for every three acres, and a complete reestablishment of government.

That is the background of the establishment of St. Bartholomew's hospital, and of the man who built it.

FOUNDING THE HOSPITAL

Who was this man who really established St. Bartholomew's hospital? His name was Raher. Probably the son of some man-at-arms who came over with William the Conqueror.

Our knowledge about Raher and of the founding of St. Bartholomew's hospital is due to a very fortunate incident. There is preserved in the British Museum a little book in manuscript. It is eighty-six pages, and it is classified with that beautiful British system or lack of system, as "Vespasian B-3." And it is called "Vespasian B-3", because a bust of the Emperor Vespasian happens to stand above the book case in which it is kept, and it is on the third shelf. Other

emperors are lined on other bookcases. One hundred years ago a fire broke out and it consumed all the books under the emperors up through "F", but, fortunately, this particular book was under "V", and we have it at the present time.

This book is known as the Book of the Foundation. As I say, it is eighty-six pages, and it consists of two parts, of a Latin part and of an English part, and it was evidently written by some member of St. Bartholomew's hospital. By studying it carefully we are able to tell about the time it was written, because this individual who was tremendously interested in this institution records very carefully the existence of surrounding buildings, and he describes the destruction of one huge castle near St. Bartholomew's hospital. That gives us a beginning date.

He also records very carefully the various gifts and particularly the charters which were given to the hospital, and he ends very abruptly about 1181 and describes no more charters. There were many more charters given after that period. The destruction of the building took place in 1174, so we know within seven years of when this man, whose name is quite unknown, wrote this original Latin description of the founding of the hospital.

It is a most interesting work. It starts out first with a description of Raher himself, of which I will say more in a minute. It then gives an account of the difficulties that hospital encountered in its first period of fifty years.

It ends up with what I suppose is the first set of clinical case histories that were ever collected and put down on paper, or at least the oldest set that is preserved. About twenty-eight records are in that collection which deal with clinical conditions. Last fall, as a matter of amusement, I took these several records. I transcribed them, leaving out certain ecclesiastic remarks. I submitted them to some of my clinical friends and I said, "What can you make out of this set of records?" They were good enough so that they were able to identify pretty definitely about one-fourth of the cases. Apparently their records of 800 years ago were clear enough that they felt they could make a tentative diagnosis; they could not realize they were dealing with individuals 800 years dead.

Along with this book is an English translation made many years later — about 1400. The English is a little bit like Chaucer, a little bit easier to read. We know the exact date because the man who transcribed it made a mistake. The establishment of the hospital took place in the days of Henry II, but the scribe who wrote the English translation was thinking of Richard II, and put his name in.

That is the introduction of the story — so much to give you a general idea of the material on which we have to work — Vespasian B-3.

THE MAN RAHER

What does this book tell us about the founder of this first great hospital? There have been a lot of stories about Raher. He was apparently, as I have said, a man who was a descendant of some man-of-arms who had come over probably with William the Conqueror. He became associated with William the Conqueror, the son, William Rufus, and with Henry I, who followed him. It was a common story that he was the king's jester. As a matter of fact, Kipling, in the "King's Jester," pictures Raher and makes a remarkable civic character of him. Certainly he was closely connected with the court. He was probably born somewhere around 1080.

When Raher was a man probably about thirty-five or so, he left England and went to Rome. He went on a pilgrimage to Rome. We do not know why, possibly because of political difficulties, possibly because of religious belief, but, at any rate, sometime early in the twelfth century (early in the 1100's) he arrived in Rome.

There he had what was evidently a severe attack of malaria, and he was placed upon the island of Aesculapias in the Tiber. While he was there, apparently, I presume, in a semi-conscious condition he made a promise that if he could get rid of this tertian malaria, he would return to London

and erect a hospital. He said he would dedicate this hospital to St. Bartholomew, and the reason for that was that St. Bartholomew was the popular saint of his day.

St. Bartholomew was not a very saintly person. As a matter of fact he was a common soldier in the first Crusade. His bones had just been brought back to Rome. He was the popular saint of the day, and it is not at all surprising that Raher, the King's jester, should have picked him out as the patron saint.

He gradually worked his way back to London and started his plan. He first met with the nobles in the city and convinced them of the need of a hospital. He then got in touch, evidently, with Richard of London, who was the Archbishop, and convinced him of the necessity of it. Then he went to the king and got the grant of that piece of land called Smithfield, or "Smooth Field," a swampy area which had never been occupied, or used.

Apparently he had no money, but he had an exceedingly persuasive tongue. Apparently the only use which Smithfield had been put to up to that time was as an execution place. On the highest place a gallows was erected. He proceeded to gather around him apparently by persuasion (the Book of the Foundation is full of it) a group of young men, children, old people, too, and they cleaned that entire area and drained it and they ditched it.

He then persuaded other people to join with him and they started the erection of the hospital and of the church. In 1123, almost 810 years ago, the church and the hospital were opened for occupation.

The church was built practically at once, and the hospital was built very shortly thereafter. Raher then proceeded to organize his project, and he had in it twelve people who were called "Brothers" because he had entered a minor order at that time, and he had four "Sisters" who acted as nurses.

THE ORIGINAL HOSPITAL

From everything we can judge the original hospital had four wards in it — one for each Sister. Each of these wards held, in theory, twelve beds, but these must have been rather capacious, because we know, in times of war and pestilence, as many as eight individuals were placed in one bed, so that they were little more than wide trunk beds. So we can imagine then a hospital of about fifty beds, the first in London.

At the end of the ward was a shrine or an altar, and in each ward was a sister who was supposed to take care of the sick. I have drawn her here in the costume which was specified at that time. It is the costume of an Augustine friar. You will notice she is standing with two sticks in her hand. Those two sticks are spindle and distaff, because the early records show that to each sister was issued a certain amount of flax, and she was supposed to sit in the ward and weave the sheets for the patients. So that the distaff and spindle (this is long before the days of the spinning wheel) represent one of the activities of the nurse, — one which I have called to the attention of our superintendent of nurses from time to time. The jar shown here was the water container. That too is drawn from the historical record, because we find all sorts of quarrels as to who is to be responsible for filling it.

The fire was probably built in the middle of the ward and the smoke drifted up through the ceiling, with no more than an open vent. There were no fireplaces in any public buildings in England at that time. That there was a fire at all may be doubted by anyone who has spent a year in England, but our records show very difinitely they did have fire, because we find record after record of the grants of wood to St. Bartholomew's hospital, and those grants are typical of the records of the time.

One, for example, of the earliest encountered is from Henry II, and he grants to St. Bartholomew's "One dead oak tree, which is to be cut in my forest of Winchester with great care so that no living tree, small or large, shall be destroyed, and it may be floated down the river to be used for the patients of St. Bartholomew's" After the timber was floated down the river it again encountered difficulty because of the little brook running up to the hospital. It was

necessary to get another grant, freedom of entry, to allow the logs to be carried up to be burned in the hospital itself.

That gives some concept of the way in which this hospital was established.

This hospital started absolutely without money. We know how the early conduct of it was carried out. In the first place a fair was established. Once a year a great fair was held in Smithfield. We still see the remnant of it in the shops around Smithfield. The hospital had the right of certain fees from that fair. The rest of the support came from what could be picked up by begging. There was a certain and apparently extremely successful beggar who begged food for the inmates.

Then there follows through the next fifty years a whole series of records of gifts to this hospital. In the first place, evidently, the hospital was, as many hospitals are, supported by the poor. It was fifty years before we find a record of any gift from a man who had a surname. There will be, "Watt, the weaver;" or "Thomas, the fletcher." A fletcher fastens the fletches on arrows. Or, "Richard, who lives by the ditch." Not one of the early records showed the man having a personal name. In other words, it was a hospital of the poor. In every case one of these records was drawn up, and in these records were never gifts of money, because money was almost nonexistent in large quantities.

What they are are gifts of rent. They would give small parcels of land to a hospital and allow them to collect the rents upon it. It was over 100 years apparently before the hospital received any money at all. There simply was not any. Rents were secured by this method of getting grants of land.

We find in the record of the witnesses practically every prominent person that could be gotten hold of, and the reason for that was they wanted to get such a full record that if anything happened, so that the land fell into dispute, they would have support in their law courts in dealing with the gift.

In that way, then, the hospital grew up rather gradually. After about 100 years, the support commenced to come from wealthy persons. We find the appearance of the names of nobility. We find that large grants of land are given. We find there is a certain amount of royal support given to the hospital. We also find that the hospital, unlike modern hospitals, was continually in trouble with practically every organization about it. And on every occasion when they got into trouble they appealed either to royalty or they appealed to the Pope for authority to go on with their duties.

That, then, perhaps gives you a little idea of how the early establishment of the hospital took place. It gradually grew in land, it gradually grew in personnel. As soon as it was found that the sisters were not enough to care for the sick they procured lay sisters. And the introduction of lay sisters, or the first true nurses, occurred apparently in St. Bartholomew's hospital, — the addition of women who were not in religious orders.

EARLY HISTORY

This addition was probably caused as much as anything by the outbreak of the plague. The plague struck London about 1350. Curiously enough, the early plagues are hardly mentioned in the records. Apparently, people were so accustomed to disease, to early death, and the like, that they simply stood to their post, and the hospital went on with its duties as usual.

In this period we find only one man whom we would regard as a scholar, and his name is John Merfield. He was enough of a physician to compile a breviary, a short record of the medical cases in St. Bartholomew's. He compiled a small list of the drugs used there. His medical knowledge was pretty limited. Certain things he knew very definitely. He had a very definite idea of pleurisy, but he knew nothing about other diseases of the chest. Even in those days the English had gout and he recognized it and gave an account of it. He was, of course, familiar with plagues, because the plague was everywhere. He was also familiar with malaria because malaria was a disease also everywhere, and he had some rather advanced ideas about nursing. He

is the only scholar that we find in this period.

St Bartholomew's then continues as a small hospital, perhaps growing slightly in size from the time of its inception in 1122 for a period of close to 400 years. Then a great change swept over England. England went into the Reformation, and every ecclesiastic house, every house which had a religious connection, was practically swept out of existence, or was reestablished, and St. Bartholomew's was one of these houses, although it was a hospital, which underwent this change.

In 1536 the hospital was closed. It was closed by order of Henry VIII. It remained closed for three or four years. At that time it had an income which I have estimated in terms of modern money of about $85,000 a year — not a small amount for a hospital of fifty beds, even if it had a church district to support along with it. Henry VIII appropriated this sum of money, although the hospital was left closed. It stood vacant about three years. Then the Londoners who needed the hospital badly petitioned the king it be restored. He graciously restored the hospital, but he neglected to return the funds. (Laughter) The Londoners struggled with the situation about four years, then some unknown physician generously proceeded to get one-half of the money back from Henry VIII. All honor to anybody who found it possible to extract 1000 marks from that much married man.

AN EARLY "COMMUNITY CHEST"

This was done, however, only under condition that London itself raise an equal amount, so the Londoners set about to raise money in very much the same way we do today. It is so similar that it is almost ludicrous. In each one of the churches, and remember there was a church for every small city block, they held a meeting. They put on a typical community chest drive. They pointed out the fact that it was necessary to get people off the streets when they were ill. They pointed out the fact that there was no place to put these people, and they raised, by what was essentially a community chest system, close to a sum equalling that which had been extracted from the king.

The Londoners had finally raised this money, and, although the king had given it, they were somewhat suspicious about its expenditure, and they proceeded to establish very definite rules about the way in which a hospital was to be conducted, and we have a record of exactly the way in which the reconstructed hospital of St. Bartholomew's was to be organized. In the first place it was to have twelve governors, and these governors were to consist of four aldermen and eight of what were called the commonality — people taken from out of non-official positions. Then under these were a set of officers and it may interest you to know what these officers were.

In the first place they had a hospitaler. A hospitaler apparently acted a good deal like a modern hospital manager. It was his business to see that things ran smoothly. It was his business to keep records of men who went in, or patients that went in and out of the hospital. It was his business to report regularly to the governors, and he received in terms of modern money probably somewhere in the neighborhood of $1,500 a year.

The next man was the renter, because Bartholomew's property lay in the form of land. Money was still a very scarce article. He received an equal amount. The next person apparently in importance was the butler, because in the Sixteenth Century England had never heard of the Volstead Act and he received a sum almost equal to the man who managed the hospital. He got about $1200 a year, plus his living. The cook, much as one may disregard English cooking, got an equal amount — about $1200 a year. And the porter also got an equal amount. But a porter was a very different individual from our present concept of a porter. It was his business to keep general order in the house, and he acted really as a sort of a police official.

The next group were the surgeons, and there were three. They were paid about $3,000 a year in modern money, and apparently they acted very much like a visiting staff.

It is most interesting to go over the instructions, for there are instructions laid down for each one of these people. Apparently these three surgeons acted a good deal like a diagnostic clinic. Every patient who was brought in had to be examined by two of these men. They made a diagnosis and they made a prognosis. They then reported that to the hospitaler. He made record of it. Then when the governors met the next time this was spread on their set of records.

Also before anybody could leave the hospital the two surgeons examined the patient and they reported back through this rather clumsy method, but a very thorough method, to the governing office. So that the surgeons then acted, it seems to me, very much like a modern diagnostic clinic.

The next group of people at first I could not recognize at all. They were called byddlem. I could not recognize this at all until I got hold of the modern spelling, which was nothing but beadle. You remember the beadle in Oliver Twist expressed such a commotion when Oliver Twist asked for more. A beadle was a curious creature. Apparently he was a mixture of human ambulance, house officer, and police executive. It was the duties of the beadles to walk the streets of London two by two and every time they met a case of disease, or every time they met an accident, it was their business to get the individuals into the hospital. They then turned them over to the surgeons, and the surgeons looked after them. The beadles probably helped and their responsibility was over.

NURSING STAFF

The nursing staff also is rather interesting. The nurses' staff consisted of twelve to fourteen people. There was always a matron or a chief nurse, and under her were ordinarily twelve nurses. In most of the records we find the name given of the chief nurse or matron. We then find the twelve nurses, then we find a curious entry below. We find the term "fool nurse", or the "innocent." And apparently the fool nurse, or the innocent, was the vaudeville performer for the rest of the nurses during her period of rest.

Here again the rules are laid down very carefully regarding these nurses. They are particularly warned to be circumspect in their conduct and at the end of each one of the charges it says, "This much shall you do, but no further duties shall you encounter." In other words, the duties of nursing were limited to nursing. In addition to this the matron was carefully instructed not to partake of strong waters, but also not to dispense them as she apparently had to the population — the hospital population.

When the hospital was reorganized, it took in 100 people, and if we compute the expense of that hospital, we find that they were spending, in modern money, about $1,500 a patient, so the concept that hospital charges were small in early days, that they have been a modern rise, is quite mistaken. It certainly cost as much in the days of Henry VIII or Queen Elizabeth to take care of a patient as it does today.

Much of that allowance went into curious things. Each patient, for example, was allowed $1.20 a day in modern money for his food alone. He was allowed about forty cents a day in the form of candies. He also was given something which few hospitals do today — a small gift of money when he left the institution.

These conditions which I have laid down or described to you were probably in existence long before the hospital was reorganized. When the hospital was reorganized these conditions were set out. Not only did they set up these conditions, but they also set up very definite conditions about how the accounts were to be gathered, and I think that modern accounting would find an elaboration of accounts which would appeal to the soul of an accountant.

Four books were kept — a journal, which told what took place every day. A book of accounts which was really a sort of an inventory. A repertory which was a daily account, and then a survey which was a summary. So suspicious were the Londoners of the situation in the hospital that one clause which is put into these orders is as follows: "There shall be provided a fair

and substantial chest which shall be located in the securest part of this hospital, and this chest shall have three separate locks, each with a different key. One shall be in the hands of the president, one in the hands of the treasurer, and one in the hands of a commoner elected by the people, and all record books shall be kept in this chest, and none shall be opened without all three officers being present, and no record shall be removed from the chest, for any purpose, none whatsoever."

So that a system of records was kept which we have today, which gives us most of our information about what an early medieval hospital was.

This then, gives you an idea of the way in which this hospital reestablished itself in the Sixteenth Century.

LATER HISTORY

The later history of the hospital becomes the later history of all hospitals. It increased in size and it increased in income. More and more money was given to it. It faced one epidemic after another, and apparently went through them satisfactorily.

It is a curious thing, that, although London was visited by some ninety-six attacks of the black plague before the last great attack, apparently they never had any trouble in handling it in this hospital. In the last great plague which occurred in 1665 they did have difficulty, probably largely because of political disturbance, which had dispersed all the physicians. We find extra money given to the people who stayed in the hospital and treated plague patients during that period.

The latter history of the hospital, going on from this period runs into the scientific period. This I shall not attempt to take up except to point out some of the men associated with it. Harvey did his work, most of his experiments, in St. Bartholomew's. Abernathy, whose name has almost been forgotten, but is, I may say, the founder of modern symptomatic physiology, was a surgeon at St. Bartholomew's. Percival Pott describes his fracture after he was thrown from a horse on his way up to St. Bartholomew's hospital, and while he lay in the mud he diagnosed his case, and Pott's fracture then represents in a way a contribution from St. Bartholomew.

Finally, I would like to show you one or two pictures of the modern hospital, and two which show it and give an epitome of its history. The hospital practically was rebuilt in the eighteenth century. These buildings are all typical of late eighteenth century, or early nineteenth century.

Two years ago, visiting this hospital, I had the pleasure of talking with one of the men. While we were wandering along the court, he said, "You see this fountain, which is fairly recent, only been up 150 years. It is our opinion our students learn more sitting on this stone bench than they do in any classes we conduct in the class room."

The next picture shows the only fragment which is left of the old original hospital. It is the entrance gate. It has been moved now, which comes in on one side of Smithfield. Through this gate went practically every patient for a period of 500 years. Through this gate the martyrs of Smithfield went out to be burned at the stake during the period of "Bloody Mary."

Finally, the last picture gives you a picture of a modern gate, the Smithfield gate proper, the eighteenth century gate. And here, located in a prominent position is our old friend, Henry VIII, whose contribution to the hospital consisted of removing one-half of its income.

This then, perhaps gives you some glance at the development of a great institution which has been going now for over 800 years. To get an idea of its continuity I would like to cite just one instance: When this hospital was first opened, according to tradition, two of the fifty people admitted were old archers who had been wounded by arrows in the battle of Hastings in Sussex.

In the World War this hospital was still being used to treat the soldiers of England, and for that period of 800 years it took in friend and foe alike, without distinction.

It seems to me in such an institution we have an example of both energy and endurance which makes a study of medieval times a worthy one. (Great applause)

Upper Respiratory Infections in Children*

By G. H. FELLMAN, M. D.
Milwaukee

In presenting for your consideration a subject so common as upper respiratory infections, I realize that it is not a new disease, and yet there is an apparent ever-increasing frequency of its occurrence, and the multiplicity of its complications and their serious end results makes it worth while reviewing this disease that occupies so much of the time of the general practitioner and the pediatrist in his daily practice.

Under the term upper respiratory infection, or, its synonym, throat infection, we include all those inflammatory infections of the nasopharynx, pharynx, and trachea, that are not directly associated with such infectious diseases as measles, scarlet fever, pertussis, meningitis, etc., wherein we also have an inflammation of the throat. Throat infections should be classified as a distinct clinical entity under the heading of upper respiratory infections because they have as definite a symptomatology as any other contagious disease and yet none of our modern textbooks on diseases of children list the condition separately. Throat infections may occur at any season of the year, but have their highest incidence during the months of October to May. In the series of cases observed by McLean [1] he found the greatest frequency occurred during December and January. Epidemic waves of upper respiratory infections spread throughout all sections of our country and often during the peak of the epidemic account for ninety per cent of the practice of the pediatrician. An abundance of evidence shows that the upper respiratory infections are highly contagious as often one member after another of the same family develops the typical syndrome. Exposure, chilling and fatigue are not definite predisposing factors. Barrows[2] studies have shown that it is neither dependent on hygienic surroundings, weather conditions nor geographical location. The average period of incubation is two days but may be as brief as a day or prolonged to four days.

Much bacteriological work has been done in attempting to isolate the specific microorganism responsible for the disease, yet thus far no definite findings have been established. Most workers agree that there is a definite organism responsible, and undoubtedly the infection is spread by contact through droplet infection. Dochez [3] and his co-workers have proven that the nasal washings contain a filtrable virus that is capable of inducing the throat infections in human beings and also monkeys. This filtrable agent has the power of destroying the protective factor inherent in the mucous membrane of the nasopharynx and thus activating the potentially pathogenic organisms present in normal throats. These secondary invaders contribute to the symptomatology and also influence the type of the complications. Grundle and Linden [4] in their studies on the bacteria present in the throat, which they made on several thousand healthy school children, conclude that the throat contains various gram negative cocci, streptococci (hemolytic and non-hemolytic) pneumonococci and at times influenza bacilli, and that these bacteria at times become pathogenic to their host and induce disease in the individual. Whether the filtrable virus Dochez has succeeded in isolating is the activating factor is not considered by Grundle and Linden. As to whether the presence of the tonsils and adenoids play an important role in inducing these infections, I can only state that in reviewing some fifteen hundred private cases I have found these infections are as frequent in those who have had their tonsils and adenoids removed as in those who still retain them.

Lemere [5], in a recent paper based upon an extensive experience, states that the removal of adenoids and tonsils does not lessen the frequency of throat infections. In examining the records of nine hundred and thirty cases at our Milwaukee Children's Hospital, I found that thirty-four per cent occurred in children under two years of age and that fifty per cent of these cases were in children

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CHART I

CASES ARRANGED ACCORDING TO THE MONTHS

January	112 cases
February	72 cases
March	120 cases
April	132 cases
May	87 cases
June	43 cases
July	34 cases
August	30 cases
September	28 cases
October	83 cases
November	61 cases
December	96 cases

under five years of age. These records also shows that the upper respiratory infections were entered at the hospital in greater numbers during the months of March and April than at any other time. A single attack does not confer immunity, but in my own private cases I have found that children who have had repeated attacks of these throat infections one year would retain their immunity for approximately one year in spite of their exposure to cases of throat infection. The upper respiratory infections are more contagious than scarlet fever and only slightly less than measles.

ONSET

The onset of the disease may be exceedingly mild or may manifest itself with an attack of acute symptoms of the greatest severity. There are two distinct groups of symptoms. 1. The acute sudden onset with rapidly mounting temperature, malaise, drowsiness or stupor and vomiting. The vomiting is often preceded by an intermittent abdominal pain. Where vomiting is pronounced there is consequently a lowered retention of the intake of nourishment and a state of acidosis is apt to develop. During this acidotic condition an acetone breath is apparent and acetone and diacetic acid are found in the urine. The face is flushed in the acute attack and the conjunctiva of the lower lids is inflamed. Occasionally a distinct pallor replaces the flushed facies. Severe attacks may be ushered in with chills or convulsions. 2. The second group of symptoms is not as severe as the previous,

CHART II

SYMPTOMS

Group No. 1	*Group No. 2*
Sudden onset.	Sudden onset.
Rapidly rising temperature 99° to 106° F.	Lower temperatures.
Malaise.	Anorexia.
Drowsiness or stupor.	Frequent severe rasping cough.
Vomiting.	Interference with nasal breathing.
Intermittent abdominal pain.	Conjunctiva inflamed.
Conjunctiva inflamed.	Cough increased when in reclining position.
Nasopharynx or pharynx inflamed.	Pharynx inflamed.
W. B. C. increased or decreased.	Negative findings of heart and lungs unless complications are present.
Frequently intermittent flushing of face.	
Acetone breath.	
Chills or convulsions.	

and usually consists of a low grade of fever, anorexia, and interference with nasal breathing; frequently a dry rasping cough is present which is intensified when the patient is in a reclining position. The cough assumes a croupy type at times.

In an analysis of some of the symptoms some interesting facts should be stressed. Although the throat on inspection may reveal a mild or severe inflammation, the child rarely complains of a sore throat. The abdominal pain associated with these throat infections is often referred to the umbilical region when the child is questioned, but on physical examination pressure in the epigastric region reveals this area to be the most tender. Occasionally there is rigidity of the right rectus muscle with marked tenderness over McBurney's point thus simulating a true appendicitis, and such cases have frequently been hurried to the hospital and operated upon only to find the appendix to be normal. The most exacting examination cannot always rule out an appendicitis and the laboratory fails us as a diagnostic aid, as the white blood count may have wide variations. I believe that a few hours of observation will often aid us in deciding this perplexing question. It has been my experience that the symptoms grouped under the heading number one would be the prevailing type for a period of four to six weeks and then the symptoms grouped un-

der the second heading would make their appearance as the most frequent in the cases seen.

One of the most annoying symptoms of the milder types of these throat infections is the persistent rasping cough. I have found that this cough does not respond readily to the medication we usually prescribe, and that these coughs often continue for weeks making us suspect the patient to be suffering from whooping cough. During the early months of 1932, the cough was croupy in character and the voice hoarse making one consider as a possibility a membranous croup. These coughs undoubtedly are confined to the region of the trachea and sometimes the larger bronchi, because the lung findings are usually negative.

Diarrhoea was often the initial symptom in the epidemics that occurred in 1928. The bowel movements would have a pale yellow color at the onset, and later change to greenish watery stools containing a considerable amount of mucus.

The temperature in these infections can range from 99° to 106° F and has a rather characteristic curve in the uncomplicated cases. In the onset there is the abrupt rise to its highest peak and then it falls rapidly to the normal within twenty-four to forty-eight hours, providing no complication ensues.

The examination of the blood shows the W. B. C. ranging from 5200 to 23,500 and the R. B. C. 3,100,000 to 4,860,000. HGLB 45% to 80%, SL 19 to 73%, L. L. 4 to 11.5%. Neutrophiles 60 to 74% (Chart 3).

SERIOUS COMPLICATIONS

However mild the onset of these infections may be, it is well to remember that they may be the forerunner to the most serious complications. The complications arising from these upper respiratory infections are so numerous and often so obscure that all the resources of the internist and the pediatrist will be required to diagnose and will often baffle their every effort to combat. Brennemann,[6] that keen clinical observer, stressed the importance of these infections as follows: "The point I want most to emphasize is the fact that any and every throat infection that we see may initiate a series of pathological changes that may involve almost any part of the body." The tragic end results of an apparently mild upper respiratory infection are written in many a record in the children's hospitals throughout our country.

CHART III

BLOOD FINDINGS IN UPPER RESPIRATORY INFECTIONS

R.B.C.	W.B.C.	HGLB.	S. Lymph.	L. Lymph.	Neutroph.
3100000	17500	48%	51 %	8.5%	39%
3500000	5600	84%	23.5%	7.5%	74%
3550000	13200	50%	27.5%	5 %	67%
3590000	6200	80%	59 %	11 %	74%
4119000	16000	70%	58 %	4 %	36%
4370000	5200	45%	73 %	1 %	26%
4830000	23500	65%	51 %	2 %	73%
4860000	10700	79%	40 %	7 %	50%
4300000	9600	68%	49 %	4 %	38%
4690000	20700	65%	40 %	7 %	74%

The complications of these upper respiratory infections are numerous, as the records of the nine hundred and thirty cases at our children's hospital reveal. (Chart 4) Otitis media occurring in 164 cases was the most frequent; infectious diarrhoea in 84, broncho-pneumonia in 46, cervical adenitis in 36, convulsions in 22, secondary anemia in 24, meningismus was present in 20 cases, malnutrition in 21, pyelitis in 16, lobar pneumonia in 10, skin lesions such as dermatitis, herpes zoster and erysipelas occurred in 20 cases, severe conjunctivitis in 20, tetany in 5, scurvy in 5, pleurisy in 3, chorea in 3, encephalitis in 3, pericarditis, stomatitis, perirectal abscess, subperiosteal abscess, and cerebral edema in 1 each. In this series of cases, 8 were complicated by an appendicitis and in 3 there was an adenitis involving the retro-peritoneal glands on the right side which appeared as an attack of appendicitis, having however a higher and more fluctuating temperature, with abdominal tenderness that was not as strictly localized as in appendicitis. In the spring a case was sent in for operation for appendicitis. Because the blood count was 23,000, the surgeon thought it would be wiser to have somebody else see this child. Here was a child of about seven or eight years of age, with a fluctuating temperature, ranging from 101–106, and even

CHART IV

THE COMPLICATIONS OCCURRING IN UPPER RESPIRATORY INFECTIONS

Otitis Media	164 cases
Infect. diarrhoea	84 cases
Bronchial pneumonia	46 cases
Lobar pneumonia	10 cases
Convulsions	22 cases
Cervical adenitis	36 cases
Meningismus	20 cases
Secondary anemia	24 cases
Malnutrition	21 cases
Pyelitis	16 cases
Appendicitis	8 cases
Skin Lesions—	
Furunculosis	11 cases
Toxic dermatitis	5 cases
Erysipeloid lesions	3 cases
Herpes zoster	1 cases
Tetany	5 cases
Scurvy	5 cases
Severe conjunctivitis	20 cases
Chorea	3 cases
Pleurisy	3 cases
Encephalitis	3 cases
Cellulitis	2 cases
Pericarditis	1 cases
Stomatitis	1 cases
Perirectal abscess	1 cases
Subperiosteal abscess	1 cases
Cerebral edema	1 cases

107. Rigidity on the right side, but this would vary at times. Not as tense at all times. The child looked very toxic. We made three different blood cultures and they were all negative.

This boy ran along for about eight days; temperature on one evening went up to 108. Two days later the temperature dropped and the boy recovered. We found nothing but a few large glands in the lower right quadrant of abdomen.

The diagnosis is comparatively simple if we remember the cardinal sypmtoms and examine carefully the throat of every child we are called to attend. In examining these throats do not make a superficial examination. If you will cause these children to gag, as the pillars roll outward you will see the red welts running up to the vault of the pharynx on either side, or you may simply find a redness in the upper portion of the nasopharynx. The next day that throat may look beefy red and yet the child will say, "No, my throat does not hurt."

The presence of an epidemic and the fact that other members of the family have recently been afflicted or had an attack of the so-called "intestinal flu" is very helpful in making the diagnosis.

TREATMENT

This consists of rest in bed until the temperature is normal, at least for one day, and, as the disease is contagious, isolation of the patient from other children. If the vomiting has been frequent a diet free of fats and consisting mainly of carbohydrates is indicated until the primary symptoms have subsided. The giving of alkalies I believe is helpful. Sponging and the use of antipyretics when temperature is high will make the patient comfortable until the attack subsides. The complications are treated according to the type that is present.

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DISCUSSION

Dr. R. P. Sproule (Milwaukee): Many articles have appeared in the literature during the past several years relative to upper respiratory infections in children. I am to discuss, in the brief time allotted me, two phases of this condition in the realm of otolaryngology, namely ear and sinus infections. I shall try to touch on the more important points which seem to demand emphasis in today's practice.

First, with regard to the ear. It is necessary to bear in mind certain anatomical points in the ear of a child which make it differ from that of an adult. The bony canal of an infant is undeveloped and the cartilaginous canal is directly attached to the osseous ring holding the drum in position. The drum in adults is described as mak-

ing an obtuse angle with upper wall of canal and an acute angle lower wall. In infants it is described as being almost flat. More recent writers, such as Cohn, say this difference in angulation of the drum is a delusion. They say that the drum maintains the same angle throughout life, and that the soft superior wall of canal, partially collapsed, give this false impression.

Further, the mastoid bone is undeveloped in an infant. There is no tip. The facial nerve exit is just under the skin in proximity to the lower auricular attachment.

The mastoid antrum and the middle ear are one cavity. The mastoid cells have not yet made their appearance. The petrosquamosal suture is still patent in the region of the antrum and the tegmen typmani.

The question arises as to why this anatomical discussion. When one manipulates the ear of an adult and produces pain it means external otitis or involvement of canal. When one wriggles the ear of an infant and it produces distress, it probably means a middle ear infection (cartilage moves clear to drum).

You, gentlemen, who look at infants' ears, realize what a quandary you are in at times, trying to interpret the drum picture. Part of your difficulty may be due to the soft cartilaginous wall sagging from above. Do not interpret this as a pathological sagging canal. It is normal. In an adult it means one thing — mastoiditis.

Due to the fact that the cells are not developed in the mastoid and that the petro-squamosal suture passes through the outer wall of the mastoid antrum, post-auricular swelling may not be as important in an infant. The mere opening of the drum may cause the post-auricular swelling to immediately subside. This is more probable because the antrum and middle ear are one cavity in infants.

The fact that the petro-squamosal suture passes through the tegmen tympani accounts for meningeal symptoms. On opening the drum these symptoms often subside. From the above anatomical considerations, one can readily see that the interpretation of ear findings in infants and small children are entirely different than in adults.

When shall the drum be opened is as debatable a subject in some minds as when shall a mastoidectomy be done. Five years ago there was presented before this Society a paper on mastoiditis. The essayist was a prominent local otologist. He stated that the drum should be opened on slight physical findings and that the mastoid should be opened if there was tenderness over the antrum even as early as 24 to 48 hours. He was supported by a local surgeon who compared the situation to acute appendicitis.

What are the facts in the case? Professor Erich Ruttin of Vienna states that it does not make much difference as to recovery or complications whether one opens the drum or it ruptures spontaneously. The statement that spontaneous rupture of the drum causes more mastoiditis is not borne out by experience.

Cohn gives a series of 100 cases of operated mastoiditis. Of these, 48 had incised drums, and in 52 cases the drums ruptured spontaneously. It would seem, therefore, best judgment at times to study the drum for 24 hours. You must realize that incising a drum and not finding pus may lead to infection. For the past ten years I have set up, in my mind, a definite mechanical picture. If there is pressure behind the drum that means pressure may develop in mastoid antrum and back pressure in mastoid cells. If there is beginning otitis media I open the drum. In face of the previous statistical evidence I cannot support the above mechanical picture but I will probably go on opening drums when there is a definite middle ear pressure. May I at this time, however, plead with the pediatrician to give the otologist a little leeway when calling him. Let him say, "I am calling an otologist to see if a paracentesis should be done," and not say, "I am calling him to open the drum."

I should like to make one point in passing over the treatment of discharging ears. In an acute otitis media not one drop of medicine used within the ear ever goes beyond the drum. No drops have any virtue except when saprophytes develop in the canal. Then an odor calls this to your attention. Of course one must use drops for the psychological effect on the patient. Irrigations are of no value except when discharge thickens and tends to block canal drainage. It is well to reserve this treatment for the latter stages of discharge to avoid bringing about an external otitis from trauma by a syringe.

As to when a mastoid should be opened. When the findings are definite and the patient shows no signs of improvement a mastoidectomy should be performed. There are many selected cases in children which for the anatomical reasons set forth above make it possible to wait. Under the careful observation of the pediatrician and the otologist they will often clear up. If these cases must be opened you have not lost any time because nature has had a chance to wall off the process with a leucocytic barrier just as in a developing abscess. The resulting convalescence will be less stormy and shortened. The two early operating on mastoids undoubtedly opens blood and lymph channels for the general spread of infection and in many cases has meant unnecessary surgery.

Now, as to sinusitis in children. Again we must refresh our minds as to the anatomical differences between the infant and the adult. The antra are present at birth, at about the third year the ethmoid cells make their appearances, and become fully developed at the age of seven. The frontal sinuses show up in the seventh or eighth year. Before puberty they are not up in the frontal bone very much but reach their full size at about the age of eighteen years. For all practical purposes therefore, we are only concerned with the antra until the age of four. The antra and the ethmoid

from four to seven and all the sinuses from seven to twelve.

Zuiherhandl is inclined to believe that accessory sinus disease is a direct extension from the mucous membrane of the nose and throat. This theory is supported by fact. They are connected and have a common blood supply. Others speak of sinus disease as a primary condition.

The sinuses are normally able to drain themselves. The ciliated epithelium wafts the cilia directly towards the opening and the cilia of the nasal mucous membrane carry the discharge backward toward the posterior choanae.

As to the causes of sinus trouble in children one must always look to the mechanics of the nose. Presuming a nasal infection and a crooked septum or a hyperplasia of the turbinates and the stage is set for extension into any one or more sinuses. Let that type of nose be full of pus, the child hold one nostril and try to blow the top of his head off, immediately there can be an invasion of discharge through one of the ostia into any of the sinus cavities.

Allergy must not be overlooked in a discussion of these cases. The diagnosis is based on other allergic manifestations in the patient, a family history of allergy, posterior skin tests and eosinophilia.

A few words as to treatment of sinusitis in children and I shall be through. The relief of mechanical obstruction is usually confined to shrinking the nose with ephedrin or adrenalin. If there is a crooked septum no otolaryngologist likes to correct it unless an almost complete atresia makes it mandatory. The nearer one can wait until the patient is sixteen years old, or until ossification of the septum is complete, the better the end result.

Negative pressure or suction following shrinking of the nose often gives definite relief from pressure pain. Nasal douching is valuable if mucopus is present. Promiscuous washing out of the nose, however, is a bad procedure because it has been proved to reduce the resistance of the tissues. L. W. Dean of St. Louis says the removing of adenoids in these cases will cure 75 out of 100. St. Clair Thompson agrees with him. Dean Barlow and Shurly proved that animals deficient in Vitamin A developed pathological changes in the sinuses. The giving of Vitamin A is therefore a therapeutic measure.

As to nasal medications. The tendency may, in the future, be away from silver salts. They have some astringent properties, and do coagulate mucous. If you have in mind the use of them as an antiseptic in the dilutions you can use, the effect is short lived if there is any. As to oily drops. Fox has demonstrated by animal experimentation that although subjectively the use of menthol eucalyptus and camphor seem to clear passages, experimentally this is not true. Menthol 1% caused degenerative changes in all layers of mucous membrane; 5% was destructive. The same was true of 5% eucalyptus and 5% camphor. Liquid petrolatum was injected in rabbits' noses for a period of two weeks, then the rabbits were autopsied. Two of the ten had minute abscesses of the lung. If you are going to give an infant nasal oil drops be sure the mother understands that the quantity must be small so that there is not a spasm with inhalation.

I have tried to give you personal experience in these remarks and also incorporate the literature of the last two years rather than stereotyped text book pictures. Much of this will change in the next decade as it has in the past. If any one has any questions at the end of Dr. Greenthal's remarks I shall endeavor to answer them.

Dr. R. M. Greenthal (Milwaukee): Complications of the lungs in acute respiratory infections are different in different types of practice. In hospital practice the complications are much more numerous and much more severe.

In private practice the complications are not as often seen. About two or three per cent, I think, is the rule in private practice. In hospital practice they may be as much as ten per cent.

The most frequent complication of the lungs following acute upper respiratory infection is a lobular or bronchial pneumonia. This usually comes on after three or four days of acute upper respiratory infection. If we have an acute upper respiratory infection, and the temperature does not come down to normal in three days, we can usually be sure there is some complication. It may be in the ears or sinuses, it may be in the kidney, or it may be in the lungs.

The presence of increased respirations is a valuable sign, and also the appearance of the child showing increased toxicity. The blood count, as Dr. Fellman has mentioned, is of very little value in diagnosis of a complication of the lungs, because we may have a severe pneumonia with a blood count of eight or ten thousand.

Lobar pneumonia is not as frequent as bronchial pneumonia, but it does occur, usually with a very sudden onset, following a day or two of acute upper respiratory infection.

Heart complications are not very frequent. Endocarditis is practically never seen following one of these infections. Pericarditis may be present, due to a blood infection of the pericardium. It is very difficult to say whether there is any myocardial damage during these infections. There may be slight damage which we are unable to detect, and the occurrence of frequent infections may have some bearing on the heart weakness of later life, but nobody knows anything about it.

One point of a practical nature which has helped me somewhat in the prognosis of these infections is the examination of the urine especially the simple test for albumin. In the ordinary uncomplicated acute respiratory infection, the amount of albumin is very slight, or there is no albumin at all. As a rule if the infections travel to the lung, there is usually a very heavy trace of albumin and the appearance of casts. If the patient is to recover,

the urine usually approaches normal. If the patient is not to recover the amount of albumin increases as the disease progresses.

The other infections of the lung which may develop as a result of acute upper respiratory infection are empyema, and very likely if sinus infection develops, a complication of bronchiectasis may follow, but the most frequent complication is bronchial pneumonia. (Applause)

Dr. C. E. Smith (Beloit): Dr. Fellman spoke particularly about this dry rasping cough that so many of these children are subject to, and somewhat about the difficulty in relieving it. I would ask what means he ordinarily takes to relieve that same cough.

Dr. B. J. Bill (Genoa City): I would like the Doctor to tell us whether he thinks there is anything in vaccine to prevent these upper respiratory infections. I would also like to make this statement: It is wise to hold these cases that indicate appendicitis. I have been feeling for the last year or two that appendicitis is becoming a racket.

Dr. G. H. Fellman: In regard to Dr. Smith's question with reference to cough, I stated the facts when I stated that the giving of the usual remedies do not seem to touch it very much.

The thing that has impressed me most so far as the relief of these coughs is concerned, especially so since these children, when they lie down, cough almost continually, is to put them in the semi-upright position in bed. Put high pillows behind them. Then I use mustard plaster locally until the skin is red, and then repeat it in four or five hours.

Internally, we usually give preparations that will loosen the secretions, because it is only in the beginning you have this tickling cough in the dry stage. You may give syrup of hydrocohl to lessen the irritation. That is useful, but you will find the other method helps you just about as much.

Regarding the question about vaccines. I have tried them, and you know when you see a case and you give vaccine, and next time it does not develop respiratory infection quite as frequently, you think it was the vaccine. As your cases grow in numbers you begin to realize that after all it is not a preventive. If you get a strong reaction from your vaccine, I think in some of those cases it is beneficial, but it is not permanent. Some people have taken the vaccine injections at the end of a year, where they have had an infection every month, and next year they would not have any, and they would lay it on to that. I have seen dozens of families where they would have these infections and no vaccine, and next year they would not have any, and possibly the next May have a slight attack. I think if you can produce a severe reaction you sometimes get some benefit.

As to appendicitis I will cite one case. One evening just before six, I was called to see a child who had a temperature of 101. Marked rigidity on the right side, local tenderness over McBurney's point, and a bright red throat. When I pressed down on the opposite side with the so-called popping test, the little girl said to me, "Don't do that. Don't let it pop." I never had mentioned popping to her and nobody else had. I said, "Why? Why don't you want that to pop?" "Then it will hurt over here."

I called in a surgeon. He lived about three blocks away. He examined her by rectum and said, "Fellman, you have an appendicitis, send her right in." Her folks were in Europe; it was a fine home and I had to take the responsibility. I said to the surgeon, "Will you wait until seven o'clock tomorrow morning when you get ready, and come in here and see this child. If she has any evidence of pain whatever, rush her to the hospital." He called me up and said, "All the appendicitis has gone."

But don't fool yourselves that there aren't appendicitis cases. Be careful before you say it is not appendicitis.

Electrocardiography; The Clinical Application by the Practitioner*

By BENJAMIN J. BIRK, M. D.
Milwaukee

The electrocardiogram is a photographic representation of the electrical processes in the heart. The activity of an organ is the sum total of the integral excitations.

In the heart walls there is a specialized neuromuscular system:[1] The Keith–Flack node (sino-auricular node), Tawara node, and His bundle with its branches (the auriculoventricular node and A–V system), which divides into a right and left branch which finally terminates in the Purkinje network.

Actions currents: Waller[2] in 1887, demonstrated the acting portion of tissue becomes electronegative to the part at rest and if the two ends are connected by a string galvanometer, the invention of the physiologist Einthoven, there will be a deflection of the galvanometer needle, first in one direction and then the other.

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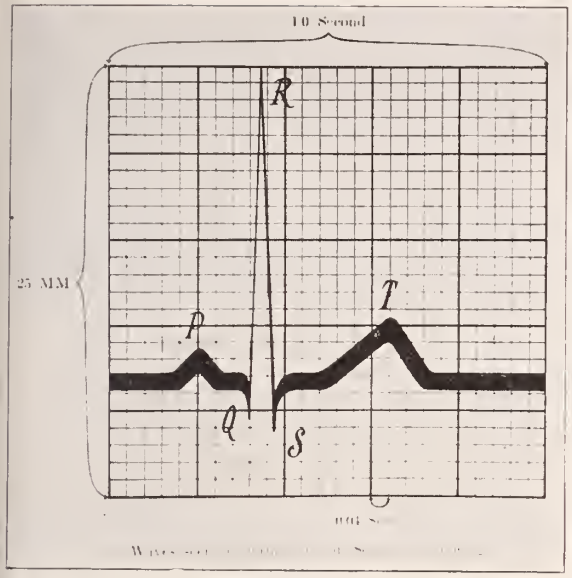

Figure 1.

In electrocardiographic work, the action currents are led away from the body through electrodes being placed on the right arm, left arm and left leg. Thus, as proposed by Einthoven, three leads are used.

Lead I consisting of right arm and left arm.

Lead II consisting of right arm and left leg.

Lead III consisting of left arm and left leg.

The graphic representation of these action currents of the heart is the electrocardiogram.

The physiologic properties of the heart are irritability, conductivity, contractility, stimulus productions and tone; however, the specific system has the essential function of stimulus formation and transmission.

The pacemaker of the heart is the sinoauricular node, but this is only relative because its rate of stimulus production is more rapid than any other part of the conduction system. If for any reason the S–A node is impeded or destroyed, the heart will not stop as a rule, but the secondary center or A–V node will become the center of origin of stimuli. If this secondary center is depressed or destroyed the heart may still beat in response to stimuli generated in the main bundle or one of the branches.

The normal electrocardiogram is made up of a series of deflections, designated as P, Q-R-S, and T. The P deflection is associated with the spread of impulse across the auricles and precedes the contraction process. The Q-R-S deflection is caused by the spread of impulse through the muscular mass of the ventricles and precedes the actual process of contraction. The P wave is known as the auricular complex and the interval P–R normally is .12–.20 seconds. The Q–R–S or ventricular complex has a normal duration of .04–.10 seconds.

The T wave is known as the terminal deflection and has a duration, the S–T interval, of .24–.28 seconds. This wave has to do with the disactivation time of the ventricles. Alterations of the T wave indicate vascular changes in the ventricles, as seen in coronary disease[3] ; and experimentally after ligation of the coronary vessels.[4]

The Q and S waves, the former preceding the R and the S following, are not constant, and of relative unimportance. In a presentation as this, these may be dismissed with the acknowledgment, and if one is further interested he can find speculation in regard to the Q and S waves in special writings on this subject.

The electrocardiographic determination of hypertrophy of the ventricles is open to criticism [5] for many reasons which would lead us in a field far from the intent of the presentation. However, the criteria, as generally accepted, indicative of ventricular preponderance (axis deviation) deals with the direction and amplitude of the R wave. Right ventricular preponderance is indicated by a downward deflection of the R wave in Lead I and upward deflection in Lead III. Left ventricular preponderance is just the opposite.

Cardiac arrhythmias may be classified as disturbances in stimulus of formation and of conduction. Namely,

Sinus arrhythmia.

Premature contractions (extra systoles).

1. Ventricular.
2. Auricular.
3. Nodal (junctional).

Auricular fibrillation and flutter.

Ventricular fibrillation.

Conduction disturbances.

With these preliminary remarks, a brief discussion will be given of the various disturbances of stimuli formation. As previously mentioned the sino-auricular node is the pacemaker; and as long as it maintains control there is normal rhythm. It is constantly under the influence of the vagus and sympathetic systems. The most common type, is the respiratory sinus arrhythmia, which is characterized by a rhythmic waxing and waning of the heart rate. The heart rate accelerates during inspiration and slows during expiration. This condition is most marked in children, and in those convalescing from acute disease. It must be remembered, however, that sinus arrhythmia per se, while not indicative of organic heart disease, may be associated with changes in the heart of a serious nature. Sinus arrhythmia in old patients with evident degenerative myocardial changes usually is associated with a slow pulse rate.

SINO-AURICULAR BLOCK

It is characterized clinically by an occasional dropping of a heart beat in the course of an apparently normal rhythm, leading to a pause. This pause being approximately the duration of two normal cardiac cycles. During this period there is a complete standstill of the heart, indicating the disturbance is at or near the pacemaker. Exercise will eliminate this arrhythmia.[6] Clinically, this condition may mask itself under a bradycardia, but, on exercise, the rate will double instead of accelerate as in a simple bradycardia; and on rest the rate will return to one-half; that is the original bradycardia.

If the stimulus formed in the sinus node is for instance prolonged to 3 cardiac cycles, the next lower automatic center, the A–V node, will take up the lead and thus one would speak of a nodal rhythm, or atrioventricular rhythm, or atrioventricular automatism. There may be many beats from this secondary center giving rise to an irregular slow heart rate, or even both centers acting at intervals giving rise to alternation of the pacemaker. However, this condition is exceedingly rare and even with the electrocardiogram, deciphering may be exceedingly difficult. The P wave of nodal origin may blend with the R, follow or just precede. Premature sinus node beats are exceedingly rare and are not compensated.

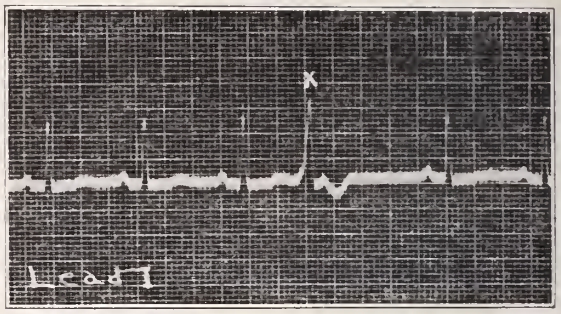

Figure 2–A. X denotes ventricular extra systole.

Should the A–V node likewise be depressed, a tertiary center, the ventricle, takes up the lead, and this is known as ventricular rhythm or ventricular automatism. The substitution of centers is known as passive heteropia. If for some reason some other center of the heart receives a higher stimulus of formation, the active center loses its control. This is known as active heteropia, examples of which are extra systoles of the various types and paroxysmal tachycardia, which will be discussed later.

SINUS TACHYCARDIA

The pacemaker mechanism which is under the vagus and sympathetic control is readily influenced by any condition which tends to alter the delicate balanced metabolic processes occurring within the cells of the nodal tissue. Bainbridge[7] has shown that increasing the blood flow to the sinus venosis area increases the heart rate.

The endocrine disturbances of which the thyroid is the best understood, exerts a specific influence on the pacemaker cells, thus increasing its rate. The physiologic acceleration of heart rate, in the normal heart, is the result of several factors. The normal heart responds to effort by increase in rate; thus, CO_2 and waste products are removed, oxygen supply increased, adrenalin liberated for utilization, the thyroid influence and the increased venous return to the right heart are the contributing factors. Any alteration of these factors would result in alterations in the pacemaker mechanism.

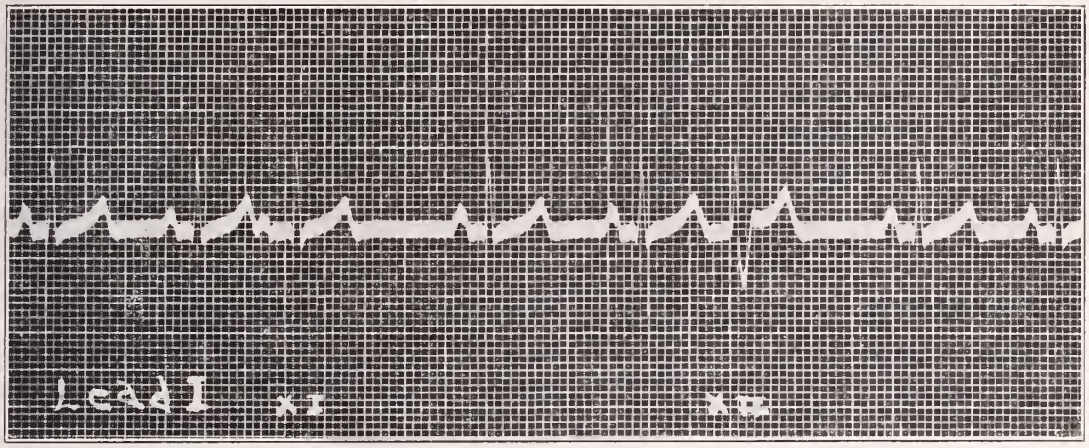

Figure 2–B. X I Auricular extra systole, normal ventricular conduction. X II Auricular extra systole with aberrant ventricular conduction.

Thyroid disturbances, toxic or bacterial influence, as fever, etc., cause increase in rate.

PREMATURE CONTRACTIONS

Extra systoles: Active heteropia: These may arise from any part of the conduction system and musculature of the heart and by far constitute the most frequent type of cardiac irregularity. They occur in perfectly normal hearts and in hearts with organic disease. However, the arrhythmia must not be considered to indicate organic heart disease, but simply an increased irritability which may have a functional or organic cause. Only too often the physician calls the patient's attention to a harmless extra systole, and from then on has created a cardiac invalid in a varying degree.

Ventricular extra systoles arise in the ventricle and remain there and do not disturb the sinus, and only rarely do they go back into the auricle (retrograde). The sinus rhythm as such is not disturbed, having contracted prematurely the ventricles must await the next sinus impulse, and thus there is a compensatory pause following the premature beat. The compensatory pause and the time of the premature beat equals two normal periods. These contractions are both regular and irregular and may be in series of successive premature contractions. Occasionally the premature beat may come so early that there is no compensatory pause. This being known as an interpolated ventricular extra systole. The extra systole may be of right or left ventricular origin.

The electrical complexes representing the ventricular extra systole are known to be ventricular, because they have a duration (in varying degrees), as the normal ventricular complex; they precede and usually replace the regular responses of the ventricle, thus disturbing the rhythmic action; their form is anomalous. There are other characteristics of extra systoles which the paper does not permit.

AURICULAR EXTRA SYSTOLES

Premature contractions arising near the sino-auricular node gives an electrocardiogram which differs from the normal by causing an arrhythmia. The P wave is upright but the P–R interval is shortened. Since the impulse travels the normal pathway, the ventricular response is as of a normal contraction. As the ectopic impulse arises nearer to the A–V node the P wave becomes inverted. Should the impulse arise very early it may be buried in the T wave preceding. Likewise, if the impulse occurs very early, the ventricles are still refractory, and there is thus no ventricular complex and the premature beat is spoken of as being "blocked." If at any time, the premature auricular contraction arrives in the ventricle, the Purkinje system of the bundle may be partially refractory, thus giving rise to aberrant ventricular complexes which simulate right or left bundle block.[8] With auricular extra systole, the danger exists that an extra systole may arise at just a certain moment to lead to auricular flutter or fibril-

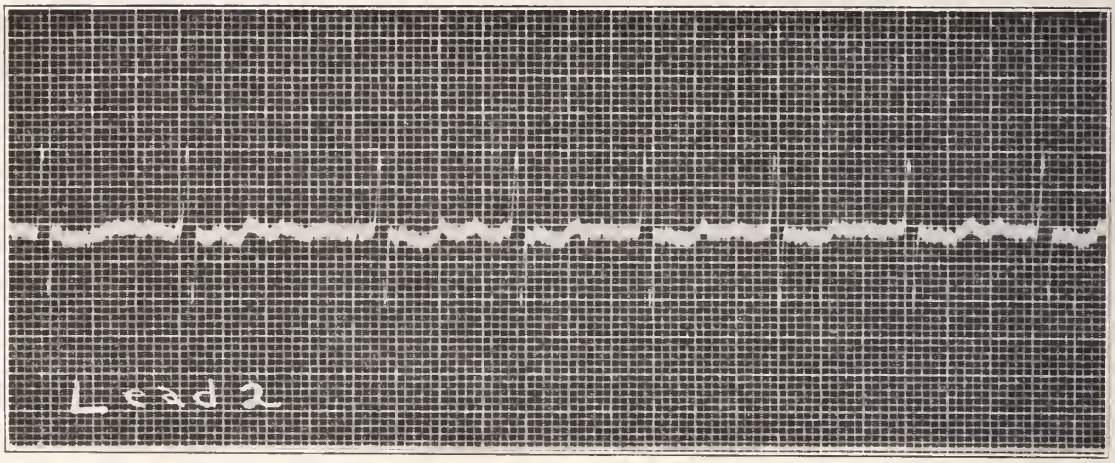

Figure 3. Auricular fibrillation. R–R distance varying. Only some fibrillation waves definitely seen.

lation. The pause after the premature auricular contraction is always longer than the normal intersystolic interval, but the time from the preceding normal beat and following is usually always less than 2 normal periods.

NODAL OR JUNCTIONAL PREMATURE CONTRACTIONS

These contractions start in the A–V node or in the bundle above its branching, and, on the electrocardiogram, have characteristics of this condition. If the impulse occupies an intermediate position, the auricles and ventricles contract simultaneously; the P wave is not apparent, and the R wave is of increased amplitude. The auricle may contract shortly before the ventricle, thus the P–R is shortened, or the ventricle contracts before the auricle; the P wave following the R. In nodal rhythm, the P wave is inverted, however, this may be upright or modified.[9]

AURICULAR FLUTTER AND FIBRILLATION

Auricular fibrillation, the most common of cardiac irregularities, also known as "pulsus irregularis perpetuous," has been a subject of much discussion. The hypothesis of Lewis,[10] based on the experiments of Mines [11] and Garrey,[12] of the circus movement is the accepted theory, however, there has been discussion to the contrary. Brams and Katz [13] have recently shown experiments opposing this view of Lewis.

Auricular flutter, therefore, is an acceleration of auricular contraction between 200–300 per minute, with all fibers acting together. Since the ventricles cannot respond to such a rate there are varying degrees

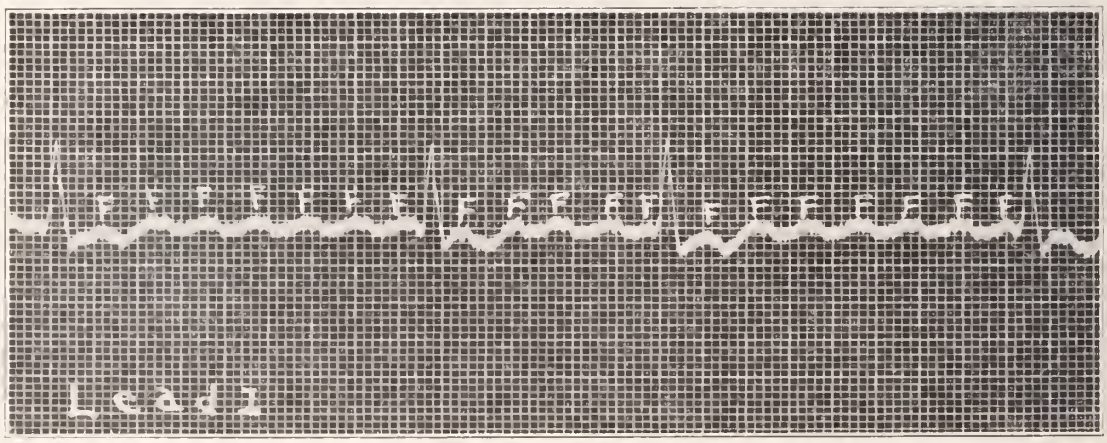

Figure 4. Auricular flutter. F denoting flutter waves with regular auricular rate.

of heart block present, from one-half rate to complete heart block. There also may be a 1 to 1 rate. The flutter waves (F waves) are regular and have the characteristic saw-tooth appearance. In auricular fibrillation the auricular contractions are between 300–800, or more, per minute, with not all the fibers contracting equally and thus the fibrillation waves (F waves) are of varying types. One can readily see that in an auricular rate of 350 there may be some irregularity and thus designate the condition as impure flutter or flutter fibrillation.

In auricular flutter, with very rapid rate, the patient may faint and have Adams–Stokes attack with a tachycardia as well as bradycardia, for with such a rapid rate there is no effect on the circulation, which is equivalent to a standstill, and if it should last long enough exodus occurs.

With the rapid auricular rate in fibrillation, and the weakness of the impulse, only certain ones are conducted to the ventricle, this resulting in an irregular pulse rate. Since many of the ventricular contractions are too weak to open the aortic cusps, there results a difference in the apex rate and pulse; giving rise to the "Pulsus deficit." Often in auricular fibrillation, with a bradycardia, the rate will appear regular and if the patient is exercised the irregularity will appear. On the contrary, in cases of fibrillation with a high frequency, only by long auscultation will one be able to get the irregularity. If in doubt as to whether the condition is flutter or fibrillation with a rapid rate, one can exercise the patient, and if flutter the rate will double, while if fibrillation the rate becomes irregular.

VENTRICULAR FIBRILLATION

Just as there is fibrillation of the auricles, so can there be fibrillation of the ventricles. This condition is rarely observed in man, for if it lasts more than a few seconds death occurs. Robinson and Bredeck,[14] reported a case in which there was temporary recovery. It is probable that this condition is the cause of death in patients who die suddenly of embolism or thrombosis of the large branches of the coronary artery. The condition of ventricular tachycardia borders on ventricular fibrillation.

Before concluding the discussion of arrhythmia due to disturbance of stimuli formation I wish to mention briefly paroxysmal tachycardia, exclusive of sinus tachycardia, which does not begin or end abruptly. Paroxysmal tachycardia is a development of a new rhythm which begins and ends suddenly and is primarily an extra systolic arrhythmia and is classified according to the ectopic beat which precipitates the new rhythm. Therefore, one may speak of paroxysmal, auricular, nodal and ventricular tachycardia.

In the preceding discussion arrhythmia due to disturbance in stimulus of formation has been mentioned. Disturbances due to conduction of stimuli will now be discussed.

The conduction system, as mentioned, is composed of various entities and, therefore, disturbance of conduction may take place at any point. Sinus block has already been discussed in the early part of this paper.

I wish now to describe the A–V type of block which may be partial or complete. Partial heart block of type I is indicated by a lengthening of the P–R interval beyond its normal limit of .20 seconds, being especially common in many acute infectious diseases, as rheumatic fever, diphtheria, scarlet fever, etc., and is unmistakable evidence of myocardial involvement. The condition is also seen as a permanent affair in hearts showing degenerative changes with vascular and myocardial sclerosis. If there is a gradual fatigue in the conduction pathway, so that gradual lengthening of the P–R interval occurs, until one beat is drop-

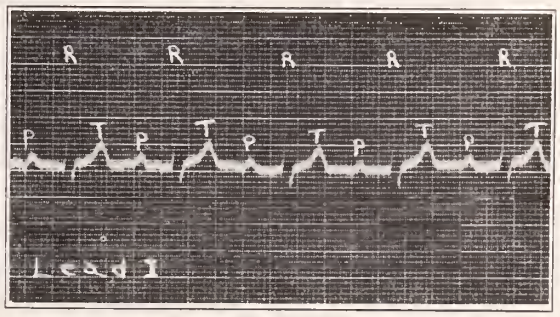

Figure 5–A. Partial heart block, Type I. P–R interval .28 seconds.

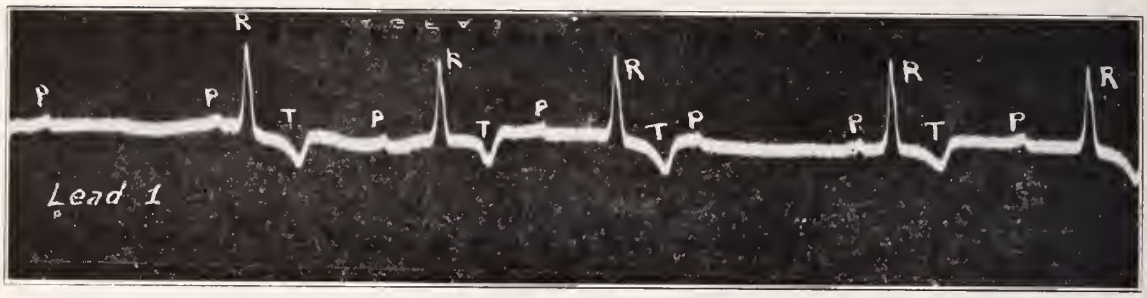

Figure 5–B. Second form of Type I. Conduction disturbances showing gradual lengthening of the P–R interval until one ventricular beat dropped (Wenckebach period). P following the third R blocked.

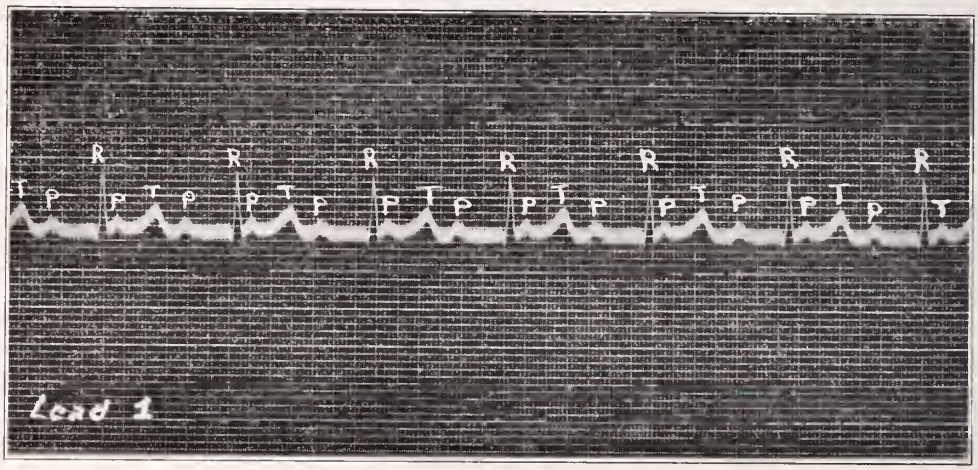

Figure 5–C. Type II. Partial heart block—2:1.

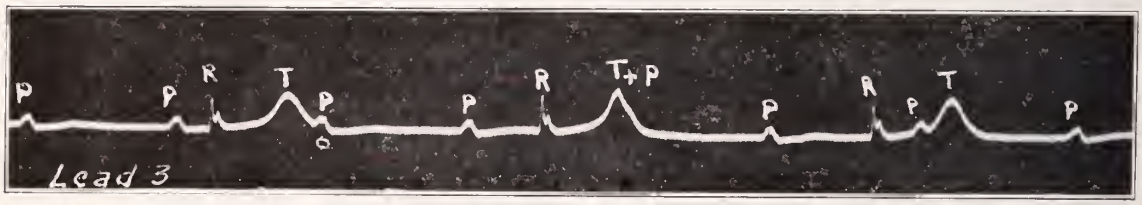

Figure 5–D. Complete heart block. Auricles and ventricles beat regularly, but independent of each other.

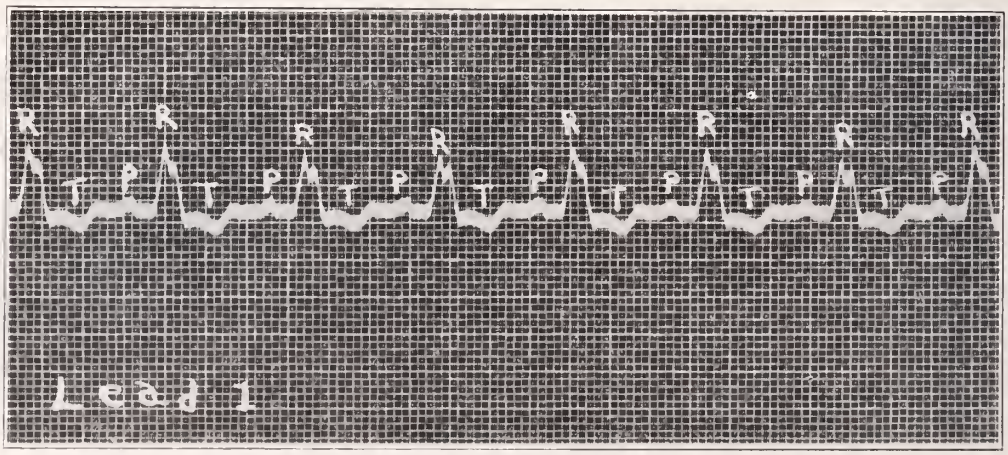

Figure 5–E. Bundle branch block—intraventricular conduction disturbance. Q–R–S interval .16 seconds.

ped, the condition is spoken of as a periodic dropped beat (Wenckebach periods). Following the dropping of the beat recovery takes place and the following P–R interval is again shortened. Disturbance as this lies in the junctional tissue. Type II disturbance is characterized by a normal P–R distance, with dropped ventricular beats. The ratio of auricular contractions to ventricular contractions may be 3-2; 4-3; 5-4; or 2-1 in extreme conditions.

Complete auriculoventricular dissociation (complete heart block) is associated with disease of the auriculoventricular bundle causing obstruction to the impulse, although cases have been reported in which no lesion was demonstrable at post morten.[15, 16, 17]

The electrocardiogram in complete heart block is very characteristic. The ventricular rate is slow, usually at a rate of about 30 per minute, and independent of the auricular rate which is regular and more rapid, for it is governed by the sinus node. The Q–R–S complexes may be of a bizarre character and the deviations of the ventricular complexes are to be interpreted according to the usual rule.

BUNDLE BRANCH LESION

It is readily seen that if one of the branches of the His bundle is diseased, the impulse cannot travel normally to excite both ventricles. Thus, for instance, if the right bundle is blocked, the left ventricle is the first to contract, the right ventricle becomes stimulated by the spreading of the contraction wave from the left ventricle through the interventricular septum to it. Left bundle block is opposite.

Clinically, this disorder may be diagnosed in a large number of cases without the electrocardiogram.[18] With the electrocardiogram one sees a Q–R–S complex which has the following characteristics: splitting, notching or widening, so that the time is beyond .1 of a second; the T wave being in opposite direction to the initial deflection.

The classification of Lewis and his coworkers,[19, 20] based on experiment in dogs, was that in the right bundle lesions the Q–R–S was upward in Lead I and downward in Lead III; the opposite condition in lesions of the left bundle. Fahr,[21] on theoretical grounds, came to the conclusion that the electrocardiograms designated as right bundle block were left bundle block and vice versa. The work on the exposed human heart is in accord with the latter view.[22, 23, 24] Therefore, in accordance with the new nomenclature, that which was formerly considered right bundle block is left and vice versa.

Electrocardiograms showing bundle branch block, but with low amplitude of the Q–R–S complex, were named by Oppenheimer and Rothschild[25] as "arborization block," believing that the lesion responsible for this condition is in the terminal arborizations of the conduction system: Contrary opinions have been put forth.[26, 27] In spite of these varying views, patients showing this condition have severe myocardial degeneration, and with a very early mortality. The average duration of life from the time of examination is about eight and one-half months.[28]

In the past decade, degenerative vascular conditions that affect the heart of middle and advanced age have received much attention. Although this disturbance has been recognized, clinically, it has really been the electrocardiogram which has made recognition of coronary vessel disturbance a definite entity. However as there are silent areas in structures as the brain, so may there be silent areas in the heart muscle which clinically means that infarction has taken place, yet no evidence on the electrocardiogram.

Experimentally it has been shown that ligation of the coronary artery of a dog produces a characteristic T wave.[29, 30]

The T wave of coronary thrombosis, described by Pardee,[31] has the characteristics to be described. The coronary T wave may appear within a few hours after the onset of the thrombosis,[32] or may develop slowly, or appear a day or so later, if it is the result of a chronic narrowing. The wave immediately following the occlusion is different. The typical Pardee wave has the feature that the S–T interval comes off the R wave at a point above the base line, with a convex bowing upward at the onset, and a depression at the end. When this is pres-

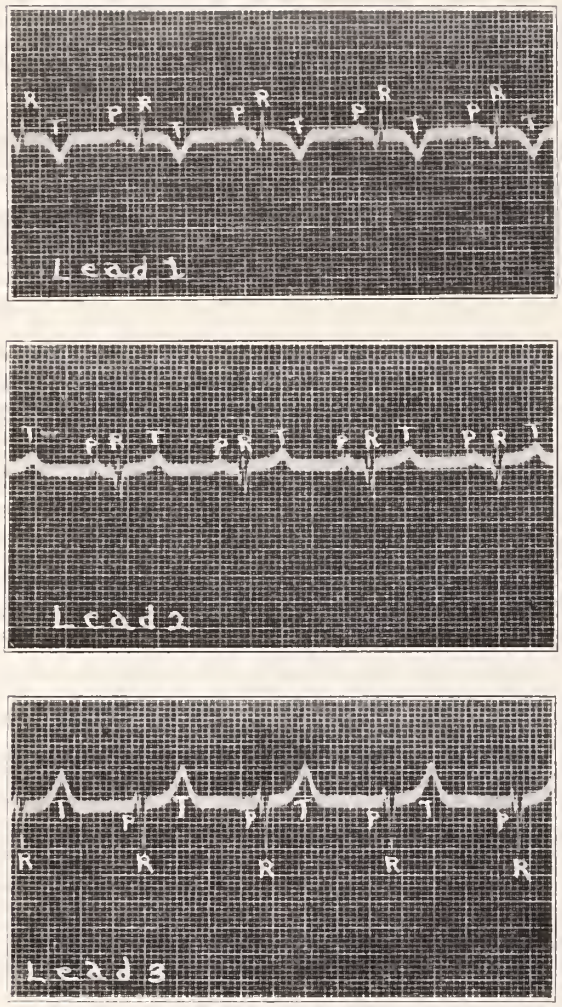

Figure 6. Showing coronary occlusion with characteristic T wave.

ent in Lead I the opposite effect is seen in Lead III. In the course of several days the T wave tends to become flattened out or inverted permanently, or gradually in the course of time becomes normal or nearly so; or the T wave may appear as an inverted V-shaped curve. This is important, for when seen in a patient weeks after a suspected attack or otherwise, one can infer that previous changes have taken place. Barnes and Whitten [33] have shown by electrocardiograms on cases that came to post mortem that where the occlusion was of the descending branch of the left coronary artery affecting the apex of the left ventricle, the S–T interval in Lead I had a high take-off on the R wave; while infarction at the base due to right coronary occlusion causes a similar effect in Lead III.

CONCLUSION

An attempt has been made to give an outline of this vast subject and to show its importance as an aid in clinical medicine and at the same time not to over-estimate what this procedure can do. The proper evaluation of a method as this depends on its correlation with the clinical condition being dealt with.

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Injuries to the Back*

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The frequency of back injuries in our practice to-day, especially where the patient comes under the Compensation Act, prompted me to present this paper. It includes the industrial lame backs—a large and important element of industrial cases. They are full of interest and importance because of their frequency, of the lack of accurate diagnosis and classification, and the difficulty in some cases of disproving the assertion of pain. We have to investigate, first, whether pain really exists, and second, as to the traumatic element in the lesion which is discovered. Emphasis should be placed upon the great importance of a routine method of examination in these cases. Next in importance is the necessary knowledge of anatomy and statics of the body as a whole and of the parts concerned, in order to interpret the findings intelligently. If completely carried out and interpreted in accordance with anatomical fact and functional use of the body, it will improve upon the standard of knowledge and treatment which commonly exists to-day.

In this paper I will not discuss the unusual and more severe forms of spinal injuries where the diagnosis is evident, but will deal with the patient coming into the office complaining of pain usually in the lumbar region. If he has received an injury that has been witnessed by fellow workers, the history of the injury will be of more value in definitely knowing that the patient has received an injury and the manner in which the accident occurred. The question that must be determined is whether an actual injury has occurred or whether the symptoms complained of are due to a pre-existing condition elsewhere in the body without relation to trauma.

Many non-traumatic conditions that give rise to pain in the back are: Posture or static (due to flat feet, knock knee, short leg, congenital hip or scoliosis), mental and physical fatigue, genito-urinary and gynecological lesions, tumors, toxic and infectious

* Presented before 90th Anniversary Meeting, State Medical Society of Wisconsin, Madison, September 1931. Revised to publication date.

diseases, congenital anomalies, arthritis, tuberculosis, osteomyelitis, affections of the lung and pleura, kidney disease and cord lesions. When all these conditions, and in addition possible foci of infection elsewhere in the body have been ruled out, we may be fairly sure that we are dealing with a traumatic condition.

The vertebral column is an organ of support and movement, a system of bones bound together in joints and causing movements controlled by muscular traction. The spinal column is constructed so as to combine the maximum amount of strength and mobility compatible with lightness. The individual vertebrae are in close apposition by means of their articular facets, while the intervertebral discs, in addition to serving as buffers or shock absorbers, allow a certain amount of sliding motion of each vertebra on its fellow. Each articulation is held firmly, and is restricted in its range of motion by the strong capsular ligaments. The transverse and spinous processes give attachment to muscles and ligaments. The muscles in this region constitute the first line of defense. When the muscles give way, the strain is thrown upon the ligaments which have not the contractile power of the muscles, and the patient suffers not only muscular but ligamentous strain as well.

In the spinal column, as a whole, there are also present three curves: One in the cervical region, with its convexity forwards, another in the dorsal region having its convexity directed backwards, and a third in the lumbar region with its convexity again directed forwards. A mechanical weakness exists at the junction of these curves, as in the junction of the flexible cervical portion with the relatively inflexible dorsal portion, and in the junction of the latter with the more flexible lumbar region.

Several constrictions are also present in the spinal column, and these constitute a source of weakness. The width of the column increases from the coccyx to the top of the sacrum, diminishes to the fourth dorsal, increases to the seventh cervical and again diminishes to the first cervical vertebrae. The foramen between the fifth lumbar and first sacral vertebrae is smaller than those immediately above, and the fifth lumbar nerve which goes through this foramen is larger than those above, so that inflammatory and circulatory reactions about the fifth lumbar nerve are more prone to produce symptoms.

There are two main enlargements in the spinal cord, one in the cervical region where the cord supplies nerves to the arms, and one in the lumbar region where the cord supplies nerves to the limbs. In these areas changes in the bony and soft tissue structures cause symptomatic brachial and sciatic nerve syndromes.

The question of the relationship of anatomical variations of the fifth lumbar vertebra to backache merits attention. When variations, as semi-sacralization and variation in the shape and direction of articular facets are found, a careful history will reveal that the patient has had periodic attacks of pain. These abnormalities have existed long before symptoms of pain in the back began, and the abnormality is to be regarded as potentially contributory. These backs are more easily strained than the normal.

Lewin describes a situation at the lumbo-sacral region as analogous to a train of movable cars which suddenly strike a bumper. The former being the movable cervical, thoracic and lumbar vertebrae; the latter being the immovable sacrum. It is, therefore, at the lumbo-sacral joint that the greatest stress, strain and shock are experienced. When strain is thrown from above upon the lumbar spine, it is practically spent at the lumbo-sacral joint. This forces the sacrum between the two iliac bones and there is a concussion of one or both sacro-iliac joints.

The fifth lumbar vertebra offers a point of least resistance since its position in human beings subjects it to the most unfavorable static and dynamic conditions. On one side is the immovable sacrum and on the other the movable fourth lumbar vertebra with which it forms a joint.

CLINICAL EXAMINATION

In the examination of the patient a complete history of the type of trauma and mechanics of injury is important. Inquire whether trauma was direct by blow or fall. If indirect, whether leverage was transmitted from above or below. What position renders him comfortable and the area of distribution of pain. Careful inspection of patient while giving history and undressing. His gait and posture are observed. His back is examined for deformity, (scoliosis and kyphosis), muscle spasm, atrophy and color. Laterally the normal curve of the spine is noted. He is palpated for points of tenderness, rigidity and muscle spasm noted whether it is constant or disappears on changing position. He is then made to flex and extend the spine, also lateral motion and rotation made.

Certain tests of motion give valuable information for diagnosis. In forward bending the lumbar spine is flexed. Then the pelvis is tilted forward until the hamstrings are taut. At this point the patient has to flex the knee of the affected side. In lumbo-sacral conditions the lumbo-sacral region is kept rigid, and forward bending takes place at the hip joint.

In sitting the hamstrings are relaxed and consequently the patient can bend forward more easily. In lumbo-sacral conditions the movement is just as limited as in standing. Lumbo-sacral strain is more common in the stout heavy person with protruding abdomen, while sacro-iliac strain is commonest in the slender type who uses the body in poor posture. A lesion in the muscle gives rise to pain when the muscle is thrown into action; a lesion in fibrous tissue when the fibrous tissue is put upon the stretch; a lesion of bone or joint on all movements of the spine. Weight lifting tests are not reliable since the human element enters into it, and if the patient is not cooperative his lifting capacity cannot be determined. Also we have no means of measuring pain, but by observing the degree of motion and comparing it with the normal range for that type of individual we can arrive at a fairly definite percentage of disability.

The x-ray is important in the diagnosis of back injuries. Good lateral x-rays as well as antero-posterior views should be taken. Correct interpretation of x-rays is essential.

TREATMENT

Treatment consists of non-operative and operative treatment. Non-operative treatment consists of rest, external support as adhesive strapping, belts or braces. Operative treatment concerns the various types of stabilizing operations and manipulations.

In many cases of alleged back injury the patient, realizing that he has little to show for his symptoms, is apt to exaggerate his condition. It has been recognized that the traumatic back is a refuge for malingerers. These cases are not difficult to rule out, as repeated examinations will disclose that there is a variation in points of tenderness. If the man has real pain in any one spot he will only tolerate the same amount of pressure each time it is touched. One must be observant for any affected symptoms not associated with the condition. A good test for the malingering of pain is to give a hypodermic injection of ½ grain of morphine at bedtime, and, if on arising the patient claims to have had pain, one may conclude he is dealing with a malingerer.

When a preexisting condition is demonstrable the amount of disability allowed should be for aggravation only. Under ordinary conditions we expect a man having a strain of the spinal muscles or ligaments to return to work in a few weeks.

Convalescence is slower in the injured under insurance than in those not insured, because of the mental attitude or psychology of the patient. This may be his first opportunity for a vacation with pay and he is anxious to prolong it.

A great many of the back cases that are to be regarded as industrial liabilities could be eliminated by a complete physical examination before employment.

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Bone Lesions in Fungus Infections of the Lungs; A Report of Two Cases*

By R. H. STIEHM, M. D.
Madison

Close scrutiny of the bony framework while reading roentgenograms of the chest will occasionally reveal pathological changes in the bones which may suggest a diagnosis.

Two cases are here reveiwed where bony destruction or erosion, best described as giving a "moth-eaten" appearance to the ribs, suggested a condition other than tuberculosis, though tuberculosis had been the original diagnosis in both cases. In the first case, the fourth, fifth, and sixth ribs were involved at their posterior angles. There was no pain or pressure over these ribs. On the x-ray film the ribs appeared wider in the involved portion and there was an irregular decrease of density of the bone substance. The lesion in the left tibia likewise showed a decrease in the density of the bone structure. In the second case, the right first rib alone was involved and resembled in appearance the lesion described.

A brief summary of these two cases with chest plates and one bone plate is presented.

Patient C. L., aged 17, was admitted to a tuberculosis sanatorium in July, 1929, with a history of increasing fatigue which had begun in the summer of 1928. In December, 1928, he noted "sharp" pain in his left chest, brought on with the slightest exertion. In August, 1929, after admission to the sanatorium, swelling of the joints of the hands, feet, knees, elbows and shoulders was noted, which was occasionally painful at night and on use after inactivity. The patient had a slight fever daily. In July, 1929, there was slight hemoptysis. His weight loss was 24 pounds in three months. His past medical history included the usual childhood diseases. He lived in a city of 11,000 inhabitants. His habits were not abnormal. The family history included no tuberculosis or other familial diseases. His ailment was not thought to be of a tuberculous nature and he was transferred to a hospital for further study.

Physical examination showed a poorly nourished but fairly well developed male, lying quietly in bed. He appeared anemic. His color was sallow and muddy.

Other pertinent findings included a rapid heart rate with a systolic murmur over the aortic area. Chest examination showed a marked lag at left apex, with impaired resonance at the left apex both anteriorly and posteriorly. Expiration was prolonged at the left apex.

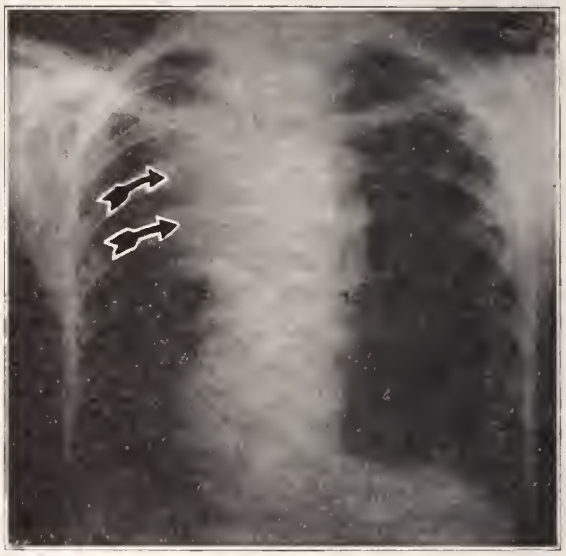

Figure I. Case I.

The joints of the elbows, wrists, and fingers were definitely oedematous and showed a bluish discoloration. They were painful to pressure and motion but not to touch. The knee and ankle joints showed similar changes.

Pertinent laboratory findings showed the hemoglobin to be 50%, with approximately 5,000,000 R. B. C. on two examinations. The leucocyte count was approximately 15,000 on two examinations. with 75% neutrophils and 25% lymphocytes. Blood Wassermann was negative. Blood chemistry showed normal variations. Basal metabolism rate was normal. Blood culture was negative. Sputum examination was negative for acid-fast bacilli. The moist preparation and culture of the sputum showed the presence of a fungus. Stereoroentgenogram interpretation of the chest showed marked increase in peri-bronchial thickening in right lower lobe and some enlargement of the right hilum. Both apices were hazy. An area of increased density of homogeneous character extended from the left clavicle downward to the lower third of the left lung. The heart was somewhat displaced to the right. *Conclusion:* Extensive parenchymal involvement in left chest as well as apical infection. Skiagram of structures around both knee joints showed bone destruction in the right tibia as indicated in the picture.

A diagnosis of pulmonary tuberculosis and chronic infectious arthritis was made and the patient returned to his home.

* From the Medical Department, Wisconsin Anti-Tuberculosis Association.

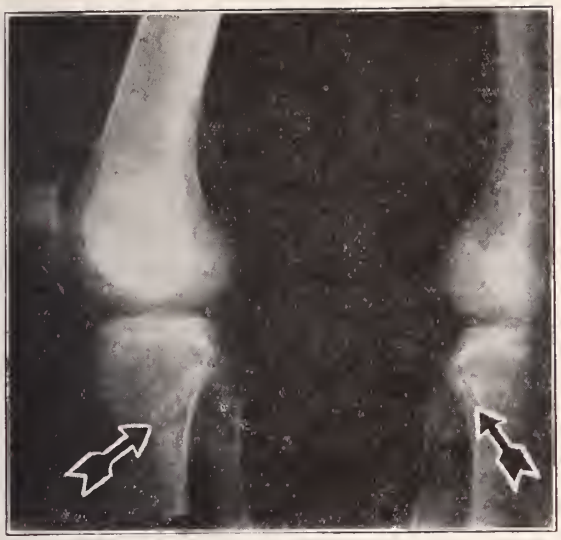

Figure II. Case I.

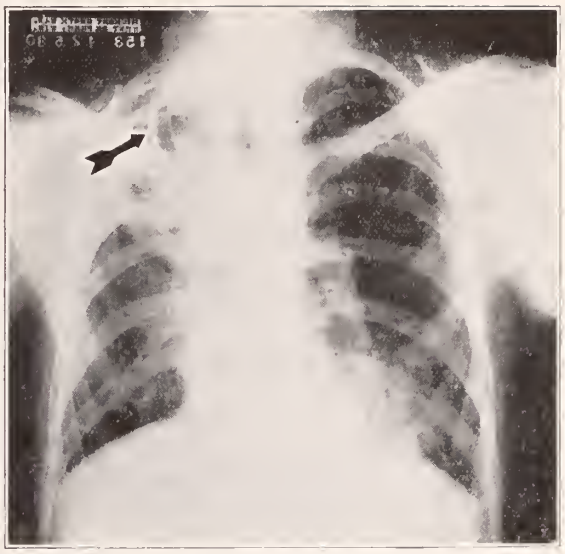

Figure III. Case II.

The patient did not improve and was again studied in November, 1929. Cultures of sputum, as before, showed the presence of fungus and stereo x-ray of the chest showed bony destruction of the ribs posteriorly as shown on photograph of the single x-ray film. The density of the shadow there also suggested a mediastinal abscess or new growth. A rib resection was subsequently done on the left posteriorly. A thick, cheesy material was found, which was removed. Culture of this caseous material showed blastomyces. Subsequent treatment consisted of administration of potassium iodide and copper sulphate. The patient showed continuous improvement and was well when last heard of.

The second case is that of a young, unemployed male, aged 27, first seen in November, 1930, with a history of cough, fatigue, and some shortness of breath which began the previous winter. There had been hemoptysis and blood streaking of the sputum. His sputum examinations were negative for tubercle bacilli. A diagnosis of pulmonary tuberculosis was made in the spring. During the summer progressive weakness, an increasingly troublesome cough, and weight loss of seventeen pounds were noted.

The past medical history was essentially negative except for frequent respiratory infections. His occupation had been that of a bellboy in a hotel. There was no family history of tuberculosis.

Physical examination showed a tall, phthisical-appearing individual, walking with stooped shoulders, cheeks highly flushed, eyes bright, coughing frequently, and markedly underweight.

Pertinent physical findings included an inflamed pharynx, a rapid heart rate, and a chest showing a marked depression and absence of respiratory excursion over the left apex. The percussion note was impaired over both apices. There was a friction rub at the right base posteriorly. There were many fine rales at the apices, and coarse moist rales at the bases. The respiratory rate was increased.

A diagnosis of active, advanced, pulmonary tuberculosis was made and the patient very reluctantly consented to sanatorium care, where stereoroentgenograms showed extensive parenchymal involvement of the lungs and a moth-eaten appearance of the first rib. Sputum examinations were negative on repeated examination during the next eight weeks and the patient had gained twenty pounds in weight. The diagnosis of tuberculosis was questioned, and an intracutaneous tuberculin test was done. It was negative. Differential sputum examination and sputum culture were requested and showed the presence of actinomyces.

Subsequent treatment consisted of the administration of thymol and routine sanatorium care. Improvement was progressive, though cough and expectoration continued. The patient was discharged after eight months' treatment, much improved.

COMMENT

Blastomycosis, actinomycosis, and fungus infections occur more frequently than is gen-

erally supposed, many cases probably receiving the diagnosis of tuberculosis. Clinically, the two resemble each other so closely that they may be indistinguishable. In all cases an intracutaneous tuberculin test should be done, for a negative reaction with very few exceptions rules out active tuberculosis. Tuberculin tests now being done on large groups of individuals indicate a much smaller percentage of positive reactors than is generally supposed. Unfortunately, in the first case, a tuberculin test was not done. In the second, it was the means of excluding tuberculosis. The moth-eaten appearance of the ribs is seldom seen in tuberculosis and may be the clue in making a diagnosis of a yeast-like fungus infection. To make a positive diagnosis and to insure against error, all material aspirated from bone lesions or abscesses should not only include the routine examination but should also be examined for fungi, though the clinical picture may be that of tuberculosis and the tuberculin test be positive.

Retropharyngeal Abscess*

By F. C. CHRISTENSEN, M. D.
Racine

This condition is sometimes spoken of as cervical prevertebral abscess. Two main forms are recognized:

1. The acute, following some infection of the upper respiratory tract, nasopharynx or middle ear;
2. The chronic variety, which commonly follows caries of the cervical vertebrae.

I shall discuss only the acute form.

ETIOLOGY

Trauma is not an infrequent factor. The child falls and receives a puncture wound in the pharynx, or jabs a foreign body too far into its throat.

Chevalier Jackson, quoted by Kistler[1], and others have reported cases resulting from trauma incident to gastric lavage or foreign bodies lodging in the pharynx.

The microorganisms are those commonly found in infection of the nasopharynx, tonsils, middle ear, etc., namely streptococci and staphylococci. It may follow scarlet fever, diphtheria, Vincent's angina or dental abscesses. It may be a complication of tonsillectomy, especially in adults.

PATHOLOGY

The superior group of deep cervical lymph nodes normally drain the lingual, deep facial and postpharyngeal glands. The superior group drains into the inferior deep group of lymph nodes, before the latter empty into the jugular lymphatic trunk. When suppuration takes place in one or more of these deep lymph nodes, there is no way for the abscess to point to the surface of the neck. The path of least resistance is first towards the pharynx, but the strong postpharyngeal fascia and pharyngeal muscles seldom allow the pus to break through, although this fascial and muscular wall does allow expansion forward, encroaching upon the larynx and interfering with deglutition.

The second path of least resistance is downward, posterior to the oesophagus, into the posterior mediastinum. Once there, the termination is commonly fatal.

SYMPTOMS

This condition is most frequently seen in children under three years of age. Greenwald and Messeloff[2] found 85% occurred under two years. A history of some nasopharyngeal or middle ear infection is usually obtainable. Duration of this pre-existing infection varies greatly. It may be 48 hours or three to four weeks.

Wishart, quoted by Pearlman[3], reported 41 cases among 33,892 admissions at Toronto Hospital for sick children, or about 1/10 of 1%. About 15% of these followed otitis media. In a child, the condition is easily mistaken for laryngeal diphtheria. There is always dyspnoea, which becomes more

* Presented before 91st Anniversary Meeting, State Medical Society of Wisconsin, Milwaukee, September 1932. Revised to publication date.

marked as the abscess enlarges and encroaches upon the larynx.

The degree of stertorous breathing varies —simulating laryngeal obstruction in diphtheria, or a foreign body in the larynx. The lungs are normal, unless involved by concomitant infection. The voice has a peculiar nasal twang, is muffled, often much as in quinsy.

There is frequently snoring. Cox [4] states that normal babies seldom snore. The child becomes cyanotic when crying. If the child is old enough it will seek a prone position, much as do cases in choking with obstruction from a large thymus.

Dysphagia is also marked. The child will want to drink and eat, but the fluid regurgitates through the nose.

In these acute cases there is fever with the usual febrile reaction. There is commonly a marked leucocytosis with a high polymorph percentage.

In the chronic variety there is a much longer history and little or no acute constitutional reaction. The head is more fixed in position, often with cervical deformity.

DIAGNOSIS

Inspection of the throat, if possible, will reveal a bulging, but there may be so much oedema that in a crying, restless and frightened child a good inspection is impossible. By palpation, if the mouth can be opened sufficiently to admit a finger, one finds a boggy mass, but the mass may be so tense as to simulate the normal pharyngeal wall. Cervical adenitis is present to varying degrees. Frequently a mass will be present which may show deep fluctuation or even point to surface of the neck. The child will hold its head in the position which will afford it greatest relief. Nasal regurgitation of fluids should lead one to carefully inspect the pharynx.

The x-ray—especially the lateral view—is of inestimable value in these cases, as this case will illustrate. It may be difficult to obtain a good x-ray film in small children, but sufficient details can readily be obtained to afford a diagnosis.

Hayes [5] credits Igluer with being the first to describe this technic in 1914.

PROGNOSIS

While some cases may terminate by spontaneous rupture and recovery—as may and do some cases of acute appendicitis—the general course of retropharyngeal abscess is unfavorable.

Greenwald and Messeloff [2] put it well when they said that: "It is a benign disease if recognized and treated early, but dangerous and often fatal if not recognized." They reviewed 55 cases of which four died. Babbitt and Myerson reported cases of spontaneous rupture and death. Woodward [6] cited a case which came to autopsy where the abscess had extended to the diaphragm, and he mentions several other fatal cases.

Barlow [7] cited Frank's case of fatal mediastinitis and Wishart's case of erosion of the carotid artery with fatal hemorrhage.

The prognosis should always be guarded, especially in cases of oral drainage, particularly so in the low and large abscess, as in these cases there is great danger of asphyxiation from the aspiration of pus, or the later septic pneumonia, or secondary infection into the abscess.

With proper and timely treatment there should be no mortality in uncomplicated cases.

TREATMENT

Once the diagnosis is estabilshed there can be no compromise on the treatment; it must be surgical. It is just as unfair to the patient to treat a retropharyngeal abscess expectantly and palliatively as it is to procrastinate with an acute suppurative appendix. The abscess must be opened and drained.

What shall guide us as to the type of drainage to be procured? Two routes are available:

1. By the simpler direct or oral route.
2. By Chiene's dissecting operation through the posterior triangle of the neck.

Binnie [8] says of these that, "The lateral route, especially in large abscesses, is a surgical procedure, while trans-oral drainage is not."

Binnie gives the advantages of the lateral route as:

1. Avoidance of drowning the patient in the pus.
2. Avoidance of septic pneumonia.
3. Avoidance of secondary infection into the wound.
4. It affords permanent drainage and surgical dressings.
5. Diseased foci may be removed if encountered.

The disadvantages of the trans-oral opening are:

1. Danger of asphyxiation.
2. Danger of septic pneumonia and infection of gastro-intestinal tract.
3. No drainage can be employed or dressings applied.
4. Frequently needs repeated opening.
5. If it is a tuberculous abscess, secondary infection complicates.
6. Danger of sinus infection, because of Rose's position during operation.

TECHNIC

If the abscess is small and high and *trans-oral drainage* is decided upon, the child should be placed in Rose's position, head down, usually without general anesthesia. It is safer, however, to use a little ethyl chloride inhalation anesthesia — as is commonly used by otolaryngologists in New York in very short operations.

When the abscess is large or low, lateral drainage should be used, Chiene's operation. The abscess commonly forms in the region of the upper group of deep cervical lymph nodes, opposite the 3rd and 4th cervical vertebrae. Chiene's incision is along the posterior edge of the sterno-cleido-mastoid muscle, just below the mastoid process. The carotid sheet with its contents must be identified and retracted foreward; this affords excellent exposure to the pre-vertebral region. The abscess is now identified, either by palpation or aspiration. The abscess is then opened by entering a hemostat or Mayo scissors and spreading same. Drainage is by a soft rubber tube; this may be left for ten days or longer. Ballinger[9] at times made the incision anterior to the sterno-cleido-mastoid muscle and carotid sheet, known as Burckhardt's operation, when he felt the abscess was endeavoring to reach the surface in that direction.

CASE REPORT

Master D. S., age 16 months.

History: Was circumcised at six months. Subject to occasional cold and sore throat.

Was seen on April 1, 1930. He was teething; had very large tonsils, with marked tonsillitis. T. 102, P. 140.

On April 2nd, T. 103, P. 144. There was marked cervical adenitis. Cold compresses were applied to neck.

April 3rd, T. 98.8. Cervical adenitis was much improved. General condition seemed fine. He was discharged as recovered.

April 9th, I was again called to see him because of dysphagia and dyspnoea. There was much phlegm in his throat. There was bilateral cervical adenitis, and slight swelling on right side of neck. He turned and held head to right. Attempts at swallowing were very painful. Fluid regurgitated through his nose. There were marked voice changes. Mouth could not be opened sufficiently to allow digital examination.

Leucocyte count was 24,300. Polys. 56. Small monos. 21. Large monos. 21. Basophile 1. Transitional 1.

X-ray showed a large prevertebral abscess, reaching to the second dorsal vertebra.

Under ether anesthesia oral examination was made. The abscess was found to be pressing against the larynx and trachea. A right Chiene's operation was done; about 100 c. c. of thick pus was removed. A soft rubber drain was placed into abscess; this was removed ten days later. The convalescence was uneventful.

The pus showed short chain streptococci.

SUMMARY

1. Retropharyngeal abscess is most common in children under three years.

2. Early opening affords fewer complications.

3. Chiene's operation through the side of the neck should be the operation of choice, especially if the abscess is large and dissecting downwards.

4. A case is reported in a 16-month-old child where the abscess reached the second dorsal vertebra, where lateral drainage was effective.

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Radiation Therapy in Medical Practice*

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INTRODUCTION

Radiation therapy has made sufficient progress during the last 10 years to warrant its recognition as a treatment method well established on a scientific basis. The adoption of an international unit, the r (or Roentgen) by which the dose administered to a patient may be expressed is one of the milestones in this development. Definite indications and contraindications have been accepted for the treatment of a large group of malignant diseases and it seems, therefore, that the practitioner of medicine should be given an opportunity to acquaint himself with some of the possibilities of radiation therapy in advanced malignant disease. Most publications dealing with this subject are found in radiological journals, unfortunately read only by the physician specializing in radiology. It is the writer's intention, therefore, to discuss in these columns some of the phases of radiation therapy particularly as it touches the general practitioner. In his capacity as a family physician it is often his responsibility to advise his patients suffering from malignant disease as to the best therapeutic procedure indicated in a certain case, and he should know that the prognosis is perhaps less grave in a large group of neoplasms both as to cure and expectancy of life than 10 years ago.

A few words must be said here in regard to the evaluation of the results obtained in the irradiation of patients with malignant disease. Most of them are fairly advanced cases referred to the radiologist as a last resort, often as a mere gesture. If the radiologist accepts such a patient and prolongs the number of useful days or even obtains a five year clinical cure he has done so with all the odds against him. The percentage of results should not and cannot be compared with results produced in the treatment of—to choose a simple example—appendicitis by operation. The deep satisfaction of a radiologist who succeeded in saving a case with far advanced inoperable malignant disease, a patient who has been given up by everyone else, can, therefore, easily be appreciated. The number of those patients is still very small; however, it has been increasing during the last years. The proper application of radiant energy, the best combination of various types of radiation and the development of a reliable dosage system are largely responsible for this progress.

In this and in the following articles the discussion of a selected group of inoperable malignancies will be presented accompanied by the report of an illustrative case.

I. CARCINOMA OF THE BONE

To quote from Holmes and Ruggles [1], "Carcinoma is always metastatic in bone and is generally multiple. It may involve any one or all of the bones. It is not common in the extremities below the elbows and knees, affecting them only in cases of widespread and generally slow-growing metastasis. It produces a moth-eaten appearance of the bone, due to the irregular destruction of bone substance and its replacement by tumor mass. The cortex may be involved, but ordinarily only in the later

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stages. There is no periosteal reaction, and no change in outline, unless spontaneous fracture occurs. In the skull, it appears as irregular areas of bone destruction, which typically are limited to the diploe, and do not involve either table. When the spine is involved, there is more or less extensive destruction of several bodies, but ordinarily they do not collapse, owing to the fact that the dense tumor tissue affords considerable support. This is of importance in the differentiation from tuberculosis and lues, in which collapse of the affected bodies is the rule.

There is a second form of metastatic carcinoma generally secondary to a tumor of the prostate or breast, which is of extremely slow development—cases having been seen ten years after the recognition of the primary disease. It is characterized by the extensive production of dense bone in the vicinity of the growth. Its usual site is in the spine, pelvis and ribs, which become greatly increased in density, and coarsely mottled from the intermingled areas of rarefaction and condensation. The bones are sometimes enlarged, and may be mistaken for osteitis deformans. The long history may also be suggestive of this condition. More careful inspection will show that the picture is produced by adjacent areas of bone destruction and proliferation, with the latter predominating, and that there is no evidence of the rearrangement of trabeculae into bundles, which is typical of osteitis deformans. Furthermore, the distribution of the lesions is quite dissimilar. Osteitis deformans more commonly attacks the long bones, skull and hands, whereas carcinoma shows a preference for spongy bone. The demonstration of a primary growth particularly in the prostate should be conclusive."

The first clinical symptom of bone involvement is usually pain; in too many cases the nature of the pathologic process is unfortunately not recognized. At least fifty percent of the patients coming eventually for treatment had physical therapy of some form for neuralgia, myalgia, neuritis or rheumatism. However, early discovery of the first bone lesion is most important and the only way to establish the diagnosis is by a careful roentgen examination. It cannot be emphasized too strongly that it is the duty of every physician to insist on such an examination if a patient with a previous history of neoplasm with a tendency to metastasize into the skeleton (i. e., carcinoma of the breast, prostate, thyroid, or fundus of the uterus) complains of pain in some other area of the body. Pain radiating into the legs, to quote an example, is often due to involvement of the spine and will many times be the first symptom which should lead to the proper diagnosis.

The question arises then what has x-ray therapy to offer to these patients? It is not widely enough known among physicians how much relief from pain can be obtained in at least 60—70% of these cases. In about 30—40%, very conservatively speaking, healing of the carcinomatous process can be brought about, finally resulting in bone sclerosis at the involved site. Patients have been kept alive in comfort and free from additional metastases up to two years and longer after the diagnosis of the first bone involvement has been made. The writer has a series of cases of this type in his files. Successful x-ray treatment of one bone lesion does not prevent, however, the development of metastatic lesions at other sites. It takes about 6 weeks to 3 months after the beginning of the treatment before follow-up roentgen examination will show calcification of the destructive process. Relief from pain may be seen, however, quite frequently after the second or third treatment. Since most of these lesions are several centimeters below the skin, heavily filtered high voltage x-rays should be used. It seems to require approximately 1000 to 1200 r effective in the malignant growth and preferably applied according to the so-called saturation method to bring about regression. A good many of these patients are not in very excellent general condition and it would not be wise to administer a single high dose in one sitting. It is better, as experience has shown, to use a fractional dose, in other words distribute the total dose over a series of sittings. A regular careful examination of the patient at monthly intervals is not only essential but well worth the effort. A typi-

Figure 1. Roentgenogram taken on April 19, 1932, showing destructive process in left margin of fourth lumbar vertebra.

cal case belonging to this group will now be briefly reported.

X-ray No. 1592, housewife, aged 37 years. Amputation of right breast in May, 1931. Involvement of one axillary gland. Histological diagnosis: Adenocarcinoma, grade II. Patient received x-ray therapy p. o. applied according to the saturation method starting in June, 1931. Received a second series in February and March, 1932. There was no local recurrence at this time. In April, 1932, patient complained of neuritis in the left side with pain radiating into the pelvis and left leg. Roentgenograms were taken, therefore, of the spine and pelvis. There was an area of bone destruction at the left lower margin of the 4th lumbar vertebra (see Fig. 1). X-ray deep therapy was given, the central ray being directed over the 4th lumbar vertebra. After the third treatment the pain in the pelvis as well as in the lumbar region subsided. A total of 1800 r (measured in air) were applied over a period of two months. In July, 1932, the roentgenogram showed marked calcification of the body of the 4th lumbar vertebra with partial collapse. Follow-up studies demonstrated increasing sclerosis of the 4th lumbar vertebra, and as shown in Fig. 2 taken in January, 1933, complete healing of the lesion occurred.

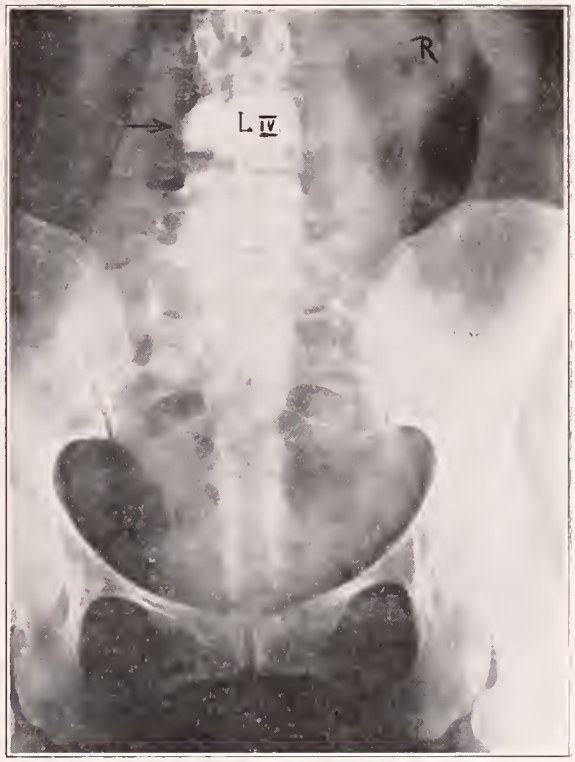

Figure 2. Roentgenogram taken on January 20, 1933, showing calcification at site of former lesion.

SUMMARY

1. Patients suffering from a primary carcinoma with tendency to skeletal metastases should be carefully examined by roentgen rays as soon as they complain of pain in a region of the body remote from the site of the primary involvement.

2. X-ray deep therapy properly applied will relieve the pain in at least 60—70 per cent of these patients and bring about healing of the carcinomatous process in approximately one-third if started early. Successful x-ray treatment of one bone lesion does not, however, prevent the development of metastatic lesions at other sites.

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Pain in Prostatic Gland Infections; A Syllabus*

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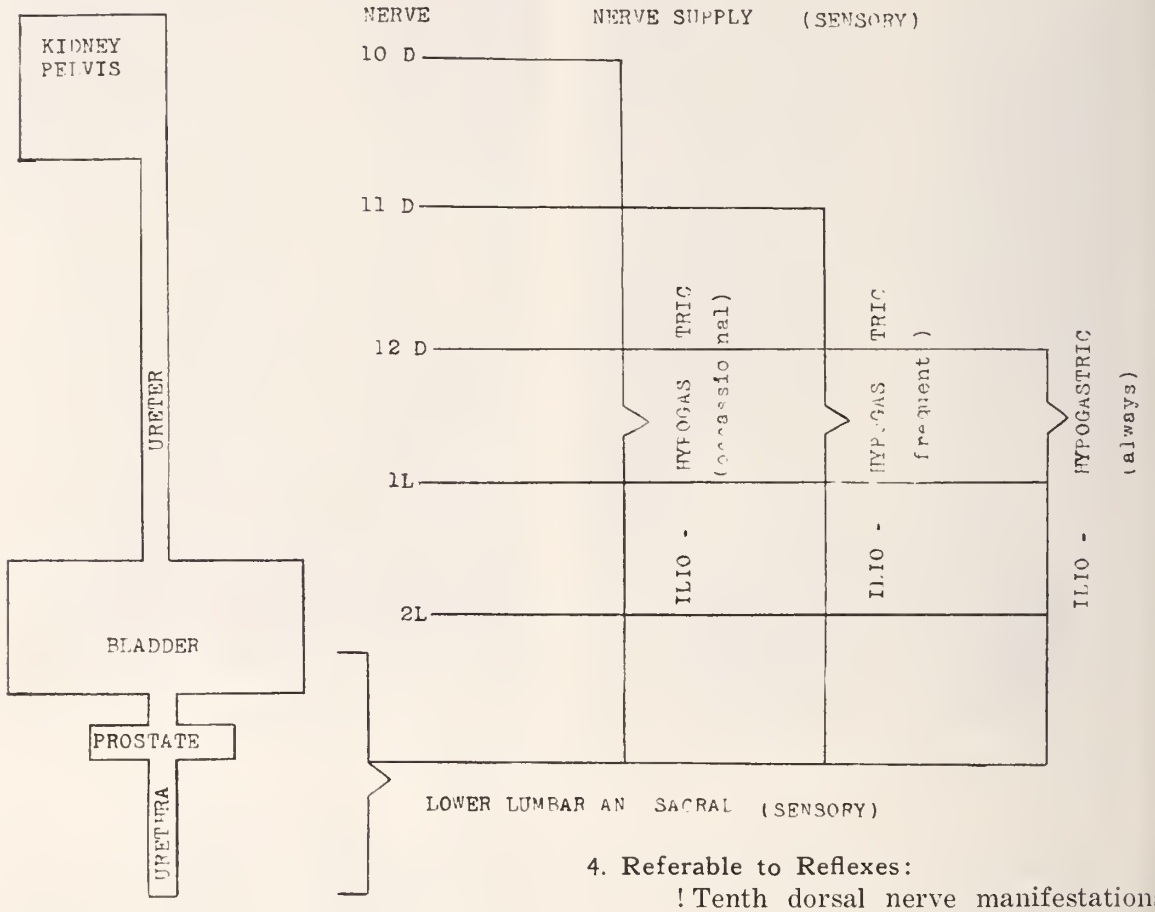

1. Referable to Pathology in Gland Itself.
2. Referable to Complications:
   - (a) Vasitis.
   - (b) Epididymitis.
   - (c) Orchitis.
   - (d) Abscess.
   - (e) Cystitis.
3. Referable to Toxemia and Circulatory Showers:
   - (a) Neuritis.
   - (b) Myositis.
   - (c) Arthritis.
   - (d) Secondary Foci.
     - (1) Causal.
     - (2) Sequential.
   - (e) Neuroses and Psychoses.
4. Referable to Reflexes:
   - ! Tenth dorsal nerve manifestations and neighboring cord segment overflow.
5. To be Differentiated From:
   - (a) Pain of Abdominal Lesions.
     - (1) Retrocecal Appendicitis.
     - (2) Diverticulitis.
     - (3) Rectal Conditions.
     - (4) Ureteral extrinsic "Tug and Push."
   - (b) Pain of Urologic Tract Pathology.
     - (1) Renal, Ureteral, Bladder, Posterior Urethral Lesions.
       - (a) Calculi.
       - (b) Tumors.
       - (c) Inflammations.
       - ! (d) Gout.
       - (e) Obstructions.
         - (1) Intrinsic.
         - (2) Extrinsic.

* A presentation to be given before a combined meeting of the Medical Society of Milwaukee County and the Wisconsin State Urologic Association on November 10, 1933.

(f) Strictures of the Ureter?
(g) Embryologic Defects.

6. Conclusions and Considerations:
! (a) Incidence of Gonorrhoea as Etiologic Factor. (Approximately 30%).
! (b) Importance of Tenth Dorsal Nerve and Neighboring Segment Pain.
! (c) The Silent Prostate.
! (d) The Infected Prostate with Negative Urine.
!! (e) THE "FORGOTTEN" FOCAL INFECTION.

Effect on the Lungs of Fungus Spores Found in Maple Bark*

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The manufacture of wood products i. e., lumber, railway ties, etc., constitutes one of the major industries of northern Michigan.

During the present economic depression a large percentage of the wood being worked today was cut into logs from one to two years ago. Many of the maple logs that have been cut for a period exceeding one year show evidence of fungus infection in varying degrees. In these affected maple logs a black dust of the consistency of lampblack is found beneath the cork layer of the bark and this dust on examination has proved to be the pure spores of fungi (coniosporium corticale). A number of men whose working operations brought them into contact with this spore dust have developed definite asthmatic attacks.

A clinical, x-ray and laboratory study has been made on a group of thirty-five patients in the upper peninsula of Michigan. Ten of these men were employed as tie peelers in a railway tie plant, the remainder of the group were sawmill employees. The symptoms presented by this group of patients were acute and typically asthmatic in character. The predominating symptom in all of these cases was shortness of breath. This was associated with loss of weight, cough, varying amounts of expectoration, substernal pain and temperatures ranging to 103 in certain instances. Physical findings were those which we commonly associate with acute asthmatic attacks with coarse rales predominating over the lower half of the chest. X-rays on these men show definite mottling throughout the lower half of the lungs in the most severe cases with a definite increase in the basal, trunk and peribronchial shadows in all cases. There was little involvement above the second rib in any of our patients. The symptoms began to improve as soon as the patient was removed from the spore dust environment and the x-rays showed a relatively rapid clearing.

The abrupt onset with the fairly prompt recovery from symptoms on removal of patients from the environment of the spore dust suggested to us the problem of a protein sensitization. Reactions to intradermal injections of the spore extract and a suspension of spore dust as compared to controls were indefinite and more work is being done to definitely establish the mechanism of the disease.

Preventive measures should include the removal of patients from the environment of the spore dust. Recent experiences show that an efficient respiratory mask offers a good deal of protection to the worker. The soaking of logs in mill ponds seems to have little effect in controlling the spore dust, although the clouds of spore dust seem to be held down by the playing of a spray of water upon the band saws during the sawing operation.

The fungus apparently is saprophytic in character and the spore dust is only found in any appreciable amount in wood that has been stored in yards for a period of one to two years. So from an economic standpoint it would be more appropriate to work only with freshly cut logs and thus avoid the risk of penalty under the workmen's compensation act.

* Presented before State Medical Society of Wisconsin. 1932. Revised to publication date.

Rupture of the Heart with Clinical and Pathological Reports of Cases

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The common recognition of coronary disease is a development of the last twenty years. Dock (1) gave the first American description of the condition in 1896. His analysis included both bedside and post mortem observation; his thorough work was neglected for sixteen years when Herrick (2) revived the interest in the clinical study of coronary thrombosis in this country. At the present time several patients with coronary disease enter the average general city hospital in the course of each month and are so diagnosed and treated. The diagnosis of coronary sclerosis based on history and physical findings has become commonplace, but patients with the history and characteristic findings of coronary thrombosis are not so common.

Patients with coronary thrombosis may present themselves without history of previous pain and with all of their symptoms confined to the upper abdomen. The differential diagnosis from abdominal conditions can be based on apprehension, cyanosis, leaky skin, weak and thready pulse, distant and feeble heart sounds and low blood pressure. Later, a pericardial friction rub, embolic phenomena or evidences of cardiac decompensation may develop. The laboratory data which confirm the clinical impression include the leukocytosis and a characteristic deviation of the ST segment in the electrocardiogram.

The following cases are described because of the development of unusual complications:

Case I. O. E., sixty-four years of age, entered the Wisconsin General Hospital on the morning of December 12, 1930, with a history of dull steady nonradiating substernal pain, appearing for the first time forty-five minutes before his admission to the hospital. After its first appearance the pain steadily increased in severity for ten minutes when he attempted to reach a window but fell unconscious on the way. He regained consciousness in about five minutes, just before a physician reached him. He received one-quarter grain of morphine sulphate and was brought to the hospital in an ambulance. On entrance he complained of marked substernal pain which he admitted to be slightly less severe than when he had first regained consciousness. His fear of impending dissolution was somewhat relieved by medical attention.

Examination showed marked apprehension; ashy cyanosis of lips, finger nails, and lobes of ears; contracted and fixed pupils; labored breathing; faint but regular heart sounds; increased cardiac dullness to left; and a systolic apical murmur. The blood pressure was 110/72 and the pulse rate 60. The peripheral vessels were sclerosed but not tortuous and the fundi failed to show hemorrhage or scars. There was a leucocytosis of 27,500 (neutrophiles 83%) on entry which continued to the end. The blood sugar was 210 mgs. per 100 cc. of blood. The electro-cardiographs showed the ST segment to be depressed in leads II and III.

By 6 P. M. on the day of entry, delusions of persecution were present, the apprehension had increased, the pulse had become unobtainable, and the venous pressure had risen to 18. Venesection was done with removal of 800 cc. of blood. Cardiac stimulants were given hourly through the night. Blood pressure had become 110/80 at 9 A. M. on the following day and the pulse was steady and of fair quality. In the four days intervening before the patient expired there were four similar attacks initiated by apprehension, followed in turn by hallucinations or delusions of persecution, convulsive movements of the extremities, and finally, severe shock. The patient rallied from each attack until the last, when he expired suddenly just as shock appeared.

At no time was a friction rub heard over the precordium although this was looked for repeatedly each day. Fibrillation was present only when the patient was in shock; at other times the rhythm was regular.

Clinical diagnosis of occlusion of the descending branch of the left coronary artery was made.

Autopsy was performed one and three-fourths hours post mortem. On opening the pericardium it was found to be filled with partly clotted fresh blood. The heart weighed 390 gms. The chambers were not dilated. The valves were normal. On the anterolateral aspect of the left ventricle was an irregular rupture of the epicardium and outer layers of myocardium. The rupture was 2 cm. in length and situated to the left of the descending branch of the left coronary, 6.5 cm. from the origin of the artery. It was surrounded by soft greyish muscle, extending from near the origin of the left coronary downward as a curving elliptical area to the apex of the left ventricle. The infarcted area measured 9 x 6 cm. roughly and was rather sharply demarcated from the surrounding normal firm reddish muscle. In the immediate vicinity of the rupture the heart wall was very soft, hemorrhagic and spongy.

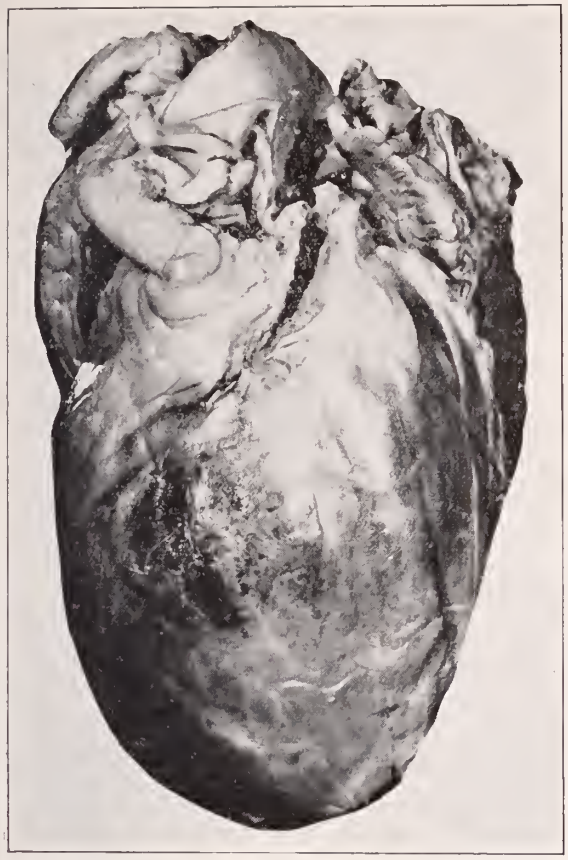

Fig. 1

Fig. 2

Beginning a few mm. from its origin, the left coronary was completely occluded by a recent friable thrombus for a distance exceeding 4.5 cm. The wall of the artery was thickened and partially calcified, and showed numerous small yellow plaques. The circumflex branch of the left coronary and the right coronary showed similar sclerosis but no thrombosis. The ruptured ventricle and thrombosed coronary are shown in Figure 1.

Extending over the apical and antero-inferior surfaces of the endocardium of the left ventricle was a reddish-grey, friable, laminated thrombus. Figure 2 shows the infarcted wall at the apex and the mural thrombus within the left ventricle.

Anatomic and histologic diagnoses included coronary sclerosis and thrombosis; infarction and rupture of wall of the left ventricle, mural thrombus of left ventricle; hemopericardium; cardiac hypertrophy and dilatation; and chronic fibrous myocarditis. In the infarcted area, necrosis of muscle fibers and hemorrhage predominated.

Significant lesions in other organs were limited to arteriosclerosis and to the effects of myocardial insufficiency. There was arteriosclerosis of the aorta and of the splenic, pancreatic, renal and adrenal arteries, chronic passive congestion of lung, liver, spleen and kidney, oedema of the lung and liver, and bilateral hydrothorax. No emboli were found. Renal changes present were the result of arteriosclerosis and chronic passive congestion and were slight.

Case II. H. F. K. A man of 64 entered the hospital on December 28, 1930, with a chief complaint of pain in the chest and a history of repeated attacks of pain beneath and to the left of the sternum for a period of 8 months previous to entry. The pain always radiated to the left scapula, was of a sharp shooting character, lasted from a few minutes to half an hour, and was aggravated by exercise. If the patient attempted to work the pain occurred daily. For three or four weeks dyspnoea was present on slight exertion, with oedema of the ankles at night.

The patient rode over one hundred miles in an automobile to enter the hospital and a typical attack of pain occurred just before the hospital was reached. This was relieved by nitroglycerine and rest in bed.

Physical examination showed a well developed and nourished man of 65 with tortuous temporal vessels, increased antero-posterior diameter of chest, cardiac enlargement to the left, no valvular murmurs, and a blood pressure of 140/76. Urinalysis, blood count, and blood chemistry were normal. The Wassermann test was negative.

The patient passed a comfortable night in the hospital. The next day at 9 A. M. severe substernal pain appeared. This was momentarily relieved by

nitroglycerine but returned in such severe form that even morphine sulphate, grains ¼, failed to give relief. The blood pressure fell to 90 mm. and the venous pressure was 12 cm. The pulse became weak and rapid. The skin became cold, wet, and cyanotic. Nausea and vomiting occurred. Stimulants were given repeatedly. Intravenous 5% glucose was given very slowly because the patient was unable to retain anything by mouth. He expired suddenly about 24 hours after entry.

Clinical diagnosis of coronary sclerosis and thrombosis and arteriosclerotic cardiovascular renal disease was made.

Autopsy was performed one and one-half hours after death. The pericardium contained a small amount of clear, straw-colored fluid. The heart weighed 400 gms. and all chambers were dilated. There was relative insufficiency of the aortic and tricuspid valves which were otherwise normal.

Two cm. to the right of the descending branch of the left coronary artery and 5 cm. from its origin (situated over the conus arteriosus of the right ventricle) were two superficial ruptures of the epicardium 8 and 5 mm. long repsectively. They were surrounded by a small area of soft grey muscle, roughly 2 x 1 cm. in area. The walls of both coronary arteries were thickened and extremely sclerotic. Beginning 2 cm. from the orifice of the descending branch of the left coronary was a reddish friable thrombus which occluded the vessel for a short distance. There were no endocardial thrombi.

Anatomic and histologic diagnoses of the heart were similar to those of the preceding case. Here, however, the infarct was much smaller and did not involve the entire thickness of the myocardium so that there was no necrotic endocardium on which a mural thrombus might form. Also no hemorrhage occurred.

Arteriosclerosis and evidences of congestive failure in other organs were similar to those of the preceding case. In addition, the lung, bronchial lymph nodes and liver showed healed and caseous tubercles.

It is not within the province of this paper to describe fully the pathological features of coronary thrombosis. This had been admirably done by Levine (3) who has also reviewed the literature and appended an extensive bibliography. A few remarks are necessary, however.

The descending branch of the left coronary artery is involved in the majority of cases (Levine—84.7%). As a result the left ventricle is affected. If the occlusion is gradual (as by sclerosis) a relative anemia of the muscle in the field of the artery occurs and there may be time for a collateral circulation to develop, which may, to a greater or lesser extent, prevent infarction.

If occlusion is sudden (usually by thrombosis of an already sclerosed vessel), acute anemia of large areas of muscle occurs. Its extent will determine whether cardiac embarrassment or complete failure ensue. If death occurs suddenly there is no time for infarction to develop. If the patient survives long enough for these processes to occur, death may result from rupture of the softened myocardium as in the two cases presented here. Levine states that rupture is most common during the second week after the attack and that repair is not a striking feature until after the third week. If the patient survives long enough to permit fibrous tissue replacement, recovery may occur. Such fibrous repair may be insufficient in extent or degree to withstand the blood pressure within the heart chamber, resulting in aneurysm of the heart wall.

A rather unusual pathological picture of coronary occlusion is presented by the case of C. W., a 51 year old man who entered the hospital on October 7, 1930, with the signs and symptoms of acute decompensation. Because of his condition little in the way of history or physical examination was attempted. He had had a severe pain in the chest followed by shortness of breath three weeks prior to entry. He died the day following admission.

At autopsy the pericardial cavity was found to be entirely obliterated by fibrous adhesions which were over 2 cm. thick in places. The weight of the heart with adherent pericardium was 1215 grams. All of the chambers were somewhat dilated. Within the thickened pericardium over the left auricle was a cavity, roughly 1 x 2 x 3 cm. in size, filled with thick, dark red, semi-fluid material, apparently degenerated blood. In the anterior part of the interventricular septum was another cavity, irregular in shape and slightly larger than the first.

The muscle of the anterior half of the interventricular septum and all of the anterior and lateral portions of the left ventricle (including the apex) was soft, dark grey, and extremely friable. The coronary arteries showed extreme sclerosis resulting in much encroachment on the lumen of the vessels. The descending branch of the left coronary was almost occluded by the sclerotic process for a few millimeters at a point 4 cm. from the origin of the artery; the occlusion was completed by a small recent thrombus. The valves were normal except for slight chronic thickening and calcification of the aortic cusps.

Histologically, the heart showed hypertrophy of muscle fibers, considerable sclerotic narrowing of coronaries, and large dense myocardial scars throughout. The left ventricle showed infarction with anemic necrosis and softening. Large healed scars were also present in the infarcted areas. A recently organized pericarditis was superimposed on an old fibrous one. In the left ventricle were an old white thrombus and a very fresh one. The pocket of old blood in the interventricular septum had friable necrotic myocardial walls; the wall of the cavity overlying the left auricle was composed of old dense granulation tissue.

Anatomic and histologic diagnoses of the heart were: chronic fibrous pericarditis and myocarditis, cardiac hypertrophy and dilatation, coronary sclero-

(Continued on page 792)

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4th Dist., W. Cunningham .Platteville

TERM EXPIRES 1934
5th Dist., A. H. Heidner ...West Bend
6th Dist., S. E. Gavin ....Fond du Lac

TERM EXPIRES 1935
7th Dist., S. D. Beebe .....Sparta
8th Dist., G. R. Duer .....Marinette

TERM EXPIRES 1935
13th Dist., I. E. Schiek ...Rhinelander

TERM EXPIRES 1935
9th Dist., Joseph F. Smith ..Wausau
10th Dist., H. M. Stang ..Eau Claire

TERM EXPIRES 1936
11th Dist., F. G. Johnson ..Iron River
12th Dist., R. W. Blumenthal, Milwaukee

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OFFICIAL PUBLICATION OF THE STATE MEDICAL SOCIETY OF WISCONSIN

EDITORIALS

YOUR OFFICERS

DURING November and December most of the county societies will choose their officers for the coming year. Each series of elections in late years has recorded, by its results, a new and wholesome tendency in elections.

The time has long since passed, if indeed it ever existed, when the offices of a county medical society constituted an honor to be bestowed in rotation; or a reward to be received. The realization is here that the county medical society is the very foundation of the state and national organizations. More and more do we appreciate that no state society can be strong without strong county medical societies. And numbers of members alone do not necessarily mean strength.

In numerous societies visited at election time we have been impressed by the evident realization of the members that the offices to be filled were each opportunities for constructive work and that the honor came only as result of doing good work during the term of office. It is no longer a case, for instance, of Dr. Jones nominating Dr. Smith as delegate because Dr. Smith is a good fellow. Today we find the President suggesting that before a delegate is elected he would like to see the hands of those who expect to attend the next annual meeting of the state society. Then when the state society meets, the roll call of the house of delegates shows a representative for that county medical society.

Frequency of meetings, strength of programs, proper cooperation and leadership in public health problems, solution of economic phases of professional life,—all these and more are responsibilities of the officers and those who discharge them ably merit the honor and appreciation of the membership. All of which may be summarized by saying that the cloak of office comes at election time but the honor is not given until the annual report is made.

(Nov. 1927)

CARE OF THE INDIGENT

IN THE study of the distribution of medical services in Wisconsin made under the auspices of the State Medical Society in 1930 and 1931, one of the leading recommendations of the committee was:

> "We recommend that the Society disapprove any system which provides a single practitioner to care for the indigent, except such as may be in institutions, for the reason that such a system is not conducive to securing a proper public service."

The soundness of this recommendation has now been accepted by the Federal Emergency Relief Administration. We express the hope that such a proper principle will be maintained in the years to come.

THE PRESIDENT'S PAGE

COMMITTEE ON CHILD HEALTH AND PROTECTION

INDICATIONS of a marked increase in the number of malnourished children and the number said by Children's Bureau investigators to be in a "border-line" condition, prompted Secretary of Labor, Frances Perkins to call a national conference on child health recovery. This conference was held in Washington on October 6.

The report of the Executive Committee, which was presented by Dr. Julius Hess, includes the following objectives: The location of undernourished children; the initiation and development of plans to overcome, as far as possible, existing malnutrition and to prevent its further progress through dietary measures and insofar as necessary the institution of corrective medical procedures. The report also recommends the promotion of such plans as may be decided upon as necessary to meet situations within different States and communities and, in order to accomplish these things, it was evident to the committee that it will be necessary to have the full and complete co-operation of the State and local departments of health, welfare, and education, the National, State, and local emergency relief administrations, the State and local medical and dental societies, together with the official and non-official National, State, and local agencies concerned in the promotion of public health and child welfare. To facilitate such co-operation, the committee recommends the organization of State, county, and local committees, each committee being so constituted as to include in its membership representation from each of the official and, so far as seems advisable, the non-official groups above indicated.

The report of the Executive Committee was approved with the understanding that the States will take action to modify any suggestions in that report in accordance with their particular needs.

Grace Abbott, chief of the Children's Bureau, in her letter of communication detailing the results of the conference, emphasizes the fact that the Children's Bureau is not recommending a program of research or investigation with a view to determining the incidence of malnutrition. The department's principal concern is solely that children whose nutritional condition may have been adversely affected by the depression, that is—those on relief, those in the "border-line" families who are not on relief, but are in great need—be located and their needs supplied.

A survey made prior to this conference indicates that there has been no increase of malnutrition among Wisconsin children during the years of the depression. As stated in the Journal of the American Medical Association, the title "Child Health Recovery" applied to the program proposed by the Children's Bureau implies notable deterioration in child health during the years of economic stress. However, the fact that the health of the citizens of this state was never better than at the present time, and that the death rate is unusually low, should not cause us to overlook the possibility of a deterioration in the health of children during the present crisis.

The Executive Committee of the Medical Council has authorized the appointment of a committee to be known as The Committee on Child Health and Protection which has as its fundamental objective the co-operation of all groups interested in child welfare. This committee, which will function under the chairmanship of Dr. Robert Blumenthal, will be patterned after that of the state committee of Iowa which was appointed on the recommendation of the American Academy of Pediatrics.

The Iowa committee has had repeated conferences for consideration of various pediatric interests. These conferences have been held with the following groups: (1) Local pediatricians; (2) Local general practitioners; (3) Officials of State Health Department; (4) Officials of city health department; (5) Officials of State Department of Public Education; (6) Officials of city boards of education; (7) Officials of State Bureau of Child Welfare; (8) Officials of Iowa State Medical Society; (9) Officials of Iowa State Tuberculosis Association; (10) Officials of local Public Health Nursing Association. In addition the members of the committee have co-operated with the speakers' bureau of the Iowa State Medical Society in the following activities: (1) Providing pediatric programs for county, district and state societies; (2) Providing speakers for lay meetings for presentation of subjects pertaining to medical phases of child health and protection; (3) Radio presentation of medical subjects pertaining to child health and protection.

The advisability of having, at this time, an active committee of this type in the State Society seems to me to be obvious and I feel certain that we can rely upon the active co-operation of the various county medical societies in furthering its program. The active participation of the government and of various private organizations in child health activities will undoubtedly be increased during the coming winter, and our organization should be in a position not only to co-operate to the fullest extent, but also to lead in all activities of a medical nature.

SOCIETY PROCEEDINGS

BROWN-KEWAUNEE-DOOR

Members of the Brown-Kewaunee-Door County Medical Society held a dinner meeting at the Hotel Swoboda, Sturgeon Bay, on October 17th to dedicate the joining of the Door County Medical Society with the Brown-Kewaunee County Medical Society. By resolution, the amalgamated society was named the Brown-Kewaunee-Door County Medical Society.

Dr. S. E .Gavin, Fond du Lac, councilor for the district, represented the State Medical Society and congratulated the physicians on the improvement of their society by this consolidation.

Scientific papers were presented by Dr. P. R. Minahan, Dr. D. F. Gosin and Dr. C. S. Williamson, all of Green Bay.

Entertainment was provided by Benjamin F. Rusy, Sturgeon Bay, who presented a number of character sketches.

JUNEAU-VERNON-MONROE

On October 12th the Tri-County Medical Society, composed of members from Juneau-Vernon-Monroe counties met at Tomah, with some thirty-five members present.

From ten to twelve in the morning the members and guests were escorted through the Government Indian School as guests of Dr. A. E. Winter, who is in charge of the new and beautiful government hospital recently erected and completed there. At noon dinner was served at Hotel Sherman and then followed the scientific program:

"Arteriovenous Aneurisms" by Dr. Joseph Dean, Madison.

"Allergy" by Dr. F. W. Gaarde, The Mayo Clinic, Rochester.

"Dermatology" by Dr. P. A. O'Leary, The Mayo Clinic.

By vote of the Society these men were heartily thanked for their fine presentation of very interesting and stimulating subjects. The spirit that prompts three busy men, of the caliber of these three gentlemen, to come out here into the country to share their experiences with us men on the "firing line" is corking fine. That's what cements the members of our noble profession into something like a real brotherhood. Thanks, "come again."

S. D. B.

MILWAUKEE

The first meeting of The Medical Society of Milwaukee County to be held since the May meeting was held in the Elizabethan Room of the Milwaukee Athletic Club on Friday, October 13th.

In keeping with the new feature suggested by the program committee, and approved by the Board of Directors, to have a short talk on economics precede the scientific program, Mr. George G. Goetz, a Milwaukee insurance man and chairman of the committee of insurance companies representatives, which cooperates with the Society's Committee on Insurance in settling difficulties arising between physicians and insurance companies, addressed the Society on "Medical Relations With Insurance Companies."

Dr. T. L. Squier, the first speaker on the scientific program, spoke on "Manifestations and Recognition of Allergic Diseases."

Dr. William S. Middleton, Professor of Medicine at the University of Wisconsin, was the guest speaker. His subject was "The Treatment of Lobar Pneumonia."

Following the scientific program the meeting adjourned to the Social Hour, during which a buffet luncheon was served.

This was one of the largest meetings in the history of the Society, with about 350 in attendance.

OUTAGAMIE-WAUPACA

Dr. S. A. Morton and Dr. A. A. Pleyte, both of Milwaukee, together with Dr. C. D. Boyd of Kaukauna and Dr. E. F. McGrath of Appleton, addressed the first combined meeting of the Outagamie and Waupaca Counties Medical Societies on October 17th. Forty members of the two societies attended the dinner which was held at Riverview Sanatorium, Little Chute.

"The Interpretation of X-ray Films of the Chest" was the subject of the principal address which was given by Dr. S. A. Morton. Members of both societies presented chest films which were introduced into the discussion.

RACINE-WALWORTH-KENOSHA

The annual meeting of the Tri-County Medical Society composed of the counties of Racine, Walworth and Kenosha, was held at the U. S. Standard Products Laboratories at Woodworth, Wisconsin, on October 14th. The scientific program began promptly at 1:30 P. M., and speakers on the program included the following:

Dr. Stanley J. Seeger, President, State Medical Society of Wisconsin, Milwaukee, spoke on "Modern Treatment of Burns."

Dr. Clifford Grulee of Chicago discussed "Interesting Conditions of the Newborn."

Dr. Harry Mock of Chicago read a paper on "Multiple Injuries With Skull Fractures."

This was followed by demonstrations by the staff of the U. S. Standard Products Company on the manufacture of smallpox vaccine; rabies vaccine, and diphtheria toxins, antitoxins, and toxoids. Exhibits were shown of tetanus antitoxins; liver extractives, antimeningococci serum, Lacprotein milk; erysipelas antitoxin, bacterial vaccines, silver nitrate, thromboplastin and dextrose solution.

The U. S. Standard Products Company was again host to the physicians and their wives at a dinner held at the Elks' Club at Kenosha in the evening.

Dr. W. C. Stewart, president of the Kenosha County Medical Society, gave the address of welcome which was followed by a talk on "The Economic Status of Medicine in Wisconsin" by Mr. George Crownhart, Secretary. Other speakers on the evening program were Mr. Fredrich Congdon who gave humorous readings, and Major Norman A. Imrie, professor of history, Culver Military Academy, who spoke on "What America Needs." Dancing and cards closed the evening meeting. Two hundred physicians attended.

ROCK

Members of the Rock County Medical Society met at the Monterey Hotel at Janesville on September 26th. Speakers at this meeting were Dr. E. J. Gray of The Mayo Clinic, Rochester, who spoke on "Surgery of the Stomach" and Judge Jesse Earle who discussed methods of admitting patients to the State of Wisconsin General Hospital.

MILWAUKEE ACADEMY OF MEDICINE

A meeting of the Milwaukee Academy of Medicine was held on Tuesday, October 17th, with the following program:

"Carcinoma of the Lip" by Dr. F. B. McMahon.

"A Century of Progress in Medicine" by Dr. Eben J. Carey.

MILWAUKEE OTO-OPHTHALMIC

The October meeting of the Milwaukee Oto-Ophthalmic Society was held at the University Club on the 24th. Dinner was served at 6:30 P. M.

Scientific Program:

1. "Intra-Capsular Cataract Extraction by the Vacuum Cup Method." Motion pictures by Dr. E. R. Crossley and discussion by Dr. L. B. Bagnall, Chicago, Illinois.
2. A case report by Dr. T. F. McCormick. "Temporal Lobe Abscess."
3. A case report by Dr. W. E. Grove.

ROCK RIVER EYE, EAR, NOSE AND THROAT

The Rock River Eye, Ear, Nose and Throat Society of which Dr. H. A. Shearer of Beloit is president, held a dinner meeting Tuesday, October 17th, at the Beloit Municipal Hospital at six-thirty o'clock.

The speaker of the evening was Dr. A. D. Prangen of The Mayo Clinic, Rochester. Dr. Prangen spoke on eye problems and new methods in eye surgery.

TENTH COUNCILOR DISTRICT

The thirty-third annual meeting of the Tenth Councilor District Society was held at Eau Claire on September 28th. This district comprises the county societies of Barron-Washburn-Sawyer-Burnett, Polk, Chippewa, Eau Claire and Associated Counties, Pierce-St. Croix, and Rusk.

The morning session was composed of dry clinics held at Sacred Heart Hospital. Dr. Hugh Cabot of The Mayo Clinic conducted a surgical clinic which was followed by a diagnostic clinic by Dr. J. A. Lepak of St. Paul.

Luncheon was served at 12:30 at the Hospital after which the members adjourned to the Elks Club for the afternoon session.

"Massive Pulmonary Collapse, with Slides" was the subject of Dr. J. A. Lepak. Discussions were led by Dr. G. Hoyme and Dr. Geo. W. Beebe of Eau Claire.

"Abortion and Premature Labor, Cause and Treatment" by Dr. John W. Harris, University of Wisconsin, with discussions by Dr. C. B. Hatleberg, Chippewa Falls, and Dr. R. E. Mitchell of Eau Claire.

"Some Applications of Recent Advances in the Treatment of Infections in the Urinary Tract" by Dr. Hugh Cabot. Discussions were led by Dr. H. M. Stang and Dr. J. E. B. Ziegler of Eau Claire.

"Sub-Clinical Lesions of the Body" by Dr. H. E. Robertson of The Mayo Clinic, with discussions by Dr. G. Scullard, Eau Claire, and Dr. F. E. Butler of Menomonie.

"Some of the Radiological Aspects of Pulmonary Diseases" by Dr. S. A. Morton, Milwaukee, with discussions by Dr. E. L. Mason and Dr. J. C. Baird of Eau Claire.

WISCONSIN UROLOGICAL SOCIETY

A meeting of the Wisconsin Urological Society will be held in Milwaukee, November 10th and 11th. The program follows:

MILWAUKEE ATHLETIC CLUB

10:00 A. M.—

1. Introductory remarks on "Recent Advances in Urology"—E. A. Fletcher, M. D., Milwaukee.
2. "Hematuria"—George H. Ewell, M. D., Madison.
   Discussion by Charles W. Giesen, M. D., Superior.
3. "Enuresis"—W. E. Bannen, M. D., La Crosse.
   Discussion by John F. Schneider, M. D., Oshkosh.
4. "Intravenous Urography"—Cyril G. Richards, M. D., Kenosha.
   Discussion by A. Schlapik, M. D., Kenosha.

12:00 Noon—

Luncheon. (Following the luncheon a short business session of the Wisconsin Urological Society will be held).

2.00 P. M.—

1. "Pain in Prostatic Infections" — Walter K. Gray, M. D., Milwaukee.
   Discussion by H. E. Kasten, M. D., Beloit.
2. "Relationship of the Urinary Organs to Systemic Disease"—Walter Sexton, M. D., Marshfield.
   Discussion by H. M. Stang, M. D., Eau Claire.

3. "Interdependence of Roentgenology and Urology"—S. A. Morton, M. D., Milwaukee.
   Discussion by Eric Wisiol, M. D., Stevens Point.
4. "Pyelitis"—Damon Brown, M. D., Madison.
   Discussion by Alf. H. Gundersen, M. D., La Crosse.
5. "Postoperative Considerations in Urological Surgery"—Ira Sisk, M. D., Madison.
   Discussion by W. E. Leaper, M. D., Green Bay.

6:00 P. M.—
Dinner (Milwaukee Athletic Club).

7:30 P. M.—
"Traumatic Lesions of the Urogenital Tract"—Diagnosis and Treatment — Vincent J. O'Conor, M. D., Chicago.

Immediately following Dr. O'Conor's address those enrolled for the postgraduate course in urology will be assigned to instructors.

The Saturday morning sessions of the Urological Society will be held in various Milwaukee hospitals. A detailed program is given:

MILWAUKEE HOSPITAL

9:00 A. M.—
E. A. Fletcher, M. D.
N. Warren Bourne, M. D.
Operative and Dry Clinics.

ST. JOSEPH'S HOSPITAL

9:00 A. M.—
James C. Sargent, M. D.
Operative and Dry Clinics.

MOUNT SINAI HOSPITAL

9:00 A. M.—
W. M. Kearns, M. D.
A Discussion on Prostatic Obstructions—Indications for Different Methods of Relief.
Operations:
1. Prostatectomy
   One case.
2. Prostatic Trans-urethral Resection
   Two cases.

10:00 A. M.—
S. J. Silbar, M. D.
Serial Pyelography.

10:30 A. M.—
Walter K. Gray, M. D.
Local Anaesthesia of the Entire Urinary Tract.

The 1933 officers of the Wisconsin Urological Society are: President, W. M. Kearns, M. D., Milwaukee; Vice-president, Alf. H. Gundersen, M. D., La Crosse, Secretary, S. J. Silbar, M. D., Milwaukee.

THE WOMAN'S AUXILIARY

MRS. EBEN J. CAREY, Milwaukee, *President*
MRS. ROCK SLEYSTER, Wauwatosa, *President-elect*
MRS. GEORGE H. EWELL, Madison, *Secretary*
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MRS. WALTER A. FORD, Sheboygan, *Press and Publicity Chairman*
MRS. JAMES BLAKE, Hopkins, Minn., *National President*

A Message from the President

To the Members of the Woman's Auxiliary to the State Medical Society of Wisconsin.

Dear Friends:

In assuming the office of President of the Woman's Auxiliary to the State Medical Society of Wisconsin, I do so with a feeling of humility. With the inspiration gained from our recent National Convention in Milwaukee, and the enthusiasm and support of my State Chairmen, I will make every effort to carry along the course which has been charted by my friends who have preceded me in this office. I pledge at all times my best efforts and cooperation to all county auxiliaries and to our State Medical Society, whose officers have been most kind to us.

The Auxiliary should be the "reserve force" for its Medical Society in promoting an understanding between the medical profession and the public: our main purpose for being organized. To be the "reserve force" we must fit ourselves with a health education gained from qualified medical speakers, book reviews and our own State Journal, which has been commended by our National President, Mrs. James Blake, for its interesting medical articles other than those of a scientific nature.

Before undertaking any program, may I impress you with the importance of consulting your Advisory Council as to the manner in which you may be of the greatest assistance to your local medical society. Follow their counsel at all times.

A true knowledge of the American Medical Association publication, "Hygeia", as well as its promotion and distribution through schools and homes, is an important health education project. Do not feel that you are a magazine solicitor if you are promoting this distribution, but, instead, feel that you are an important factor in a health education project, devised and promoted by the American Medical Association for the good of both the profession and the public.

The social contacts through the Auxiliary between families of doctors is of extreme value in bringing about a closer relationship and unity within the profession.

The success of the State Auxiliary is dependent entirely upon the whole-hearted cooperation of the county auxiliaries. Let us endeavor to make this year a most enthusiastic one in many ways: by enlarging our membership to include the wife of every member of our local medical society; by placing approved physicians as speakers before lay organizations wherever possible; regular attendance at our local Auxiliary meetings; and cooperation with its officers, and by carrying the sale of subscriptions to "Hygeia" far beyond the goal set for us by the National Auxiliary.

To be of assistance to you will be a real pleasure. Your suggestions and constructive criticism will be always welcome.

My cordial greetings and very best wishes,

Faithfully yours,

HELENE M. CAREY,

(Mrs. Eben J.) Helene M. Carey,

President, Woman's Auxiliary to the State Medical Society of Wis.

ATTEND A. A. U. W. CONVENTION

Among the members of the Woman's Auxiliary to the State Medical Society who attended the recent state convention of the American Association of University Women at Racine were Mrs. Edward C. Pfeifer, Racine, Mrs. Millard Tufts, Milwaukee, and Mrs. Walter A. Ford, Sheboygan.

DANE COUNTY

The Woman's Auxiliary to the Dane County Medical Society held its second meeting on Wednesday, November first, at the Madison Club, Madison. Following a luncheon the president, Mrs. Reginald Jackson, Madison, announced the appointment of the county chairmen and following the business meeting the State President, Mrs. Eben J. Carey, Milwaukee, addressed the group.

MILWAUKEE COUNTY

The following program arranged by Mrs. Carl Henry Davis for the Milwaukee County Auxiliary deals with problems in which we are all personally interested and it seems a most opportune time to present them. "Local Relief Administration" by William Coffey, Manager, Milwaukee County Institutions. "Federal Relief Program" by Miss Edith Foster, Executive Secretary, Wisconsin Conference of Social Work. "The Importance of Dietetics" by Miss Susan West, Director, Department Home Economics, Milwaukee Downer College.

Mr. Theodore Wiprud, Executive Secretary, Milwaukee County Medical Society, will discuss the problems confronting organized medicine in Milwaukee County and the part the Auxiliary can take in their solution.

Milwaukee County Auxiliary also reports that they have prepared for distribution a list of new talks given by the Speakers' Bureau and the County Medical Society and a revised list of some subjects which were presented last year. The Auxiliary Committee will begin work immediately on the project of placing these speakers before lay organizations. During 1933 forty-four speakers have been placed through the Auxiliary with a growing demand for subjects pertaining to public health, thereby aiding the Medical Society in its educational work.

ROCK COUNTY

The Auxiliary to the Rock County Medical Society met on September twenty-sixth at the Woman's club for a dinner and program. Miss Jean Sutherland, who recently spent several months in Asia Minor, gave a talk on "Turkish Hospitality". Mrs. Oscar W. Friske, Beloit, presented a report of the National Convention which was held in Milwaukee in June.

SHEBOYGAN COUNTY

Sheboygan County Auxiliary held its opening meeting of the fall season at the Elsie Timm restaurant, Sheboygan, October fourth. A one o'clock luncheon was served and after a short business meeting the guests adjourned to attend a matinee at one of the local theatres.

WINNEBAGO COUNTY

The Woman's Auxiliary to the Winnebago County Medical Society held its first meeting of the season on September twenty-fifth at Sunnyview sanatorium. The event opened with a delightful luncheon, there being sixteen members and four guests present.

Immediately following the luncheon, Miss Irene Niland, Milwaukee, of the Wisconsin Anti-Tuberculosis Association, presented a thought provoking and interesting talk on "What is New in Tuberculosis". At the brief business session, presided over by the president, Mrs. Gregory Connell, Oshkosh, members voted to present worthwhile books to the sanatorium and took action to subscribe to several magazines which would be educational and entertaining for patients.

A tour was taken of the sanatorium, the auxiliary dividing up into small groups for the trip through the institution.

On October 23rd the Auxiliary met at Oshkosh. Following a luncheon at Steins Tea Room, they motored to the Northern Hospital for the Insane at Winnebago, where they were guests of Dr. Peter Bell, the Superintendent. The ladies heard a talk by Dr. Bell on mental hygiene.

WAUKESHA COUNTY

Dr. H. C. Schumm of Milwaukee addressed the Woman's Auxiliary to the Waukesha County Medical Society at their September meeting. At the October meeting the Waukesha County Nurse spoke to the group on her work.

NEWS ITEMS AND PERSONALS

Dr. W. A. Rauch, who has practiced at Valders for the past ten years, has sold his practice to Dr. R. S. Simenson of Wautoma. Dr. Rauch intends to do postgraduate work at Chicago and abroad next year.

—△—

Dr. H. C. Koch of Whitehall and Dr. C. F. Peterson of Independence sailed on October 25th for a three months' tour of England, Germany, and France, where they will visit hospitals and clinics.

—△—

"The Surgical Treatment of Tuberculosis" was the subject of an address by Dr. Burton Clark, Jr., Oshkosh, before a meeting of the Wednesday Noon Club.

—△—

Dr. A. H. Gundersen of La Crosse was elected a district vice-president and member of the governing board of the Wisconsin Conference of Social Work for the coming year.

—△—

Dr. E. H. Pawsat, a graduate of the University of Cincinnati College of Medicine in 1932, has become affiliated with the Wiley-Smith Clinic at Fond du Lac and is engaged in general practice.

—△—

Dr. P. H. Hansberry of Hillsboro suffered a fractured shoulder and arm when on August 28th he was struck by an automobile while standing in the road conversing with a friend near Elroy, Wisconsin. He is convalescing in Hansberry Hospital and hopes to resume his practice in a short time. Dr. M. Foley and Dr. J. S. Hansberry are taking care of his practice.

—△—

Dr. E. L. Sevringhaus of Madison spoke before the Wayland Club on the subject of "The Wisdom of the Body."

—△—

Dr. S. E. Gavin, Fond du Lac, was elected commander of the Maj. A. M. Trier Post, American Legion, at its annual meeting held recently.

—△—

Dr. Henry C. Werner, who was formerly with the Wisconsin Memorial Hospital for World War veterans in Madison until its transfer to St. Cloud, Minn., has opened an office in the Hutter building at Fond du Lac for the practice of internal medicine and will also give special attention to nervous diseases.

—△—

Dr. C. A. Harper, state health officer, discussed Indian problems before a luncheon meeting of the Wisconsin Rapids Rotary Club.

—△—

At a meeting of the Wisconsin State Nurses held on October second to fourth at Green Bay, Dr. R. C. Buerki, Madison, gave an address on "The Part the Nurse Plays in the Future Hospital Service." Dr. James C. Sargent, Milwaukee, also spoke before the convention, his subject being "Shall the Care of Sick Be Socialized?"

—△—

Dr. E. V. Smith, Fond du Lac, was elected a member of the advisory board of The Mayo Foundation, at its annual meeting held early in October.

—△—

Dr. John Tasche, Jr., Sheboygan, attended a week's period of training with the surgical department of the medical corps of the U. S. Army at The Mayo Clinic, Rochester.

—△—

Dr. Lester McGary, Madison, spent a month in San Antonio, Texas, studying at Dr. Kahn's Hay Fever and Asthma Clinic. He also visited clinics in Dallas and New Orleans and will return to practice about the middle of November.

—△—

The State Medical Society of Wisconsin broadcasts over stations WHA, Madison, and WLBL, Stevens Point, every Tuesday, Wednesday, and Thursday at 10:45 A. M. Following are the subjects of the talks which were delivered by Ruth Buellesbach Naset, R. N.;

Oct. 3—Fall Health Hazards.
4—Hidden Diseases of Childhood.
5—The Will to Win.
10—Shopping for Health.
11—Whooping Cough.
12—Some Facts About Moles.
17—Manual Training in Medicine
18—Manual Training in Medicine (continued).
19—We're All Much Alike.
24—"A Diamond is Not so Precious as a Tooth."
25—Rheumatic Fever.
26—The Handicapped Child.

—△—

Dr. R. C. Buerki, Madison, gave an address on "The Education of the Physician" over station WLS, Chicago, on October 9th.

—△—

The annual meeting of the Wisconsin conference of the Catholic Hospital Association was held at Green Bay, October 4 and 5, in the auditorium of St. Mary's Hospital.

Sister M. Beata of St. Francis Hospital, La Crosse, presided at the opening session when "The Hospital, the Center of Social-Medical Welfare" was discussed. Rev. Alphonse M. Schwitalla, S. J., dean, St. Louis University School of Medicine, opened Tuesday morning's session when problems of the hospital were discussed. Other speakers were Dr.

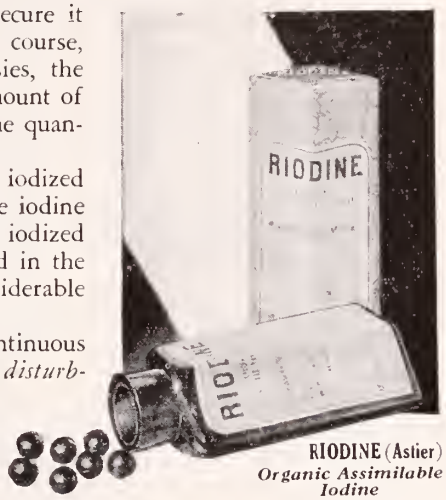
Effective Iodine Medication

With the Undesirable Features Minimized

The usefulness of iodine therapy is well established, but how to secure it without iodism has long been a problem. In a general sense, of course, iodine therapy is inseparable from iodism, but barring idiosyncrasies, the severity of the symptoms of iodism is directly proportional to the amount of iodine retained in the blood. This amount, in turn, depends upon the quantity administered.

In RIODINE (Astier), which is a 66% solution in oil of an iodized glyceric ether of ricinoleic acid, containing about 17% of iodine, the iodine is held in such a form as to pass through the stomach unchanged as iodized fat and to be absorbed from the intestines. Consequently, it is held in the cells in a lipoid-soluble form and remains in the body for a considerable period of time.

Riodine (Astier) is of obvious advantage in cases where the continuous action of small amounts of iodine is desired, such as *Cardiorenal disturbances, Hypertension (Arteriosclerosis), Bronchial Asthma, Chronic Bronchitis, Pulmonary Emphysema, Chronic Rheumatoid Arthritis, Latent Syphilis, Lead Poisoning, Hypothyroidism, Simple Goitre, Obesity.*



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Organic Assimilable Iodine

Prolonged Antiseptic Action

in the Urinary Tract

ARHEOL
(Astier)

In acute inflammation of the bladder, posterior urethra, and genito-urinary tract—where there is pain, tenesmus, and frequent urination—one of the best internal medication adjuvants is the active principle of sandalwood oil —*santalol.*

By charging the urine with santalol, the entire mucosa of the bladder and posterior urethra is constantly being laved with a soothing, reducing, and antiseptic fluid.

This is exactly what takes place when you administer ARHEOL (Astier).

For Arheol (Astier) is the purified active principle of sandalwood oil, containing never less than 98% of santalol. It is free of the therapeutically inert but irritating substances found in crude sandalwood oil.

In the acute stage of *Gonorrhea,* Arheol (Astier) alleviates pain, reduces inflammation, lessens involvement of the posterior urethra, diminishes the frequency of urination. When local treatment is indicated, it acts as a useful adjuvant to treatment with local antiseptics and astringents. It may be used to advantage in *Cystitis, Vesical Catarrh, Prostatitis, Posterior Urethritis.* In *Pyelitis* and *Pyelonephritis,* owing to its dependable urinary antiseptic properties, Arheol (Astier) is a definite aid in overcoming infection in the kidney and renal pelvis.

Write for Information and Sample of Either RIODINE *or* ARHEOL *or Both*

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AMERICAN MEDICAL ASSN.
Council on Pharmacy and Chemistry

Herman Hendrickson and Dr. A. J. McCarey, both of Green Bay, and Dr. James C. Sargent, Milwaukee, who spoke on "What of the Various Hospital Insurance Plans."

—△—

At a staff meeting of St. Francis Hospital, La Crosse, Dr. M. A. McGarty was elected chief of staff; Dr. E. E. Gallagher, vice president, and Dr. J. E. McLoone, secretary.

—△—

Dr. David F. Cole of Ripon spoke on "Heart Disease" before a meeting of the Ripon Rotary Club.

—△—

Drs. A. H. Pember and S. A. Freitag of Janesville enjoyed a fishing and hunting trip near Hayward, Wisconsin, in October.

—△—

Dr. Otto S. Blum, formerly of Monticello, has taken over the practice of Dr. W. E. Allen of Albany.

—△—

The postgraduate clinic held at the Jackson Clinic and Methodist Hospital, Madison, on Friday and Saturday, October 6 and 7 was well attended. A scientific program was presented on Friday at which Dr. Ralph M. Carter of Green Bay; Dr. Henry Olson, Milwaukee, and Dr. William Jermain were the out-of-town speakers.

A dinner at the Hotel Loraine for the physicians and their wives concluded Friday's program at which Dr. Henry Schmitz, professor of obstetrics and gynecology, Loyola University, was the principal speaker.

Drs. James C. Sargent, Milwaukee; Stanley J. Seeger, Milwaukee; T. J. O'Leary, Superior, and Francis D. Murphy, Milwaukee, presented papers at the Saturday morning session. A buffet luncheon was served at noon after which the group attended the Marquette-Wisconsin game.

—△—

Dr. E. B. Banister, formerly of Grand Forks, North Dakota, has joined the staff of the Appleton Clinic and will specialize in eye, ear, nose and throat diseases.

—△—

Dr. Charlotte J. Calvert, director of the bureau of child welfare of the State Board of Health attended the national conference on child health recovery held in Washington, D. C., in October.

—△—

Dr. E. A. McKenna of Antigo accompanied by three of his friends spent two weeks in the Canadian forests near Fort Francis, Ontario, hunting moose.

—△—

Members from out of the city who visited the offices of the State Medical Society recently included Dr. G. A. Grinde of Cumberland; Dr. Harry Schlomovitz of Barron, and Dr. D. L. Dawson of Rice Lake.

—△—

At a meeting of the Kiel Chamber of Commerce, Dr. F. P. Knauf presented motion pictures showing an appendectomy.

A talk on "Troubles Caused by Second Teething" was given by Dr. M. P. Andrews of Manitowoc over Station WOMT on October 18th under the auspices of the Manitowoc County Medical Society.

—△—

Dr. W. G. Sexton, Marshfield, was re-elected secretary-treasurer of the North Central branch of the American Urological Society at its annual meeting in Chicago in October, which was held in connection with the American College of Surgeons meeting.

—△—

What the Kiwanis Club clinic has meant to Janesville and a detailed discussion of the scope of the work accomplished was outlined at a meeting of the Kiwanis Club by Dr. T. J. Snodgrass.

—△—

Dr. Charles D. Packard, Rhinelander, was appointed city health officer to fill the vacancy caused by the recent death of Dr. John T. Elliott.

—△—

A resolution praising the work accomplished under the leadership of Dr. W. W. Kelly with respect to the N. R. A., was adopted by the Green Bay Association of Commerce.

—△—

Dr. G. C. Waufle, formerly connected with the Pember-Nuzum Clinic of Janesville, has opened an office for general practice at 315 Hayes Block.

—△—

Dr. W. T. Clark, Janesville, spoke on the subject of "Mental Defectives in Relation to Crime" before a meeting of the Janesville Junior Association of Commerce.

—△—

The following newly licensed physicians have opened offices within the past month:

Dr. George A. Maloof of Madison has taken over the practice of Dr. J. L. Conover at Wauzeka. Dr. Conover has accepted a position as a medical officer in the United States Army at Fort Sheridan.

Dr. Charles F. Fishback, of Decatur, Ill., has opened an office in Sharon.

Dr. A. T. Hume has rented offices over the postoffice building in Sauk City.

Dr. A. B. C. Bock, formerly of Philadelphia, and son of the late Dr. O. B. Bock of Sheboygan, has started practicing medicine at 925 N. Eighth Street, Sheboygan.

—△—

Dr. F. J. Broghammer of Superior attended the fifth annual medical reserve officers' inactive training school held from October 1 to 15 at The Mayo Clinic.

—△—

The promotion of Dr. James P. Dean of Madison from lieutenant colonel to colonel in command of the 135th medical regiment, Wisconsin National Guard, was announced by Governor Schmedeman in October.

—△—

Dr. and Mrs. Hugh McCormick of New Auburn have announced the marriage of their daughter,

*

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Makers of Medicinal Products

AMYTAL
for Sedation and Hypnosis
(ISO-AMYL ETHYL BARBITURIC ACID)

In nervousness or insomnia due to arterial hypertension, mental worry, psychosis, fatigue, narcotic addiction or withdrawal, alcoholism, and in many other conditions where rest is needed. Amytal augments the action of analgesics such as amidopyrine, acetphenetidin, and acetylsalicylic acid.

Supplied through the drug trade in 1½-grain (0.1 Gm.) and in ¾-grain (0.05 Gm.) tablets.

PROMPT ATTENTION GIVEN TO PROFESSIONAL INQUIRIES

PRINCIPAL OFFICES AND LABORATORIES, INDIANAPOLIS, INDIANA

Miss Helen, to Dr. Ralph B. Mullenix, son of Prof. and Mrs. R. C. Mullenix of Appleton. Dr. Mullenix is affiliated with the University of Iowa Medical School.

—△—

The first American Congress of Radiology held in Chicago, Sept. 25 to 30, was attended by the following Wisconsin physicians as members: Dr. E. F. McGrath, Appleton; Dr. Annie E. Freese, Ashland; Dr. R. F. Wilson, Beloit; Drs. A. O. Olmstad, G. M. Shewalter, Dr. Ralph L. Troup, Green Bay; Dr. I. E. Bowing, Kenosha; Dr. E. A. Pohle, Madison; Dr. R. P. Potter, Marshfield; Drs. C. A. H. Fortier, J. E. Habbe, S. A. Morton, Frank W. Mackoy, H. B. Podlasky, Milwaukee; Dr. S. D. Greenwood, Neenah; Dr. W. Fletcher, Salem; Dr. G. E. Peterson, Waukesha.

A number of other Wisconsin physicians also attended the scientific sessions.

This meeting was the first joint meeting of the American College of Radiology, American Radium Society, American Roentgen Ray Society, and the Radiological Society of North America. The scientific program included speakers from Canada, Mexico, and Central and South American countries as well as the United States.

—△—

Dr. and Mrs. T. J. Gunther, and Dr. and Mrs. Fred Nause, Jr., of Sheboygan were among those who attended the International Assembly held at Cleveland, Ohio, Oct. 16–21.

—△—

Dr. T. J. O'Leary, Superior, President-elect of the State Medical Society, was a guest of honor at the recent Sixth District meeting at Green Bay.

—△—

Dr. and Mrs. E. A. Pohle and Dr. and Mrs. Gordon Ritchie motored to Chicago on September 28th to attend the American Congress on Radiology. Drs. Pohle and Ritchie presented a paper on Friday morning, "The Fate of Thorium Dioxide in the Body After Intravenous Injection."

—△—

MILWAUKEE

Dr. and Mrs. A. L. Natenshon left Milwaukee on October the 11th for Dublin, Ireland, where Dr. Natenshon will do research work in obstetrics and gynecology at the Rotunda Hospital. From Dublin they plan to go to Vienna and Budapest. Before returning to the United States they will tour Europe. Dr. Natenshon completed his internship at the Milwaukee County General Hospital this year.

—△—

Dr. and Mrs. W. F. Wegge returned on September 23rd from a six-week stay at Charlevoi, Michigan.

—△—

Dr. F. W. Madison was the principal speaker at the commencement exercises on September 20th, when fourteen nurses were graduated from the Columbia Hospital School for Nurses.

Drs. C. V. Lynch, I. B. Reifenrath, and B. H. Oberembt returned the latter part of September from a brief hunting trip.

—△—

On September 22nd, Dr. Hoyt E. Dearholt spoke at the American Inter-Professional Institute luncheon on "Tuberculosis and You."

—△—

On September 21st, Dr. and Mrs. Harry Heeb were hosts to a group of physicians' wives who served as chairmen of various committees for the annual meeting of the American Medical Association, which was held in Milwaukee in June. Among those who attended the picnic supper were: Dr. and Mrs. Louis M. Warfield, Dr. and Mrs. F. R. Janney, Dr. and Mrs. G. F. Fitzgerald, Dr. and Mrs. James C. Sargent, Dr. and Mrs. F. C. Heidner, Dr. and Mrs. A. R. F. Grob, Dr. and Mrs. J. Gurney Taylor, Dr. and Mrs. J. H. Sure, Dr. and Mrs. William C. Liefert, Dr. and Mrs. P. H. Perlson, Dr. and Mrs. Robert E. McDonald, and Dr. and Mrs. Albert Bork.

—△—

Dr. and Mrs. E. W. Bentzein and daughter, Carol, left on September 30th to motor to Los Angeles where Mrs. Bentzein and Miss Carol will sail for Melbourne, Australia, where they expect to remain for about a year. Dr. Bentzein returned to Milwaukee following the sailing of the ship on October 17th.

—△—

Dr. and Mrs. Thomas Furlong of Bryn Mawr, Pennsylvania, left Milwaukee on October 7th, after having visited relatives for several weeks.

—△—

Mrs. John L. Yates returned late in September from Nova Scotia, where she spent part of the summer.

—△—

Dr. Paul A. Brehm, who has been in South America for the past year, returned to Milwaukee the latter part of September. Dr. Brehm expects to resume his practice in Milwaukee.

—△—

On September 29th, at the annual convention of the Radiological Society of North America, which was held in Chicago, Dr. Eben J. Carey, newly appointed Dean of the Marquette University School of Medicine, was awarded the gold medal for research which is given annually by the Association.

The medal was presented to Dr. Carey in recognition of his x-ray work and study for fifteen years on bone growth. Dr. Carey has presented papers on this subject before the radiologists and before the American Medical Association.

—△—

Dr. Arthur T. Holbrook addressed the members of the Optimist Club at their meeting on September 25th, on the subject of "Optimism and Good Health."

One of a series of advertisements prepared and published by PARKE, DAVIS & CO. in behalf of the medical profession. This "See Your Doctor" campaign is running in the *Saturday Evening Post* and other leading magazines.

"Things I wish my Mother hadn't taught me"

EVERY young woman who embarks upon the great adventure of Motherhood is overwhelmed with advice from those who love her most.

The advice may be on some apparently trivial matter—clothing, feeding, what to do for an upset stomach, or the way to nip a cold in the bud.

Yet many a brand-new mother has learned that often the reward for following such advice is regret. She has said, not in bitterness, but in sadness, "I wish I had never been told to do that." She has learned, too late, that many of the beliefs of a generation ago have been cast into disrepute by the findings of recent years.

For these past few decades have been a Golden Age of Medicine. Much has been learned . . . much has been disproved. And, as a result of developments and discoveries that have taken place since you yourself graduated from childhood, the baby of today has a better chance of arriving into the world safely . . . of successfully weathering the treacherous storms of infanthood . . . and of enjoying a healthy, vigorous childhood.

A better chance, that is, if medical science is given the opportunity of exerting its influence on the child and on the mother . . . It is difficult not to take advice from those who love us most. But when so fragile and precious a thing as a baby's health is at stake, there is one person, and one person only, whose advice you can safely follow.

That person is your doctor.

PARKE, DAVIS & CO.
DETROIT, MICHIGAN
The World's Largest Makers of Pharmaceutical and Biological Products

NRA
WE DO OUR PART

Mr. Theodore Wiprud, Executive Secretary, has been invited by the Marquette University School of Medicine to present a series of lectures to senior students of the medical school during the 1934 season. The lectures, of which there will be eight, will deal with various phases of medical economics. The first one will be given early in February.

—△—

Dr. and Mrs. Frank E. Darling early in October took possession of their new home, located at 6936 N. Bartlett Lane, Fox Point.

—△—

Dr. and Mrs. E. F. Peterson left Milwaukee on October 6th for London, England, where they were called by the serious illness of their daughter.

—△—

Announcement has been made of the marriage of Miss Ruth Powers, daughter of Dr. and Mrs. Herbert W. Powers, to Mr. Frederic Mendelson, son of Mr. and Mrs. Fred Mendelson, which took place on September 30th.

—△—

Dr. Roland A. Jefferson has announced the opening of his new office in Suite 1149-50 of the Bankers Building, 208 E. Wisconsin Avenue. His practice is limited to psychiatry with special interest in the psychoneuroses and the behavior problems of children.

—△—

Dr. Karl Schlaepfer addressed the Congress of Anaesthetists of the United States and Canada at its annual meeting in Chicago, October 9 to 12. He spoke on "Pernocton as a Preanaesthetic in Surgery."

—△—

At the twenty-first convocation of the American College of Surgeons, held in the Stevens Hotel, Chicago, on October the 13th, Dr. Joseph M. King and Dr. Lemuel D. Smith received fellowships in the organization.

—△—

Dr. and Mrs. A. W. Gray left Milwaukee about the middle of October for a trip to Hot Springs, Virginia. They expect to be gone several weeks.

—△—

Dr. Francis D. Murphy was the guest speaker at the meeting of the Wisconsin Academy of Dentists held on October 11th. Dr. Murphy addressed the dentists on the subject of "The Relation of Heart Lesions to Infection of the Teeth."

—△—

The clinic for working girls and women, carried on last year at Mount Sinai Hospital, was resumed on September 25th. The clinic is in charge of Dr. Eleanore Cushing-Lippitt, who is assisted by the women physicians of Milwaukee County.

—△—

Drs. R. J. Bach and C. J. Corcoran, with their families, left Milwaukee on Friday, September 22nd, to sail for Europe where they expect to spend from six months to a year in postgraduate study. Their time will be divided between Vienna, Innsbruck, and Berlin.

—△—

On October 11th, Miss Kathleen Evans, daughter of Dr. E. P. Evans, became the bride of Mr. Charles Strack of Endicott, New York.

—△—

"Do We Understand Our Children" was the subject of Dr. Samuel Plahner's address to members of the Cudahy Woman's Club on October the 9th.

—△—

Notices have been sent out for the opening of the postgraduate course in urology on November 10th at the Milwaukee Athletic Club. This day has been set aside by the Wisconsin Urological Society which will hold its meetings in Milwaukee on November 10th and 11th, particularly for this course, which is sponsored by the educational committee of The Medical Society of Milwaukee County.

Instructors for this course are: Drs. N. Warren Bourne, J. W. Kleinboehl, A. J. Hood, James C. Sargent, W. M. Kearns, and S. J. Silbar.

—△—

The following physicians, representing the Speakers' Bureau of The Medical Society of Milwaukee County, addressed lay organizations during the month of October:

Dr. Harvey E. Webb, Normal Living, Dover St. School P. T. A.

Dr. D. W. Roberts, Mental Hygiene of Adolescence, P. T. A. of the School of Saints Peter and Paul.

Dr. James C. Sargent, Shall Medicine be Socialized, Knights of the Round Table.

Dr. Harvey E. Webb, Normal Living, Fratney St. School P. T. A.

—△—

The following health talks, sponsored by the Wisconsin State Board of Health and delivered by Mr. Theodore Wiprud, Executive Secretary, will be broadcast over the Milwaukee Journal Radio Station, WTMJ, during the month of November.

November 2—What is Acidosis?
November 9—Children Who Might Live.
November 16—Facial Eruptions.
November 23—When Your Doctor Listens.
November 30—The Eyes Have It.

These talks are broadcast each Thursday afternoon at 1:45 P. M.

BIRTHS

A daughter to Dr. and Mrs. L. H. Guerin of Milwaukee on October first.

A son to Dr. and Mrs. Henry J. Olson, Milwaukee, on September 19th.

A son to Dr. and Mrs. Max J. Fox, Milwaukee, on October 20th.

A son, Charles Marvyne, to Dr. and Mrs. W. W. Bauer of Wilmette, Ill., on October 18th. Dr. Bauer, formerly of Racine, is now director of the Bureau of Health and Public Instruction of the American Medical Association.

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MEAD'S HALIBUT LIVER OIL

(Without Viosterol)

32,000 U.S.P. Vitamin A Units and 200 Steenbock Vitamin D Units per gram. 10 cc. and 50 cc. bottles.*

economical for vitamin **D**

MEAD'S VIOSTEROL IN OIL 250 D

(Contains No Vitamin A)

3,333 Steenbock Vitamin D Units per gram. 5 cc. and 50 cc. bottles.

economical for vitamins **A** and **D**

MEAD'S VIOSTEROL IN HALIBUT LIVER OIL 250 D

32,000 U.S.P. Vitamin A Units and 3,333 Steenbock Vitamin D Units per gram. 5 cc. and 50 cc. bottles.

*brown bottles in light-proof cartons to protect against deteriorating action of light; supplied with combination dropper-stopper.

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MARRIAGES

Dr. George W. Bartels of Janesville to Miss Winifred V. Kyler, of Cedar Falls, Iowa, on September 16th at Cedar Falls.

Dr. Paul E. Campbell, son of Dr. and Mrs. W. B. Campbell of Waukesha, to Miss Mitzi Douglass, also of Waukesha, on Sept. 30th.

DEATHS

Dr. Bernard F. McGrath, former Dean of the School of Medicine of the Marquette University, died suddenly in New York on October 16th, at the age of sixty-three years.

Dr. McGrath was born in Amesbury, Massachusetts, in 1869. He attended the Georgetown University in Washington, D. C., and received his medical training at the Harvard Medical School from which he was graduated in 1906.

Previous to his appointment as Dean of the Marquette University School of Medicine, Dr. McGrath had been a professor of surgery and director of the surgical laboratories in the Medical School for twelve years, besides being chief-of-staff at the Marquette University Hospital until its discontinuance in 1930. Prior to becoming a member of the Marquette University staff, Dr. McGrath was director of surgical research and assistant pathologist at The Mayo Clinic, Rochester, Minnesota, for five years.

Dr. McGrath did a great deal of postgraduate work, — both in this country and abroad, particularly in Dublin and Vienna. From 1898 to 1909 he was attending surgeon at the Beverly Hospital, Beverly, Massachusetts, which position he left to join the staff of The Mayo Clinic. In 1918 he was made a fellow in the American College of Surgeons.

Dr. McGrath recently had resigned his position as Dean of the Marquette University School of Medicine. He was succeeded by Dr. Eben J. Carey.

He was a member of the Medical Society of Milwaukee County, the State Medical Society, and was a fellow of the American Medical Association.

SOCIETY RECORDS

New Members

H. Edgar Van Riper, 113 N. Carroll St., Madison.
Geo. W. John, 405 E. Grand Ave., Beloit.
Oscar W. Friske, Beloit.
Cyril Radl, Pardeeville.
Norman De Nosaquo, 536 W. Wis. Ave., Milwaukee.
Russell C. Smith, Barron.
Frank C. Iber, 104½ Strongs Ave., Stevens Point.
W. A. Gramowski, 111½ N. E. Public Sq., Stevens Point.

Changes in Address

R. H. Juers, Marshfield to 516 Stark St., Wausau.
R. H. Stiehm, Milwaukee, to Student Health Department, Madison.
W. A. Rauch, Valders to 1434 S. 74th St., West Allis.
D. W. Curtin, Milwaukee to Little Chute.
Lester B. Hansen, Racine to 405½ Main St. Stevens Point.

RUPTURE OF HEART

(Continued from page 776)

sis and thrombosis, chronic dissecting aneurysm of the heart wall, chronic and acute infarction of myocardium, healed and recent endocardial thrombi, and acute pericarditis.

The extreme diffuse sclerosis of the coronaries, the large fibrous scars throughout the heart muscle, and the old white thrombus point to cardiac infarction some time in the past, insufficient in extent or degree to cause circulatory failure. Because of their large size, the healed scars are interpreted as old healed infarcts rather than as the coarse patchy fibrous myocarditis seen so commonly at autopsy.

The pockets of blood in the septum and fibrous pericardium were probably formed at the time of the original infarction. Unable to escape through the confines of the fibrous pericardium, the hemorrhage from the softened infarcted area dissected its way within the myocardium.

As a result of delayed extension of the sclerotic process there occurred the recent massive infarction which resulted in death. The necrotic friable ventricle and fresh white thrombus point to a process only a day or so old. It seems reasonable to conclude that life was prolonged by the thickened pericardium which held together the necrotic ventricle had this fibrous envelope been lacking, rupture must have occurred.

BIBLIOGRAPHY

1. Dock, G.; Med. and Surg. Reporter, LXXV, 1896.
2. Herrick, J. B.; J. A. M. A. LIX, 2015. 1912.
3. Levine, S. A.; Medicine, VIII, p. 245. 1929.

Recent Licentiates Announced by State Board of Medical Examiners

BY EXAMINATION

Name	*School of Graduation*	*Year*	*Present Address*
Ansfield, Maurice J.	Wisconsin Med. Univ.	1932	2817 W. McKinley Blvd., Milwaukee.
Bachhuber, Max O.	Wisconsin Med. Univ.	1932	Knowles, Wisconsin.
Baker, Vance LaMar	Marquette Med. Univ.	1933	Chicago Maternity Hosp., Chicago Ill.
Barone, Andrew M.	Loyola Med. Univ.	1932	209 Allen St., Jamestown, N. Y.
Bensman, Irvin	Marquette Med. Univ.	1933	2218 Hi-Mount Blvd., Milwaukee.

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Blanchard, Porter B.	Wisconsin Med. Univ.	1932	2200 W. Kilbourn Ave., Milwaukee
Bolles, Carlton S.	Wisconsin Med. Univ.	1932	Milw. Children's Hosp., Milwaukee
Bornstein, Samuel L.	Marquette Med. Univ.	1933	3018 W. Juneau Ave., Milwaukee.
Brillman, Chas. Rob't.	Wisconsin Med. Univ.	1932	Avoca.
Buscaglia, Christopher	Marquette Med. Univ.	1933	1025 S. 16th Street, Milwaukee.
Campbell, Paul Edw.	Pennsylvania Med. Univ.	1932	121 E. Avenue, Waukesha.
Cogan, Leo Judas	Toulouse Med. Univ. Toulouse, France	1933	2815 North 18th St., Milwaukee.
Coyne, Anna Regina	Wisconsin Med. Univ.	1932	3700 California Ave., San Francisco, Cal
Deysach, Leonard J.	Marquette Med. Univ.	1933	2744 N. 50th St., Milwaukee.
Dockry, Patrick F.	Marquette Med. Univ.	1933	3435 W. Wisconsin Ave., Milwau-
Donath, Lawrence H.	Marquette Med. Univ.	1933	2733 W. Wright St., Milwaukee.
Donlin, Wm. Francis	Wisconsin Med. Univ.	1932	432 North Few St., Madison.
Dunst, Carl Geo.	Louisville Med. Univ.	1931	1445 North Cass St., Milwaukee.
Eisenberg, Joseph A.	Marquette Med. Univ.	1933	2105 N. 49th St., Milwaukee.
Erdmann, Norman C.	Marquette Med. Univ.	1933	Cleveland, Wis.
Faber, Charles A.	Wisconsin Med. Univ.	1932	3560 N. Oakland Ave., Milwaukee.
Fechtner, Harold H.	Wisconsin Med. Univ.	1932	Wis. General Hospital, Madison.
Fishback, Charles F.	Northwestern Med. Univ.	1932	436 W. William Street, Decatur, Ill
Foley, Mark Edward	Marquette Med. Univ.	1933	Dalton, Wisconsin.
Gendlin, Nathan A.	Marquette Med. Univ.	1933	2031 N. 9th St., Milwaukee.
Gillett, Geo. Nield	Marquette Med. Univ.	1933	R. No. 1, Box 100, Racine.
Grimaldi, Gregory Jos.	Marquette Med. Univ.	1933	825 N. 25th St., Apt. 301, Milwaukee.
Grant, Reuben	Marquette Med. Univ.	1933	1047 Park Avenue, Racine.
Grossmann, Lawrence L.	Marquette Med. Univ.	1933	5603 W. Washington Blvd., Milwaukee.
Guth, Harvey Kenneth	College of Med. Evang.	1933	Brandon, Wisconsin.
Hable, Peter Albert	Marquette Med. Univ.	1933	Bloomer, Wisconsin.
Hanson, Oscar Henry	Wisconsin Med. Univ.	1932	Fort Atkinson, Wis.
Harmon, John C.	Minnesota Med. Univ.	1930	Lutheran Hospital, LaCrosse.
Hauge, Howard L.	Wisconsin Med. Univ.	1932	Deerfield, Wisconsin.
Hicks, Earl V.	Wisconsin Med. Univ.	1932	925 Mound Street, Madison.
Hoffman, Jacob S.	Wisconsin Med. Univ.	1932	Menorah Hospital, Kansas City, Missouri.
Huth, Elmore P.	Marquette Med. Univ.	1933	3938 N. Cramer St., Milwaukee.
Kelly, John Palmer	Marquette Med. Univ.	1933	1505 N. Franklin Pl., Milwaukee.
Kirchgeorg, Clemens G.	Wisconsin Med. Univ.	1932	2730 W. Garfield Ave., Milwaukee.
Klabunde, Earl H.	Marquette Med. Univ.	1933	1637 N. 54th St., Milwaukee.
Kocovsky, Elmer C.	Marquette Med. Univ.	1933	1529 Upper Parkway, Wauwatosa.
Konnak, Wm. F.	Wisconsin Med. Univ.	1932	827 Yout St., Racine.
Kramoris, Fred H.	Marquette Med. Univ.	1933	3911 N. 21st St., Milwaukee.
Krygier, Walter L.	Marquette Med. Univ.	1933	1648 S. 8th St., Milwaukee.
LaBreche, John Jos.	Marquette Med. Univ.	1933	611 Washington St., Berlin, Wisconsin.
Lengyel, Carl Edw.	Marquette Med. Univ.	1933	Lincoln, Illinois.
Levin, Abraham J.	Marquette Med. Univ.	1933	Mt. Sinai Hospital, Milwaukee.
Lifschutz, Leo M.	Wisconsin Med. Univ.	1932	2824 Wright Ave., Racine.
Ludwig, Erwin P.	Wisconsin Med. Univ.	1932	Berlin, Wisconsin.
Maloof, Geo. John	Wisconsin Med. Univ.	1932	404 W. Mifflin St., Madison.
Mannis, Harry	Wisconsin Med. Univ.	1932	307 Clark St., Stevens Point, Wis
McGovern, Francis H.	Pennsylvania Med. Univ.	1932	U. of Va. Hospital, Charlottesville Va.
McNamara, James H.	Marquette Med. Univ.	1933	St. Elizabeth's Hospital, Appleton
Meloy, Geo. Edw.	Marquette Med. Univ.	1933	Mil. County Hospital, Wauwatosa.
Michna, Chas. Theo.	Marquette Med. Univ.	1933	1113 Hagerer St., Racine.
Mittermeyer, Edw. Jos.	Wisconsin Med. Univ.	1932	Cornell, Wisconsin.
Morgan, James Ellis	Marquette Med. Univ.	1933	St. Anthony's Hospital, Milwaukee
Muntz, Earl R.	Wisconsin Med. Univ.	1932	Wis. General Hospital, Madison.
Natenshohn, Adolph L.	Northwestern Med. Univ.	1932	2473 N. 51st St., Milwaukee.
Naylen, Frank Jos.	Marquette Med. Univ.	1933	1123 Michigan Ave., N. Fond du Lac, Wis.
Neville, Mary E.	Marquette Med. Univ.	1933	315 W. Mineral St., Milwaukee.
Olson, Wm. Arthur	Wisconsin Med. Univ.	1932	Blanchardville, Wis.
Paulbeck, Theodore M.	Marquette Med. Univ.	1933	2745 N. 40th St., Milwaukee.
Paxson, Jane Taylor	Wisconsin Med. Univ.	1932	1121 E. Huron St., Ann Arbor Mich.
Peelen, Alfred W.	Marquette Med. Univ.	1933	1564 S. Third St., Milwaukee.
Pomainville, Harold G.	Temple Med. Univ.	1932	Nekoosa, Wisconsin.
Robinson, Arthur H.	Marquette Med. Univ.	1933	2165 N. 64th St., Milwaukee.
Ross, Alexander T.	Oregon Med. Univ.	1932	Wisconsin Gen. Hosp., Madison.
Roth, Fred'k. Dan'l.	Marquette Med. Univ.	1933	Lewiston, Minn.
Schmallenberg, Herman C.	Wisconsin Med. Univ.	1932	Milwaukee Co. Hosp., Wauwatosa.

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Schneeberger, Edw. Jos.	Marquette Med. Univ.	1933	Hillsboro, Wisconsin.
Schramel, Anton John	Marquette Med. Univ.	1933	2021 N. 18th St., Milwaukee.
Schulte, Geo. Chas.	Marquette Med. Univ.	1933	1820 56th St., Kenosha.
Shapiro, Herman H.	Wisconsin Med. Univ.	1932	1021 Desmond Ct., Madison.
Simenson, Raymond S.	Wisconsin Med. Univ.	1932	Wautoma, Wisconsin.
Skemp, Fred'k Chas.	Marquette Med. Univ.	1933	1643 Kane St., LaCrosse.
Skroch, Joseph Phillip	Marquette Med. Univ.	1933	Arcadia, Wisconsin.
Spooner, Alexander D.	Wisconsin Med. Univ.	1928	219 6th Ave., SW Rochester, Minn.
Stern, Louis Simon	Marquette Med. Univ.	1933	2460 N. 16th St., Milwaukee.
Sylvain, Gerald Jos.	Marquette Med. Univ.	1933	Milwaukee Co. Emerg. Hosp., Milwaukee.
Taugher, John S.	Marquette Med. Univ.	1933	4037 N. Stowell Ave., Milwaukee.
Tax, Archie Hanwit	Wisconsin Med. Univ.	1932	2120 E. Menlo Blvd., Milwaukee.
Tegtmeyer, Gamber F.	Harvard Med. Univ.	1932	2569 N. Lake Drive, Milwaukee.
Tuell, J. Irving	Oregon Med. Univ.	1932	Roosevelt, Oneida Co., % Camp Bryn, Afon.
Waffle, Rob't. L.	Wisconsin Med. Univ.	1932	388 S. Park Ave., Fond du Lac.
Wagner, Raymond F.	Marquette Med. Univ.	1933	Cleveland, Wis.
Waldkirch, Ray M.	Marquette Med. Univ.	1933	Station F., R. No. 11, Milwaukee.
Wasielewski, Stanley F.	Marquette Med. Univ.	1933	905 W. Lincoln Ave., Milwaukee.
Wegmann, Geo. H.	Wisconsin Med. Univ.	1932	Milwaukee Children's Hosp., Milwaukee.
Welsch, John Michael	Wisconsin Med. Univ.	1932	105 E. Mill St., Beaver Dam, Wis.
Wendt, Floyd August	Temple Medical Univ.	1932	Johnson Creek, Wis.
Wernitznig, Edw. R.	Marquette Medical U.	1933	% Hotel Lone, Lake Geneva, Wis.
Wien, Irving Abraham	Wisconsin Medical U.	1932	Menorah Hosp., Kansas City, Mo.
Woodford, Lester M.	Illinois Med. U.	1932	82 E. 9th St., Fond du Lac, Wis.
Zenner, Clarence Ed.	Marquette Medical U.	1932	Milwaukee Co. Hosp., Wauwatosa.
Quigley, Maurice W.	Minnesota Medical Sch.	1930	Caledonia, Minn.
Piaskowski, Ray	Marquette Med. School	1933	400 E. Lake View Ave., Milwaukee.
Alexander, Cornelius A.	Rush Medical School	1921	214 E. Frank St., Kalamazoo, Mich.
Banister, Edwin B.	Nebraska Med. Sch.	1929	510 Irving Bldg., Appleton, Wis.
Boudry, Marshall O.	Illinois Med. Sch.	1930	50 N. Marr St., Fond du Lac, Wis.
Frisch, Rob't A.	Yale Medical Sch.	1929	3123 N. Marietta Ave., Milwaukee.
Hume, Albert T.	Washington School of Medicine	1931	Elsberry, Mo.
Lee, Albert Paul	Marquette Med. Sch.	1929	901 Locust St., Milwaukee.
Mehl, Rudolph A.	Emory Med. School	1931	Box 465 RR. No. 5, West Allis, Wis.
Molsberry, Jasper	Iowa Medical School	1925	University Hosp., Iowa City, Iowa.
Owens, George Colville	Harvard Medical Sch.	1931	910 Grand Ave., Racine.
Rich, Gilbert Joseph	Rush Medical School	1929	3130 W. Wis. Ave., Milwaukee.
Schacht, Edmund Wm.	Johns Hopkins Med. Sch.	1926	1621 Grange, Racine.
Shulak, Irving	Rush Medical School	1932	Normandale, Madison, Wis.
Warner, Raymond C.	Michigan Medical Sch.	1929	Samuel Robb, Bk. Bldg., Milwaukee.
Wilson, Marvin W., D. O.	Kirksville Coll. of Ost.	1930	% Dr. Myrtle Stewart, Milwaukee.

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Name	*School*	*Reciprocity From:*	*Present Address*
Barnet, Emmanuel G.	Minnesota Med. Univ.	Minnesota	1145 Argyle St., St. Paul, Minn.
Berger, Edmund H.	Oregon Med. Univ.	Nat'l Bd.	Manitowoc, Wis.
Carstens, Ernst H.	Bennett Med. Univ.	Illinois	10 Broadway, Melrose Park, Ill.
Conway, James Paul	Washington Med. Univ.	Missouri	710 Third St., Wisconsin Rapids.
Gramowski, Walter A.	St. Louis Med. Univ.	Missouri	504 4th Ave., Stevens Pt. Wis.
Hankwitz, Arthur W.	Washington Med. Univ.	Missouri	2572 S. Kinnickinnic, Milwaukee.
Haseltine, Burton C.	Hahnemann Med. Univ.	Illinois	122 S. Michigan Ave., Chicago, Ill.
Hiller, Samuel Jos.	Washington Med. Univ.	Missouri	St. Louis Co. Hosp., Clayton, Missouri.
Hinckley, Rob't. Geo.	Wisconsin Med. Univ.	Oklahoma	155 Malcohm S. E., Minneapolis, Minn.
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Johnson, Karl F.	Minnesota Med. Univ.	Minnesota	Osceola, Wis.
Kaiser, Lloyd F.	Washington Med. Univ.	Missouri	New Holstein, Wis.
Kenny, Herbert F.	Michigan Med. Univ.	Michigan	Union Park Hotel, Chicago, Ill.
Marshall, Stanley B.	Loyola Med. Univ.	Iowa	Blanchardville, Wis.
Mookerjee, Marcus K.	Minnesota Med. Univ.	Minnesota	St. Anthony's Hospital, Milwaukee.
Paton, Donald M.	Washington Med. Univ.	Indiana	2200 W. Kilbourn Ave., Milwaukee
Pawsat, Ewald H.	Cincinnati Med. Univ.	Ohio	St. Agnes Hospital, Fond du Lac.
Rikkers, Donald F.	Pennsylvania Med. Univ.	Pa.	Waupun, Wisconsin.
Roth, Julius A.	St. Louis Med. Univ.	Missouri	115 N. 11th St., LaCrosse.
Shaner, Ralph Dan'l.	Indiana Med. Univ.	Indiana	Oconomowoc Health Resort, Oconomowoc, Wisconsin.
Van Riper, Hart E.	Pennsylvania Med. Univ.	Ohio	113 N. Carroll St., Madison.
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The Treatment of Rheumatoid Arthritis and Sciatica. By A. H. Douthwaite, M. D., F. R. C. P. (Lond.) Assistant physician, Guy's Hospital, All Saints' Hospital. Second edition. H. K. Lewis & Co. Ltd., 136 Gower St., London, W. C. 1.

Psychology of Sex. By Havelock Ellis. Ray Long & Richard R. Smith, Inc., New York, 1933.

Food, Nutrition and Health. By E. V. McCollum, Ph. D., Sc. D. and J. Ernestine Becker, M. A., professor, and associate, of biochemistry, School of Hygiene and Public Health, Johns Hopkins University, Baltimore, Md. Third edition, rewritten. Published by the authors, East End Post Station, Baltimore, Md., Price $1.50.

Diseases of the Chest and the Principles of Physical Diagnosis. By George William Norris, A. B., M. D., formerly professor of clinical medicine in the University of Pennsylvania; chief of medical service "A", Pennsylvania Hospital, and Henry R. M. Landis, A. B., M. D., Sc. D., professor of clinical medicine in the University of Pennsylvania; director of clinical and sociological departments of the Henry Phipps Institute of the University of Pennsylvania. 997 pages with 478 illustrations. Cloth $10.00 net. W. B. Saunders Company, Philadelphia, 1933.

Diseases of the Heart. The Methods for their diagnosis, prognosis and Treatment. By William D. Reid, M. D., F. A. C. P., assistant professor of cardiology, Boston University School of Medicine. Copies obtainable from author, 65 cents per copy. Address 510 Commonwealth Ave., Boston, Mass.

The Wellcome Research Institution and the Affiliated Research Laboratories and Museums. Founded by Sir Henry Wellcome, LL.D., F. R. S. The Wellcome Foundation Ltd., London, England, 1933.

Nervous Breakdown: Its Cause and Cure. By W. Beran Wolfe M. D., director, the Community Church Mental Hygiene Clinic, New York. Price $2.50 net. Farrar & Rinehart, Inc., On Murray Hill, New York, N. Y.

The New Dentistry. Six Lowell Lectures, by Leroy Matthew Simpson Miner, D. M. D., M. D. F. A. C. S. dean of The Central School and Professor of Clinical Oral Surgery in Harvard University. Harvard University Press, Cambridge, Mass. 1933.

Teaching Methods in Medicine. The application of the philosophy of contemporary education to medical schools. By William Duncan Reid, A. B., M. D., F. A. C. P., assistant professor of cardiology, Boston University School of Medicine; Member, Evans Memorial, Research Division of the Massachusetts Memorial Hospital. Copies obtainable from author, $1.00 per copy. 510 Commonwealth Ave., Boston, Mass.

Textbook of Physical Therapy. By Heinrich F. Wolf, M. D., chief of the Department of Physical Therapy, Mt. Sinai Hospital and Dispensary, New York; President, New York Physical Therapy Society. D. Appleton-Century Company, New York.

I Go Nursing. By Corinne Johnson Kern. E. P. Dutton & Co., Inc., 286-302 Fourth Ave., New York City.

Clinical Diagnosis. By Neuton S. Stern, A. B., M. D., (Harvard) associate professor of medicine, University of Tennessee School of Medicine. Price $3.50. The Macmillan Company, 60 Fifth Ave., New York, N. Y.

Fetal, Newborn, and Maternal Morbidity and Mortality. Report of the subcommittee on factors and causes of fetal, newborn, and maternal morbidity and mortality. Hugo Ehrenfest, M. D., Chairman. White House Conference on Child Health and Protection. D. Appleton-Century Company, New York. Price $3.00

Studies in Psychology and Psychiatry. From the Catholic University of America. Edited by Edward A. Page, professor of philosophy. The Williams & Wilkins Company, Baltimore.

Minor Maladies and Their Treatment. By Leonard Williams, M. D. Sixth Edition. William Wood and Company. Price $3.75.

Life-Giving Light. By Charles Sheard, Ph. D., Sc. D., professor and director of biological research, The Mayo Foundation, University of Minnesota, and The Mayo Clinic. The Williams & Wilkins Company in cooperation with The Century of Progress Exposition.

Urine and Urinalysis. By Louis Gershenfeld, Ph. M., B. Sc., P. D., professor of bacteriology and hygiene and director of the bacteriological and clinical chemistry laboratories at the Philadelphia College of Pharmacy and Science. Illustrated. Lea & Febiger, Philadelphia, 1933. Price $2.75.

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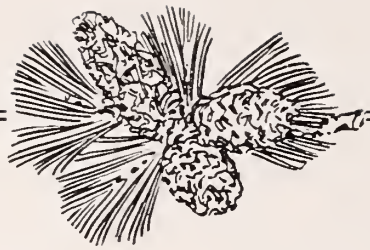

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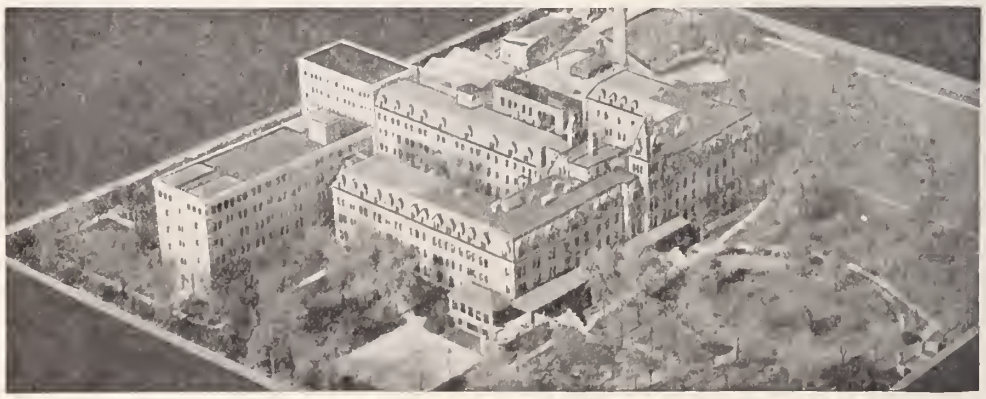

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The Wisconsin Medical Journal

Volume XXXII DECEMBER, 1933 No. 12

Chronic Fevers*

By JOHN M. BERKMAN, M. D.
Division of Medicine
The Mayo Clinic, Rochester, Minnesota

Some of the most difficult cases with which the physician has to deal among hospitalized patients are those in which the most prominent symptom, and at times the only symptom, is fever. Usually these patients come to the physician after several weeks of fever, and in many instances provide little evidence, after careful taking of a history and careful general examination, to explain the fever. Some of the patients give enough history to indicate what laboratory tests should be carried out, whereas others fail to give any evidence whatsoever, and occasionally the diagnosis is determined by laboratory tests through a process of elimination. It is rarely necessary to include the entire list of conditions causing chronic fever in considering a differential diagnosis. Frequently, it is necessary to include only a few conditions, whereas at other times, after considering every condition that could possibly be the cause of the fever, the findings have been entirely negative.

This group of cases, needless to say, is called that of the indeterminate fevers. I might mention some of the difficulties we encounter at The Mayo Clinic.

MALARIA

Very occasionally we see cases of malaria. Usually, however, the patients live in malarial districts and have had previous attacks. At times, however, we see patients with malaria from the South, whose condition has not been diagnosed, and the fever is the primary cause for their being referred to us. There is some difference of opinion regarding chronic malaria. Some authorities feel that the organism is practically always present in the blood stream, and that if repeated examinations of blood are made, the organisms will be found, the most opportune time for obtaining a positive blood smear for malaria being immediately following a chill. Others feel that cases of chronic malaria occur in which the organism is confined to the spleen and liver, and that it is rarely found in the blood stream. At one time it was felt that if patients were suspected of having chronic malaria, and if examinations of blood were negative, splenic puncture was indicated. In some parts of the South, patients suspected of having malaria, whose blood has been repeatedly negative to examination, are given provocative doses of quinine, followed by examination of blood. Another procedure is to give subcutaneous injections of epinephrine, and to make a blood smear ten minutes later.

MALTA OR UNDULANT FEVER

Bruce, in 1886, discovered the cause of Malta fever, and named the organism Micrococcus melitensis. Bang, in 1897, discovered the organism responsible for contagious abortion in cattle which he named Bacterium abortus. However, twenty-one years passed, until Alice Evans, in 1918, showed that these two organisms were almost identical and responded in like manner to most laboratory tests. It has been suggested that the causative organism be given the generic name Brucella, and that the disease be called brucelliasis. Undulant fever was practically unknown in this country until about four years ago. Prior to 1927 only 198 cases had been reported; however, since that time the disease has been rather widely recognized, so that in 1929 more than 1,300 cases were reported.

The incubation period is about two weeks. The onset as a rule is insidious; however,

* Read before the Chippewa County Medical Society, Chippewa Falls, Wisconsin, 1932. Revised to publication date.

occasionally it may be abrupt, with rapid elevation of temperature to as high as 105° F. Elevation of the temperature depends on when the patient is seen by the physician; if early, the temperature will be well over 100° F.; if late, the temperature may be only slightly over 100° F.

As a rule, the temperature is almost normal in the morning, gradually increases during the day, and reaches its greatest elevation in the evening. The temperature curve is of a continuous type, with undulations. Associated with the rise in temperature are chilly sensations, chills, and drenching sweats. One rather prominent characteristic of the condition is that the patient does not present the features usually seen in association with such high temperatures; another is that the temperature is surprisingly high in comparison with the pulse rate. The fever may last from a few weeks to more than six months, the temperature returning to normal by lysis.

The general manifestations of the disease vary. There may be debility, progressive anemia, various gastro-intestinal complaints, generalized aching and pains in the joints, and at times these symptoms are prominent enough to be very confusing unless an agglutination test is made. On general examination, the spleen may or may not be palpable. The weakness may be marked and considerably out of proportion to the apparent illness. In certain cases there may be evidence of anemia.

Leukocytosis is uncommon; usually there are four or five thousand leukocytes in each cubic millimeter of blood, and relative lymphocytosis; as a rule, mild secondary anemia is present.

There are four types of laboratory identifications: (1) the agglutination test, which is similar to the Widal test; (2) blood culture, which according to reports is far from being dependable; (3) the intradermal test, and (4) inoculation of laboratory animals. The most used and most practical tests are the agglutination and intradermal tests. In a positive intradermal test, a small, indurated, red area occurs within twelve to thirty-six hours after the injection. This area may remain present for a considerable length of time.

In the summer of 1931 a patient who lived in a malarial district came to the clinic for an operation on the hip joint. She had had annual attacks of malaria for several years. During her trip a rather high temperature developed, and consequently, on her arrival she was admitted directly to the hospital. Because of her previous experience, the patient had no doubt that her trouble was due to malaria. Incidentally, it was brought out in the history that milk was never included in her diet because of her dislike for it. After two negative examinations of blood smears for malaria, other investigations were carried out, and finally a positive agglutination for Alcaligenes abortus was obtained.

To that time we had used on a few occasions a vaccine which caused rather severe reactions, and in a few cases abscess had occurred at the point of injection. Consequently, this treatment by vaccine had been discontinued. Because of the fact that we were unable to say how long it would be before her temperature might return to normal, so that her surgical treatment could be carried out, the patient returned home. Shortly after this, Dr. Walter Simpson of Dayton, Ohio, visited the clinic and told us of the very favorable results from the use of a vaccine which he had recently developed, and which now is being produced by the Lederle Company. This vaccine should be given in a course of ten injections, and the course should be completed in spite of the disappearance of fever after the first injections.

An example of what may occur unless vaccine is taken to completion of treatment is as follows: We advised the home physician of the patient whom I have just mentioned to try the vaccine advocated by Simpson. After four injections of the vaccine the temperature returned to normal, and the physician saw no occasion for giving further vaccine. However, after a period of two weeks the fever returned, and it was necessary to continue with the treatment by vaccine. Simpson has found this treatment to be suc-

cessful when doses are large enough to produce an elevation in temperature of 2 to 4 degrees.

There is a malignant type of undulant fever which is fatal, usually in from ten days to two weeks. A patient was seen at the clinic early last autumn who presented debility, secondary anemia, and fever, and his blood was found to agglutinate Alcaligenes abortus strongly. Because he was unable to remain at the clinic at that time, he left with the understanding that he would return in a short time for a course of vaccine. He did not return, however, and about two months later we learned of his death.

More recently, Malta fever has been treated elsewhere by means of transfusion of blood, with apparently very good results. Statistics show the mortality of this condition to be about 2 per cent. Since the time of the last patient's examination we have had only one case which gave us an opportunity to determine the efficacy of treatment by both transfusion and vaccine. Transfusion had no effect, and a full course of the vaccine had little effect. From such a limited trial, we were unable to express an opinion.

TULAREMIA

The first case of known tularemia occurred in 1904. However, it was not until 1910 that a case was reported in the literature. What were supposed to have been cases of bubonic plague occurring in 1911 in Tulare County, California, were found not to be bubonic plague and were later called tularemia after the name of the county. In 1921 an epidemic of tularemia occurred in Utah, the deer-fly being the host and the incubation period being estimated to lie between one and six days. A tiny ulcer occurred at the site of the bite, which was followed by enlargement of the regional lymph nodes.

The onset of the disease is with a chill, which is followed by rather high fever. There is general aching, profuse sweats, vomiting, and marked prostration, and very often nocturnal delirium.

Four distinct types of tularemia have been described: (1) the ulceroglandular type, which has been mentioned; (2) the oculoglandular type, which is almost always unilateral, with adenopathy of the regional lymph nodes, the primary lesions being tiny white ulcers on the conjunctiva; (3) the glandular type, in which it is impossible to demonstrate a primary lesion, and (4) the typhoid type, in which there are no primary lesions and in which lymph nodes are not palpable. In this type there is secondary anemia, and leukocytes number between 10,000 and 15,000 in each cubic millimeter of blood; such cases have been proved to be examples of tularemia only by agglutination. The seasonal incidence varies somewhat in different localities. The most common hosts are deer-flies, woodticks, and rodents, especially rabbits and squirrels. Cross-agglutination of the organisms of Malta fever has been caused by the serum of patients with tularemia. A survey of cases of tularemia has disclosed that fourteen cases have been reported in Minnesota, three in North Dakota, three in South Dakota, twelve in Nebraska, eight in Iowa, six in Wisconsin, thirty-nine in Missouri, and thirty-eight in Illinois. The far southeast and the far northwest have had a larger number of cases than other parts of the country. The survey showed that twenty-four deaths have occurred, which amounts to about 3 per cent of the reported cases of tularemia. However, this percentage is probably very low, for undoubtedly there have been cases in which the condition has not been diagnosed. Six of the twenty-four deaths occurred from broncho-pneumonia, two from lobar pneumonia, and two from generalized abdominal peritonitis. In three cases death occurred between six and eight days from the onset, and the remainder of the deaths occurred between fifteen days and five months from the onset.

Until recently, no vaccine or antiserum has been developed. Dr. Lee Foshay of Cincinnati, has recently reported favorable results from the use of a vaccine; however, this work is still in the experimental stage, and the vaccine is not obtainable. It is suggested that it is unwise to excise a primary lesion or to drain the lymph nodes before suppuration has begun. Antibodies are not present in the blood stream until the end of the first

week. However, in the second week agglutination may be obtained.

At the clinic we have had ten cases in which tularemia has been either suspected or proved. None of the patients lived in Minnesota; the majority of them came from Wyoming. There were three cases of the oculoglandular type, in all three of which agglutination for tularemia was positive; there were four other cases of ulceroglandular type. One patient, who was convalescing, but who had had tularemia, had palpable abdominal lymph nodes, without a demonstrable primary lesion. The ninth case was a suspected but not a proved case of tularemia, as was the tenth case. The tenth patient died. Postmortem examination disclosed acute ulcerative enteritis, the cause of which was not determined.

THE VARIOUS TYPES OF BLOOD DYSCRASIA

Acute infectious mononucleosis, or acute benign lymphadenosis, is another condition which until recent years has not been recognized as a disease entity. Publication of reports of cases in which there was a lymphocytic reaction much like leukemia, but followed by complete recovery in a relatively short time, occurred as early as 1907. However, it was not until 1920, when Sprunt and Evans published their paper on the subject, that the condition became recognized as a disease entity. Nothing is known concerning the cause of the condition, and it apparently does not occur in epidemic form.

The clinical features of the disease are irregular fever, which may reach 104° F., sore throat, moderate enlargement of discrete lymph nodes, and at times splenomegaly. The onset is acute, and may be associated with malaise and various gastro-intestinal symptoms. The fever persists for one or two weeks, and the symptoms usually disappear within a week after the temperature returns to normal. The adenopathy, splenomegaly, and characteristic changes in the blood may last six weeks or longer.

As a rule, leukocytes number 10,000 to 20,000 in each cubic millimeter of blood. The diagnosis is made by examination of the blood smear and the finding of large numbers of large mononuclear leukocytes, which are characteristic of the condition, and which are not found normally in the blood. Agranulocytosis may resemble this condition somewhat; however, the marked leukopenia and the rapid downhill course of agranulocytosis, distinguish it from acute infectious mononucleosis.

In any of the types of blood dyscrasia, when associated with an erythrocyte count below 2,000,000 cells for each cubic millimeter of blood, there may be high fever. The acute types of leukemia usually are accompanied by fever, and in chronic leukemia a rapid fall from a previously high leukocyte count may be accompanied by fever, which may last as long as six weeks.

PEL-EBSTEIN FEVER

The Pel-Ebstein type of Hodgkin's disease, or Hodgkin's disease with fever, occasionally offers difficulties in diagnosis. Patients who have fever associated with enlargement of the superficial lymph nodes, and especially if a mediastinal tumor is present, offer less difficulty in diagnosis than those who do not have palpable nodes. At least, they offer the possibility of biopsy. Pel-Ebstein fever is of relapsing type. As a rule, for a period of four or five days there is a steady rise of temperature, which may reach as high as 105° F., where it remains for several days. This is followed by gradual reduction of the temperature to normal. The normal temperature may then be maintained for ten days to two weeks, the afebrile period being followed by repetition of the cycle of fever. In the late stages of the disease the fever may remain high until death. In the absence of palpable lymph nodes, the character of the fever and the inability to explain the fever by laboratory tests should draw one's attention to Hodgkin's disease. The blood smear, in the hands of a competent hematologist, may be of considerable value.

Some time ago, a patient whose temperature was well above 100° F. came to the clinic, and on examination enlarged lymph nodes were not found. He was anemic, and so weak that he could barely stand. He was sent to the hospital, and in spite of negative results of investigation, a tentative diagnosis of the Pel-Ebstein type of Hodgkin's

disease was made. Death occurred in about three weeks, and postmortem examination disclosed the glands along the abdominal aorta to be enlarged to about 2 cm. in the long diameter. A microscopic diagnosis of Hodgkin's disease was made.

Although the prognosis in cases of the Pel-Ebstein type of Hodgkin's disease is not so good as that in Hodgkin's disease without fever, physicians of the section on radiotherapy at the clinic feel that the fever is not a contra-indication for irradiation. However, instead of treating the patients for five days, which is the routine in treating patients with Hodgkin's disease without fever, the treatments are given over a period of ten days.

TYPHOID FEVER

In the last five years we have had fewer than ten cases of typhoid fever at the clinic. In that time we have made an average of about seventy-five Widal tests a year, which is accounted for by the fact that occasionally a very atypical case of typhoid fever is seen, in which the usual features, so characteristic of the disease, are absent. Typhoid fever may manifest itself in various atypical forms, and many times it is necessary to obtain positive agglutination before a diagnosis can be made. The Widal test may be positive in conditions other than typhoid fever, such as miliary tuberculosis. It may also be positive as long as a year, and has been positive as long as thirty years, following inoculation with typhoid vaccine. An example of this is the following case:

Recently a patient came to the clinic with a rather high temperature, and with an elevated leukocyte count. The findings of perinephritic abscess were not clear-cut, and before diagnosis was made a positive Widal test was returned. On questioning, it was found that a year previously the patient had been vaccinated against typhoid fever.

PERINEPHRITIC ABSCESS

Perinephritic abscess should be thought of if patients have persistent, unexplained fever, are running a progressively downward course, and if the leukocyte count is appreciably elevated. In such a case, the presence or a history of boils is very important. Perinephritic abscess may follow blows or injuries, or a ruptured appendix, or it may be the extension of inflammation in the renal pelvis or ureter. It may occur as an extension from empyema. In some cases, especially in children, it may follow as a sequel of acute infectious disease.

The presence of a palpable mass is of diagnostic importance. There may be severe pain in the lumbar region, which is aggravated by palpation. The pain may be referred to the region of the hip joint, and the patient may lie with his leg flexed. On bimanual examination one may notice induration or resistance on the affected side, in the region of the lumbocostal angle. Occasionally the physical observations in the renal area are not striking, and unless both sides are carefully compared, the condition may be missed even when it is considered. Unless the origin of the perinephritic abscess is the kidney itself, the urinary findings are usually negative. Four roentgenologic findings may be made in the presence of perinephritic abscess: first, obliteration of the shadow of the psoas muscle on the affected side, second, scoliosis involving the lumbar part of the spinal column, produced by muscular spasm, with the concavity toward the abscess, third, upward displacement of the diaphragm on the affected side, and fourth, displacement of the colon. At times this condition remains undiagnosed for weeks.

SUBDIAPHRAGMATIC ABSCESS

A subdiaphragmatic abscess should be considered in cases of chronic fever following ruptured appendix, disease of the gallbladder, or duodenal ulcer. It also should be considered following infectious processes such as boils. One should be on the lookout for subphrenic abscess in cases in which there is high, sustained leukocytosis with fever after operations on the stomach or gallbladder. Several cases have been seen at the clinic, in which such conditions followed a ruptured appendix. The symptoms of subphrenic abscess vary. The onset, which may be somewhat sudden, or which may be insidious, is usually associated with

symptoms of general toxemia, chills, and fever, and a leukocyte count that may run from 10,000 to 22,000 for each cubic millimeter of blood and may remain somewhat stationary. The pain in subdiaphragmatic abscess is pleuritic, and is associated with painful respiration; at times the pain may be referred to the shoulder. The diaphragm may be raised and fixed on the side of the lesion, and the localizing symptoms of pain and tenderness may be marked. In cases of subphrenic abscess the aspirating needle has been found to be of assistance in diagnosis.

PYELITIS AND PYELONEPHRITIS

Pyelitis and pyelonephritis are comparatively common causes of chronic fever. The finding of marked pyuria immediately leads one to thorough investigation of the urinary tract. Not frequently the cause of the pyuria will be found to be obstruction in the urinary tract. Acute onset of chills and fever, with frequency, dysuria, and pyuria in postoperative and obstetric cases, are significant. Occasionally, in cases of long-standing pyelonephritis, there may be dull, aching pain over the affected kidney, and not infrequently gastric symptoms.

INFECTIONS OF THE BLOOD STREAM

In a typical case of subacute bacterial endocarditis, some of the findings are so characteristic that the diagnosis is immediately suggested. However, occasionally not all of the characteristics are clear-cut, and at times there is a question concerning the diagnosis. A prominent feature of the condition is that these patients frequently are free of bacteria. The history of rheumatic heart disease, and the finding of a mitral lesion, with the presence of fever, secondary anemia, splenic enlargement, and various embolic phenomena, principally petechiae, are significant. Marked renal disease may be present.

Pyemia may be mistaken for several other causes of fever. There is often an enlarged spleen, which, with other symptoms of pyemia, suggests typhoid fever. Blood cultures as a rule give positive results.

OTHER CONDITIONS

Occasionally, during the process of metastasis in the presence of carcinoma, fever will occur. There is a rather large group of cases which comes under the head of neurasthenic fever. However, these patients, as a rule, are not incapacitated, and the temperature very rarely rises higher than 100° F.

There are many other conditions which at times may be the cause of chronic fever. Tuberculosis, of course, is a common cause, and must always be considered in the differential diagnosis.

THE USE OF INTRAVENOUS DYES IN INFECTIONS OF THE BLOOD STREAM

I do not suppose there is any subject on which there is greater diversity of opinion than that relative to the efficacy of various dyes given intravenously, especially from the standpoint of antiseptic action. Probably one of the most important factors in the diversity of opinion is the difficulty in estimating just how much benefit should be attributed to the use of the dye. These dyes, when given for their antiseptic action, are used either when the blood culture is positive, or when it is suspected that it would be positive and, as a rule, when patients are in very grave condition, receiving in many cases transfusions of blood, or intravenous infusions of saline solution, or glucose. In instances in which the patient has recovered, there is a tendency to give more credit to the dye than it perhaps deserves.

At the clinic we have used mercurochrome in a rather large number of cases. Mercurochrome, from the chemist's standpoint, should not be of much value as an intravenous antiseptic substance, for it immediately combines with the proteins of the blood, and therefore should be rendered inactive. This is also true of gentian violet.

At one time, mercurochrome, given intravenously, was used extensively at the clinic in the treatment of chronic infectious arthritis, both from the standpoint of the reaction which follows its injection, which is like that caused by foreign protein, and from the standpoint of its antiseptic value. It was given in doses of 10 c.c. of 1 per cent so-

lution, which amounts to 5 mg. for each kilogram of the weight of man, estimated at 50 kg. It has never been given in larger doses. A rather severe systemic reaction, with high temperature, resulted. It has also been used to a considerable extent in the treatment of acute pyelonephritis, with fairly good results. However, similar results have been reported from the use of subcutaneous injection of a foreign protein. Mercurochrome has been used in various other conditions, in many of which blood cultures have been positive. The value of mercurochrome, given intravenously, is questionable. More than likely, the favorable results obtained from the use of mercurochrome in treatment of patients with arthritis, or of patients with acute pyelonephritis, could be obtained in the same manner by subcutaneous injections of a foreign protein, such as typhoid vaccine. At the clinic, in a number of cases, acute ulcerative colitis, principally of the colon, but in some cases of the small bowel, was found after death. On reviewing these cases, it was found that the patients had been given intravenous injections of mercurochrome, and the pathologists feel very strongly that these acute ulcers were due to the mercurochrome. This condition, however, was not the cause of death, but was an associated finding. Consequently, on the arthritis service, mercurochrome has not been given intravenously in the last seven years, but has been supplanted by the use of typhoid vaccine; the same results have been obtained, and the possible dangers of mercurochrome avoided.

No reaction should be obtained from intravenous use of gentian violet. A 0.25 per cent solution, in a dose estimated at 5 mg. for each kilogram of body weight, is used; never more than 130 c.c. is given at one time. About ten doses of gentian violet a month have been prepared at the clinic. Acriflavine has been used intravenously seven or eight times, 10 mg. in each 100 c.c. of saline solution being given intravenously without respect to the weight of the patient.

Recently, iso-amin blue has been used in cases of arthritis. In three cases, after a few injections of iso-amin blue, the fever has entirely disappeared. In one case there was some improvement in a joint; however, it was indeterminate how much of this was due to the iso-amin blue. In using iso-amin blue, a 0.50 per cent solution of the dye is added to 100 c.c. of saline solution and the mixture is given intravenously in 800 to 1,000 c.c. of a 5 per cent solution of glucose. Iso-amin blue has been prepared in our laboratories twenty-five times; however, it has been used in a somewhat larger number of cases. It is a general feeling that so far, in trying to estimate the value of iso-amin blue, there have been no noticeably favorable results.

Recently there have been reported in the literature some rather good results from a dye named rivanol which has been used in staphylococcic and streptococcic septicemia. In some cases metaphen has been used with results that also have been reported to be favorable. We have not used either of these dyes at the clinic.

On looking back to the time when mercurochrome and gentian violet were first used intravenously, one is struck with the very good results obtained. This is characteristic of reports on the use of all new preparations for intravenous medication. Opinions here at the clinic vary somewhat. Several members of the staff feel that dyes given intravenously are worthless; others feel that there have been some cases in which there was a possibility of the dye being of some value; however, there was no way in which to determine this. I believe that the consensus of opinion of the men at the clinic who have occasion to use the various dyes is that as antiseptic substances for use in the blood stream they have been of very little value, and in the presence of the streptococcus of no value. As new dyes are developed undoubtedly they will be investigated at the clinic and if they are safe, will be given clinical trial. It may be possible that in the future, as new dyes are developed for intravenous use, some of them may be shown to have specific effect against certain organisms.

The Importance of Blood Grouping in Clinical and Legal Medicine*

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Since the transfusion service was organized at the Milwaukee Children's Hospital in 1928 by Dr. S. J. Seeger, a considerable amount of blood group material has been accumulated in the typing of children for blood transfusion, and of their parents to act as donors. We have attempted to correlate this data with the present theories of the inheritance of blood groups.

In 1910 and 1911 Von Dungern and Hirschfeld[1] reported their experimental work on the inheritance of blood groups. From this step in our knowledge the study of blood groups has spread to many divergent fields of thought. Although their hypothesis was almost unquestioned for the next 15 years, as more reports were published, it became increasingly more evident that their hypothesis was inadequate to explain the heredity of the blood group factors. In 1925 Bernstein[2] published his paper on conclusions of the method of inheritance from calculations of mass statistics. Furuhata[3], in 1925 and 1926, proposed still another hypothesis, and Bauer[4], in 1928, added his contribution in attempting to explain the complicated situation which had arisen.

Thus we are left, at the present time, with four main hypotheses to explain the existence and behavior of the four blood groups. Before enumerating these let us review some of the fundamentals of genetics which are essential to a complete understanding of the mechanisms of the various hypotheses. We must assume as fact that there are chromosomes within our body cells and that these chromosomes carry the different inheritable factors; such as eye color, hair color, etc. Each one of these factors is carried by what are called genes. These specific genes are thought to occupy the same specific location on the chromosome in every single cell. There are two genetic terms which we must understand fully before going on to our subject: allelomorph and mutation. An allelomorph is merely the name given to one of a pair of characters in Mendelian inheritance which is alternative in its inheritance. Mutation is the term applied to any sudden production of a new inherited character.

With these things in mind we can outline the hypotheses with better understanding. Von Dungern and Hirschfeld assumed that there were two factors in the cells, which they called agglutinogens A and B, and two factors in the serum, which they designated as agglutinins alpha and beta. They believed that the agglutinogens were inherited according to Mendel's laws, the presence of the agglutinogens being dominant to the lack of them.

Bernstein assumed that there were three factors in the cells, as well as in the serum. He further assumed that the sera of all four groups were alike. His inherited factors are called A, B, and R, the latter being hypothetical. He postulates the existence of three separate races A, B, and R, the A and B races being late mutations of the R race.

Furuhata's hypothesis is much like Bernstein's except that it takes into consideration factors in the serum. It amounts to a hypothesis of complete linkage of characters.

Bauer's hypothesis, too, is much like Bernstein's; it differs by assuming a condition of partial linkage on the chromosome, which allows some crossing over.

Bernstein's hypothesis is the one most generally accepted, because it fulfils most of our observations. As Snyder[5] points out, Furuhata postulates a mutation in the exact spot on the chromosome where a previous mutation had taken place, which is highly theoretical. Bauer's hypothesis is not tenable because the crossing over value has been calculated to be 10^{-7}, which would make any observations of such cross overs highly improbable, and this is not in accordance with the facts. There are other genetic objections to Bauer's hypothesis equally as serious.

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With these fundamental thoughts in mind we reviewed our records to see if they upheld the current beliefs of the heredity of blood groups. Four hundred and eighty nine patients who had been grouped for transfusion have been reported by Seeger and Schaefer[6]. Since then we have added 127 cases to our series. The distribution of the groups is indicated in chart 1.

Chart 1

Percentage of Blood Groups Found in 616 Patients at Milwaukee Children's Hospital. (Moss Classification)

Group	No. of Patients	Percentage
I	41	6.66
II	229	37.17
III	81	13.15
IV	265	43.02

The assumption that an agglutinogen can only appear in the child when it is also present in one of the parents is a fundamental of all of the hypotheses of the heredity of blood groups and has never been seriously questioned. If we tabulate all of the instances where the mother, the father, and the child were typed we obtain some data to verify the continuity of agglutinogens. There were 246 instances where the groupings of both of the parents and the offspring were done. These are shown in chart 2.

Chart 2

Matings and Offspring Which Occurred in 246 Instances at Milwaukee Children's Hospital. (Moss Classification)

	Children			
Parents	Group I	Group II	Group III	Group IV
IV x IV	(1)	(1)		44
IV x II	(1)	32	(1)	46
IV x III			14	14
IV x I		6	2	(1)
II x II		22	(2)	9
II x III	5	6	7	2
II x I	7	5	7	
III x III			3	2
III x I	1		1	
I x I	3			(1)

The offspring in ( ) are impossible according to the triple allelomorph hypothesis.

In some cases only one of the parents was grouped with the child to be transfused. These are shown in chart 3. In this and the previous chart the numbers in parenthesis represent the impossibilities according to one or the other of the hypotheses mentioned previously. In all there are ten exceptions;

Chart 3

Group of One Parent and Offspring — Other Parent Unknown

	Child			
Group of Father	Group I	Group II	Group III	Group IV
I	5	1		(1)
II		67	2	10
III			9	2
IV	(1)	11	6	55

	Child			
Group of Mother	Group I	Group II	Group III	Group IV
I	8			
II		34		7
III		1	11	1
IV		8	1	56

six of these cannot be explained by any hypothesis. The remaining four are valid according to the hypothesis of Dungern and Hirschfeld, but by no other. There are several sources of error (1) mistakes in the technique of grouping (2) illegitimacy of the offspring (3) offspring of a previous marriage (4) adopted children. All of these results were obtained before this study was considered so that none of these possibilities have been inquired into. It is significant that, since the study was begun, 3 children in a series not included here we have good reason to believe are illegitimate. When one realizes the difficulties encountered in blood grouping and our later findings in this class of patients, it seems that nearly all of these exceptions can be accounted for without casting much doubt upon the accepted theories of blood groups.

PRACTICAL APPLICATION

All of this seems interesting enough from a theoretical standpoint, but how can we use this knowledge in the practice of medicine? First of all, with these things in mind, the task of blood typing will hold a new interest and will make the actual work more accurate, because if we find an exception to one or the other hypotheses we can repeat the typing of the blood. Thus it affords an additional check on the laboratory staff. The

importance of blood groups in transfusion and skin grafting is well recognized. Aside from this, however, a consideration of these theories is of real value in establishing the paternity of babies who have accidentally become exchanged in a nursery. The field of blood grouping is thus brought into forensic medicine. Closely allied to this problem is that of establishing the paternity of children before the courts when one or more men are suspected. Schiff[7] in Germany is applying Bernstein's hypothesis in the determination of nonpaternity cases in the courts. In 1929 he collected 5,584 cases in which blood groups were used for this purpose in Germany, Austria, Denmark and Switzerland. Blood groups are also being applied in France, Italy, and England. In no case can it be said that a suspected man is the father of the child in question, but it can be said with certainty that he is not the father of the child in one-sixth of the cases by means of the one fact that an agglutinogen cannot be present in the child unless also present in one of the parents. On the basis of Bernstein's hypothesis and the use of the tests for the agglutinogens M and N of Landsteiner and Levine[8] about two-thirds of the cases can be settled. Perhaps in the future other blood characteristics will be discovered which will give us still more information. Doan[9] submits his contribution of the incompatibility of the white cells. Probably this will become one of the methods for further differentiating blood types.

There are other applications in forensic medicine. The blood of every murdered man should be grouped, because, as very often happens, a suspect is found with blood stains on his clothing or clots on implements used in the murder. These clots or stains must first be proved to be of human origin which is comparatively easy by means of the precipitin test. Blood stains of at least a few months old can be typed, and it has been stated that if sufficient of the stain is left it could be done after many years. In this connection it might be interesting to know that the blood group of embalmed bodies and cadavers can be determined. This is made possible by the fact that most of the organs contain the same group specific substance as the blood. The pericardial fluid is especially strong in agglutinins and is available in recently dead bodies at necropsy. Group specific substances have been found in saliva[10], gastric juice, bile, tears[11], sperm, hydrocele fluid, ovarian cyst fluid, perspiration, pleural fluid, peritoneal fluid, synovial fluid, milk and colostrum[12], saline extracts of malignant tumors, tissue juices obtained from cantharides blisters, urine, cyst fluids, amniotic fluids, pericardial fluid, and cerebrospinal fluid occasionally, especially if an inflammatory process is present in the brain of meninges, and various other tissue extracts. So we find that what we commonly conceive of as a blood group is actually a specific group factor common to all of our body cells, and body fluids with the exception of the fluid of the anterior chamber of the eye and possibly the cerebrospinal fluid. Many problems of a medico-legal nature can be solved by means now at our command; the variety of these is well illustrated by the task put to an English investigator[13] who was called upon to determine whether the blood pouring from a holy picture was human and who supplied the blood. The possibility of determining the group from the saliva on a stamp or envelope or from the perspiration on clothing opens interesting fields for speculation.

Ever since the existence of blood groups as hereditary factors was established, efforts have been made by many investigators to link this heredity with that of various constitutional states[14] and tendencies to various diseases[15]. Up to the present, however, no linkage with disease states has been proved. There is no adequate reason to suppose that an inheritable quality such as is under discussion should predispose an organism to any special disease process unless that disease is in itself inherited. Hemophilia has been discussed in this light, but, as is well known, hemophilia is a sex-linked character, and can in no way be linked with the inheritability of group specific factors. There is a way in which group specific factors might have some bearing on disease entities, and this has been suggested in the case of

eclampsia. Macquarrie and Ottenberg[16] suggested that it was due to the incompatibility of the blood of the mother and the fetus. This would lead one to the assumption that there was an actual exchange of blood through the placenta, and this we are quite certain is not the true state of affairs. Veit[16] believes that syncytial cells pass into the blood of the mother, and if we remember that the group specific factors are common to all of the cells, the phenomena of the intoxication of pregnancy could be explained by the difference of the cellular groups. After all, the phenomena do not differ much from those seen in some types of transfusion reactions. Much work remains to be done to clear up this question.

Outside of the field of medicine blood grouping is being used in anthropology in the study of the origin and the migration of races. The percentage of blood groups among a great many peoples in all parts of the world has been determined and much valuable data is being accumulated.

CONCLUSION

In conclusion, we have records of 616 patients grouped for transfusion at the Milwaukee Children's Hospital. There were 6.66% in group I; 37.17% in group II; 13.15% in group III; and 43.02% in group IV.

The mother, father, and child were typed in 246 instances, and only one of the parents and the child in 297 instances. Among these matings there were 10 exceptions to the hereditary theories of blood groups; six of these cannot be explained on the basis of any hypothesis, and 4 of them can be explained on the basis of Dungern and Hirschfeld's hypothesis but no other.

The sources of error in blood grouping are sufficiently varied and numerous to place these exceptions within the probability of error without casting doubt upon the existing theories of the inheritance of blood groups.

The grouping of blood or rather the determination of the specific group factor in human cells is a valuable procedure in clinical and forensic medicine.

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The Suitable Time for Surgery in Children*†

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Infants and children present surgical problems so different from adults that the practice of pediatric surgery probably should be as specialized as is the practice of pediatrics.

I wish to discuss only a phase of pediatric surgery, namely, the choice of time for surgical interference in congenital defects and in operations of choice. As an example, it makes very little difference, as to success and mortality, whether an operation for hernia is performed on a patient of twenty or one of forty years of age, but it makes a vast difference whether such an operation is performed on an infant of eight weeks or one of eighteen months of age.

To review briefly the differences that do exist between children and adults:—*Anatomically.* (1) the tissues of the young are softer and more frail and the structures and spaces smaller than those of the adult. (2) The various parts and organs of the infant body are not in proportion to each other as are those of an adult, and during the first fourteen months of life these proportions are constantly changing. (3) In the adult the blood amounts to about 8% of the body weight, whereas, in the infant the blood is only 5% of the body weight and is under lower tension. This might explain why post-operative shock supervenes more easily and the changes associated with shock progress much more rapidly in children than in adults.

The *physiological* processes in the young are so finely regulated and interrelated that they are upset easily and an alteration in one process usually affects the entire mechanism. Weight and nutrition are easily disturbed. Anemia and fever occur readily. The water balance is upset easily causing dehydration and acidosis to develop rapidly. Perhaps it is the activity of growth, controlled by the endocrine system, that produces this "lack of reserve," as we might call it, and renders the child liable to such violent reaction from slight cause. Children, however, respond to treatment much more rapidly than do adults. There are *three periods* in the life of a child when its reserve is low and its mechanism particularly unstable: the first is from birth to eighteen months of age; the second during the fifth and sixth years; the third at puberty. Operation during any of these periods often is followed by marked reaction.

There is a close relation between the general condition and nutrition of a child and the outcome of an operation. Many an operation performed with skill has failed, because it was ill-timed; the child was ill-nourished, anemic, exhausted, or otherwise out of condition. No operation of choice, such as herniotomy, should be undertaken until every effort has been made to put the child in as good physical condition as possible. Even in emergency cases, such as intestinal obstruction and peritonitis, appropriate pre-operative measures should be taken against dehydration, acidosis and shock.

CONGENITAL DEFECTS

In congenital defects the question of surgical treatment immediately after birth is important. The time for operative interference depends upon the type of defect present. The following criteria often may be used as a guide.

(1) Defects which render the child unviable, if allowed to remain, must be relieved at once. (2) If the defect in no way inter-

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† From the Milwaukee Children's Hospital.

feres with the normal development of the child, operation should be postponed until the child has reached the age of eighteen months or two years, particularly if a major operation is to be performed. At this age the child has fairly well passed the critical period when it is so easily upset in its mechanism.

The following are a few of the congenital anomalies apparent at birth.

Hare-lip frequently requires repair within the first week or two, for it often interferes with the infant's ability to nurse. A perfect cosmetic result is not always obtained from this first operation, and plastic repair at a later date is often necessary.

Cleft Palate must be completely repaired by the time the child has developed its speech. As several operations are usually necessary, the first one is performed before the infant has reached nine months of age. If associated with hare-lip some immediate repair is necessary.

Spina Bifida fortunately is relatively rare. Very frequently this condition is associated with neuromuscular disturbances, lower limb deformities, paralyses, and, at times, with hydrocephalus. The presence of all these complications is a definite contraindication to operation. *Meningocele* is most often suitable for surgical interference. *Syringo-myelocele* and *myelo-meningocele* occasionally are amenable to treatment. Operation must be performed before marked nerve involvement occurs. This is usually within the first six months of life. Where the sac or tumor is not covered with healthy skin, operation should be performed immediately after birth, for infection of the mass occurs very early.

Hernia into the cord is rare but is worth mentioning. The larger herniae are easily recognized at birth. The smaller ones may have the innocent appearance of a thickened cord, and a loop of intestine easily can be included when ligating the cord, producing obstruction. Hernia into the cord requires immediate surgery, with excision of the stump of the cord and closure of the abdominal defect.

Undescended testicle occurs rather frequently. Surgical treatment should be postponed, for the testicle very often descends spontaneously. If the testicle lies in the inguinal canal, symptoms occasionally arise, and operation may be performed at about four years. If it is distal to the external ring, operation should not be done before eight to ten years of age, unless a complication such as torsion occurs. Daily stretching of the scrotum often stimulates descent of the testicle. This deformity, however, must be corrected before the age of twelve years, when the gland begins to function.

Extrophy of the bladder fortunately is rare. It often is associated with other deformities of the genito-urinary tract and with spina bifida. This condition calls for surgical interference sometime between the second and the fourth year, when operation is relatively safe and before an ascending infection of the kidney has occurred. The accepted treatment consists of transplantation of the ureters into the sigmoid, followed by later excision of the remnant of the bladder.

Imperforate anus, as such, is rarely seen. More often there is an associated fistula leading to the perineum, the vagina, scrotum or bladder. If associated with a recto-vaginal or a recto-perineal fistula that is large enough to function properly, operation should be postponed until a later date. If there is no opening, or a fistula to the bladder or urethra exists, immediate operative relief is necessary. Fortunately, as a rule, the blind end of the gut lies close to the perineum and an opening may be made with little difficulty. As a rule, further plastic repair is necessary at a later date.

Web fingers do not need immediate operation. Plastic repair is usualy performed between the ages of four and eight years. However, early massage should be instituted. This practice stretches the skin and soft tissues between the bones, making plastic repair easier.

Club foot, which is relatively common, should be treated immediately after birth with strapping or plaster cast, and treatment should be persisted in conscientiously. Too many children with club feet are brought to the orthopedist after they are a year old. At that time operation is usually necessary.

The following conditions, although congenital, usually are not discovered until later:

I shall consider hernia with these congenital defects. Inguinal hernia is the most common, followed by umbilical hernia. Femoral hernia is very rare in children.

Inguinal hernia usually presents itself after the first few weeks of life. In some cases the hernia can be satisfactorily held by a simple truss; and a surprising number will disappear within the first year. Operation should not be performed before the second year, except where complications arise, such as incarceration and strangulation, which demand immediate operation. Where conditions suggest probable development of these complications, operation should be performed earlier.

Umbilical hernia is very common. This condition is post-natal in occurrence and due to imperfect closure of the linea alba. Many herniae disappear spontaneously in the first six months. Mechanical occlusion of the opening with adhesive tape should be done for about six months, and a high percentage of cures will be obtained. The larger herniae also should be held and usually will decrease in size. Operation should be postponed as many years as possible, unless some complication arises.

Hydrocele in infants is often associated with inguinal hernia. Repair is best postponed until after two years, unless symptoms arise from the associated hernia.

There are several intra-abdominal anomalies which are of interest.

Meckel's diverticulum may be connected with the umbilicus and form a fistula, or may be blind. If fistulous and discharging fecal matter, repair should be made at about three months. The blind type is discovered accidentally, usually in later years, when it becomes inflamed and simulates acute appendicitis.

Congenital atresia of the intestine may be present in any part of the embryonic midgut, with resulting obstruction. There may be one or more points of constriction. Like almost all cases of congenital obstruction of the intestine, diagnosis usually is not made until from three to five days have elapsed. When it is made, immediate operation is necessary.

I shall include *pyloric stenosis* under congenital defects. This condition is due, perhaps, to a lack of rhythm or faulty nervous control of the sphincter, with resultant hypertrophy. However, as symptoms occur shortly after birth, it is permissible to discuss it here. Many infants recover under medical measures. Too many die, however, because of too prolonged, unsuccessful medical treatment, even though it is followed by the most skillful surgery. Operative interference should be instituted before dehydration and toxemia are too marked.

Hirschsprung's disease, or congenital dilatation with hypertrophy of the colon, becomes apparent in the first few months of life. Children with this condition rarely reach adult life. Medical management may control symptoms if consistently followed. Later surgical measures often are necessary. Treatment by ileo-sigmoidostomy or cecostomy, followed by colectomy, entails a severe risk. Lumbar ramisection has given about 50% cures with a relatively low immediate mortality rate.

Congenital wry-neck becomes apparent shortly after birth and progressively increases in degree. The treatment consists of early recognition and treatment of the involved sterno-mastoid muscle before associated changes of the facial muscles develop. If of slight degree, massage and motion may be all that is necessary. If more advanced, excision of the fibrosed muscle is required.

Congenital dislocation of the hip should be treated as soon as recognized. Brilliant results are obtained by simple measures if treatment is started within the first six weeks of life.

There are many other defects which merit discussion here. There are also many other phases of surgery in children which warrant consideration. The field of pediatric surgery is important and large enough to deserve some place in the curriculum of medical education.

The feeling that infants and young children should not be subjected to surgery of major character is erroneous. The infant and child can easily undergo a major opera-

tion successfully, if its physiological mechanism is understood, if the proper pre-operative and post-operative precautions are taken, and if the operation is performed quickly and with minimum trauma. Upon completion of the operation the patient is again a medical case and should return under the care of the attending physician or pediatrician. This co-operation between the surgeon and pediatrician, plus the trained personnel of the well organized Children's Hospital and children's ward in the General Hospital, has been a prominent factor in reducing the post-operative mortality rate in children.

CONCLUSION

In conclusion, allow me to repeat: (1) Congenital defects which endanger the life or development of the newborn, and which are amenable to repair, require early operation. (2) Defects which do not interfere with the normal development of the child should be operated upon later. However, there are some defects, which, if treated early, can be cured by conservative measures, but which, if neglected, will require operation.

DISCUSSION

Dr. A. L. Kastner (Milwaukee): I consider this a very important subject, both pediatrically and surgically, and I think it is worth while hammering over quite a bit.

When a child is about to be operated it not only presents a surgical problem, but a pediatric problem, and the life of the child sometimes depends on the correct management of the pediatric problem, and the correct management of the surgical problem. We have seen that so many times that I am really becoming rather worked up about the condition.

I have seen children die who ought not to have died, simply because they were operated, and were operated at the wrong time, or by a man who had no pediatric viewpoint, or because no pediatrician or a general medical man was counsel. I will gladly entertain anything that may be said on this subject.

Dr. John Docter (Racine): I think it is very advisable to have your patient in good shape before you operate. Many of those cases are dehydrated and are not good risks, and I think that the giving of liquids, Ringer's solution, or normal saline, many times before or during or right after the operation, is very essential to save that child's life. I think most of those babies die of dehydration, and acidosis.

Dr. A. H. Heidner (West Bend): How is the period of lowered vitality between five and six years explained?

Dr. H. A. Jegi (Galesville): In cases of pyloric stenosis that are practically complete at the age of six weeks, just how would you overcome your dehydration?

Do you ever give fluids intraperitoneally?

Dr. W. T. Lindsay (Madison): I would like to ask the Doctor what his objection would be in reference to a supernumerary thumb? I recently had a case — an extra thumb and small amount of webbing. The outer one of the two seemed to be the one in excess, and perhaps if allowed to go on would cause the larger amount of deformity of the hand. The question of whether this extra thumb should be removed early, or whether a certain delay should be permitted, came up. I would like to know what his idea would be. Of course, the cosmetic effect of having a deformed thumb is considerable.

Dr. Schulz: I do not know if there is any particular explanation for that period of lowered vitality, but it seems to be the opinion from experience in the Children's Hospital, that children at that age are subject to marked reaction to disease or operation. I do not know of any physiological explanation for this.

As to the matter of dehydration, as I mentioned, the water balance in children is very finely regulated. They become dehydrated for little or no reason. They also develop an edema in giving fluids intravenously and so on, post-operatively. This must be watched very carefully. The diagnosis of dehydration is very frequently missed. Children look sick, they feel warm, usually have an associated fever. The skin might feel dry, but it is very easily missed at any rate. A characteristic sign of dehydration is the disappearance of the normal elasticity of the child's skin. Toxemia also occurs very rapidly in children because of this rapid development of dehydration.

Cases of pyloric stenosis are treated in an attempt to get something through the pyloric ring. If the child does not respond to medical treatment, the case is a surgical one. If the child comes to the hospital for operation in dehydration and toxemia, because of loss of gastric fluids, preoperative preparation consists mainly of getting salt and fluids into this patient, either intravenously, which is very difficult in children, or subcutaneously.

If you need hurry and the child is in very poor condition, you can give fluids during the operation by giving them intravenously after cutting down on the vein.

I never give fluids intraperitoneally. I believe fluids absorb rapidly enough subcutaneously, and if you want it faster than that you can give them intravenously.

Regarding the extra thumb—the orthopedists, of course, do all of that work. They feel that the best cosmetic results, and the repair is fairly easy, can be

obtained by repairing this at about four years of age. Sometime after two, of course, but sometime before four or five years of age. Care should be taken in operation that your finger is held in a splint, for we see many that have been operated upon where part of the bone and the extra thumb has been removed, and has allowed this one distal phalanx to point out in an abnormal direction. Four years of age, I think, is about the choice of time for that condition.

Nasal Polypi With Radium After Removal*

By WALTER A. FORD, M. D.
The Sheboygan Clinic
Sheboygan

The postoperative use of radium in the treatment of nasal polypi was first reported by Lyons[1-2] in 1921. This was a definite advance in the management of a troublesome condition against which, up to this time, the prinicpal weapon had been surgery.

About nine years ago we began the use of radium in our postoperative treatment of nasal polypi and believed that the idea was original until a review of the literature was made. It was natural that, having several very satisfactory results to begin with, we were enthusiastic about radium as a new cure for this condition.

The postoperative use of radium in about thirty cases, together with the accumulated experiences of others using this method, has brought out several factors with regard to radium which we can evaluate at this time. Our experience has also led to some modification in treatment both with regard to selection of cases and exposure to radium.

Nasal polypi are not new growths, but, as pointed out by Hirsch[3], are partly prolapses of the mucous membranes of the sinuses which hypertrophy and become edematous.

It is now generally agreed that polypi are of inflammatory origin. Zukerkandl in 1882 brought out this idea but denied that necrosis of the bone accounted for their development as insisted upon by Woakes. Hajek later gave credit to Woakes, at least for pointing out the connection between nasal polypi and the underlying bone condition, and all writers since have confirmed Hajek in his researches. His explanation of why polypi occur, has not been answered to the satisfaction of all rhinologists even to this day.

Pathological secretions of all kinds in the nose are by some believed to be the immediate cause of the hypertrophies (Smith[4]). Others are of the opinion that vasomotor changes leading to lowered resistance, inflammation and suppuration, are the chief causes of polypi. This theory at least would help to explain that group of patients having nasal sinus disease but never developing polypi. In some measure too, this view might help to explain an hereditary factor which seemed to be present in two of my cases. One patient has a mother, two sisters, and a brother all suffering from nasal polypi. Another patient told me his mother and one brother were similarly affected.

Just what role trauma plays in the development of nasal polypi is also in doubt, but we know that operative trauma has been followed by polyp formation. Scal[5] believes that, if not due to operative trauma, a fully matured polypus is always the symptom of bone involvement of one or more of the accessory sinuses of the nose. In the final analysis he considers nasal polypi to be "only a symptom of an underlying osteomyelitis or at least a periostitis of one of the sinuses", and points out that removal of the exuberance without attention to the underlying condition will never effect a cure.

Microscopically a polypus consists of a loose fibrous stroma, the meshes of which are filled with serous fluid. The surface is covered with epithelium of the modified columnar and ciliated type. It also contains glands, blood vessels, and a few nerve fibers. The glands may be numerous and from pressure or inflammation, may be cystic. They never arise from the roof or floor of the nose, and rarely from the septum and in-

* Presented before 91st Anniversary Meeting, State Medical Society, Milwaukee, September 1932. Revised to publication date.

ferior turbinates. The usual sites are the middle meatus, inferior border of the middle turbinate, the ethmoid labyrinth, the edge of the hiatus, the lips of the uncinate process, the infundibulum and the bulla ethmoidalis. In addition, polypi may spring from the lining mucosa of any or all of the other nasal accessory sinuses, especially the maxillary antrum.

While multiple polypi may arise from the lining membranes of the maxillary sinus, it is usual in these cases to see a solitary polypus protruding into the nose. Multiple polypi in the middle meatus are most frequently encountered. Hirsch[3] divides polypi into primary or non recurring, and secondary or recurring; the first being in the minority and occurring mostly on the middle turbinate, and the second being more frequent and originating within the sinuses. Polypi may also be divided into the suppurative and the non-suppurative or hyperplastic types.

Sufferers from chronic nasal disease frequently allow obstruction to the passages to take place before seeking relief. As a consequence, inability to breathe properly is often their chief complaint. Sometimes pressure symptoms in one or more of the sinuses develop with pain or at least a feeling of fullness. In addition, many polyp cases give a history of more or less severe non-seasonal asthmatic attacks with rhinitis, hay fever, urticaria, and bronchitis.

The definite localization of the trouble within the nose has been the subject of a great deal of study. Granger in his methods for taking sinus films, and Fraser[6] in the use of opaque oil, have simplified diagnostic procedures.

USE OF RADIUM

The surgical removal of all visible polypoid material continues to be the first step in the treatment. On the thoroughness with which the polypi are removed depends, to a large extent, the results which will be achieved. As pointed out by Lyons[2], the use of radium will have no influence on the polypus itself, and it is this fact that has led some to the conclusion that radium is of no value in these cases. Not only must the polypi be as thoroughly removed as possible, but the diseased bone must also be removed if at all practical. Where the polypi and their underlying diseased structures can be reached as in the maxillary antrum, using the Caldwell-Luc operation, we believe that radium is seldom necessary.

At first we used radium postoperatively on nearly all types of polyp cases. Now we limit its use to only those cases involving the ethmoid cells anterior and posterior. These are the cases which are of the recurrent proliferative type, most difficult to deal with surgically. In some of our earlier cases we waited a week before applying radium. We found that it could be used just as well within forty-eight hours.

There is a marked difference in the penetration of the beta and gamma rays of radium. The ordinary metal container or tube used in cavity work will screen off most of the less penetrating or soft beta rays. "The hard rays are of extreme tenacity and it is doubtful if 1 cm. of lead will completely block them" (Newcomet). "To get deeper effects, the greater quantity of beta rays are cut off so that only gamma rays are employed. In such cases thicker filters are necessary. Two m/m of platinum or 4 of lead or silver cutting off practically all of the beta rays" (Knox). An account must also be taken of the moist character of parts being treated. A dosage causing some discomfort if applied to dry skin will not have this effect in the nose.

The question of the exact amount of filtration therefore in any case where radium is used becomes of paramount importance. McCullagh[7] and Robinson[8] state that in their cases only gamma rays were used as the beta rays were screened off with 0.2 m/m of platinum and 1 m/m of brass. Fifty milligrams were used for two hours or one hundred milligrams were used for one hour. Lyons' method is to insert a fifty milligram tube and allow it to remain in place eight hours. Sluder[9] says "Gold tubes containing twelve and one-half milligrams of radium have been inserted * * and allowed to remain three hours." Key[10] places a fifty milligram tube covered with rubber tissue in the affected area two or three hours.

We first used 25 milligrams of radium on each side for forty-five minutes, as we feared over exposure. We use monel-metal tubes or needles of 0.4 m/m wall thickness. Radium sulphate is inclosed in platinum cells of about 0.1 m/m thickness within these needles. One layer of dental rubber is wrapped around the needles after anchor strings are attached, and the whole then covered with a light layer of absorbent cotton for insertion into the diseased area.

The dosage has been increased in most cases from 38 to 100 milligram hours without disagreeable symptoms of any kind. All the beta rays are not screened off and consequently we do not use as long a dosage period. I have had no experience with the more heavily screened tubes using only gamma rays. Fifty milligrams of radium in all are used. This treatment is repeated every two or three weeks until from three to eight treatments have been given. Should polypi recur during this time, they are removed and more radium used.

The application of radium must be governed by the type of patient and the results obtained. It may be necessary to repeat with radium after several months have elapsed. In any case apparently free from polypi, several years should pass before being pronounced cured. Some of our cases have been polypus-free from five to eight years.

Radium properly used stimulates the growth of fibrous tissue. This action is carried through into the tissues and bone inclosing the ethmoid labyrinth. Polypi which appear after radium is used are noticed to grow more slowly and at gradually increasing intervals due to the more fibrous nature of the tissues from which they spring. Radium used in this way reduces the number of operations necessary and gets results without pain and very little inconvenience to the patient. In some cases the purulent discharges have been markedly diminished and some have reported asthmatic attacks less severe.

I include a summary of the case records of three of the earlier patients treated, as they are fairly typical.

Case #1

Male, age 45 in 1923. History of many previous operations for removal of nasal polypi. At first examination, found both nares filled with polypi and chronic purulent right and left ethmoiditis present. Patient had a chronic bronchitis and periodically suffered from severe asthmatic attacks. We operated first the left and soon afterward the right side of nose, removing what remained of diseased middle turbinates and curetting anterior and posterior ethmoid cells. Four applications of radium were used at intervals of about three weeks, using on the average about 60 milligram hours at a dose. This patient was entirely free from polypi and his asthmatic attacks were markedly improved the last time I saw him in 1929—five years following the last radium treatment.

Case #2

Female, age 61 in 1924. History of complete nasal obstruction on left side for seven years. On first examination found multiple polypi left, some protruding from left nares. Polypus beginning on right side. Operated left side removing multiple polypi, the left middle turbinate, and curetted ethmoids, anterior and posterior.

On right side found only one polypus which was removed from the turbinate. Radium was used every two or three weeks for four treatments. The dosage varied from fifty to sixty-five milligram hours. During this time a small polypus was removed on two occasions from the region of the left ethmoid. Two months later radium was again used, this time on the left side only, following the removal of a third small polypus. At the present time, eight years following the last treatment, she is entirely free from nasal trouble.

Case #3

Male, age 43 in 1925. This man gave a history of nasal trouble for twenty years. Polypi were removed twice in Russia and five or six times since he came to this country.

On examination large polypi completely blocked both nares. In separate operations polypi were removed together with diseased parts of both middle turbinates, and ethmoid cells curetted. About three weeks following the second operation, seventy milligram hours of radium were used. The same dosage was used at intervals of from three to six weeks until five applications had been given.

January, 1932, more than six years after the last treatment, found one small polypus in the region of the right ethmoid. This was removed and two more radium treatments given. Since then there have been no indications of any more recurrence.

CONCLUSIONS

Our method of using radium postoperatively in nasal polyp cases has been a gradual evolution in a field comparatively new. We had at first few landmarks to go by. It

(Continued on page 856)

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EDITORIALS

FROM WITHIN

THE December report of the Chippewa County Medical Society states that "an effort has been made throughout the year to develop material from among the Society's own membership with gratifying results". This idea is in line with what the officers of the State Medical Society sought to accomplish when they created the Speakers' Bureau. It was their thought that right here in Wisconsin could be found medical men especially well qualified to speak on any phase of medicine or surgery, and that every effort should be made to utilize our own talent before seeking elsewhere. It was also the desire of the state officers that the profession itself assume at least part of the task of postgraduate teaching. Thus not only would the profession be more closely molded together but the various speakers would be stimulated to seek out and disseminate the newer developments in medicine.

The Speakers' Bureau was organized under the direction of the committee on Scientific Work, and, in response to a call, seventy-five leaders of the profession throughout the state at once volunteered their services. This number has since been augmented by some twenty-five additional speakers and there is still need for more. These members have offered to speak at county society meetings within a radius of seventy-five miles of their homes. A list of these was furnished the secretary of each county society last year and may still be obtained from the office of your state secretary. The success or failure of this plan depends upon the utilization of this bureau by the secretaries of the county societies.

The Chippewa County Medical Society is to be commended for their effort to develop program material from within their own ranks. Many other societies throughout the state are now utilizing the bureau to secure material for their programs. The Committee on Scientific Work would be gratified to see the secretary of every county medical society follow the example of Chippewa County. A. J.

SURGICAL TREATMENT OF HEART DISEASES

ONE of the outstanding, if not the outstanding, contributions to medicine in the past year has been the relief offered to patients with chronic congestive heart failure through the means of total thyroidectomy. The rationale for this procedure which is being done at the Beth Israel in Boston resulted from the investigative studies of Dr. H. L. Blumgart on the velocity of blood flow.

Measurements of the rate of blood flow in normal subjects with normal cardiovascular

We Wish You A Happy Holiday Season

systems demonstrated that the velocity of blood flow was directly determined by the metabolic demands of the body. In hyperthyroid states it was found that with the rise in metabolism there was a corresponding increase in the rate of the blood flow. Following partial thyroidectomy there was a return to normal in the speed of blood flow as the normal metabolic level was reached.

Accelerated blood velocity entails more work upon the heart. The minute volume output of the heart in thyrotoxic patients at rest corresponds to that in normal persons doing light work. This increased strain upon the heart accounts for the cardiac lesions which occur in hyperthyroid states rather than to any toxic effect upon the heart. A heart with a valvular defect may be able to maintain a normal rate of circulation at a normal metabolic level. If such a heart is subjected to the increased metabolic and circulatory demands of hyperthyroidism, congestive failure often results.

It was found in persons with circulatory insufficiency and normal basal metabolism that there was a slowing of blood velocity depending in degree upon the severity of the circulatory failure. It was apparent that circulatory insufficiency was due to the failure of the heart to maintain a blood supply adequate to the ordinary needs of the tissues at any given metabolic level.

Studies of blood velocity in myxedema revealed a very marked slowing of blood flow almost equaling that found in severe cardiac decompensation. In such instances of myxedema, as the metabolic level was raised with thyroid extract there was a corresponding increase in blood velocity. The fact that myxedematous patients showed no evidence of circulatory insufficiency with a speed of blood flow approximately the same as that of decompensated persons, demonstrated to them the fact that the adequacy of a given speed of blood flow can be decided only in relation to the metabolic needs of the tissues.

The thought occurred to them that if in the patient with a congestive heart failure the metabolic rate could be reduced to and maintained at a subnormal level, the blood supply, while not necessarily altered, might nevertheless be sufficient for the lowered metabolic needs of the body.

A subtotal thyroidectomy was done on two patients with congestive heart failure. In both patients there occurred, following the operation, an improvement in their symptoms concomitant with a drop in metabolism. Within a few weeks, however, the metabolism rose to normal and the former symptoms of the patient returned. It was then concluded that nothing short of a total thyroidectomy could be expected to maintain a continued reduced basal metabolism.

Only those patients who had resisted all forms of medical management were chosen for the operation. In a period of eight months, from December 1932 to August 1933, over thirty cases were operated upon by Dr. David Berlin of the Beth Israel Hospital. The results in the majority of these cases were most striking. Improvement was noticeable within a few days after the operation. The heart became quieter, dyspnea on exertion and orthopnea were lessened, edema if present disappeared or did not recur when the patient was able to be out of bed as had formerly been the case, rales which were present at the bases of the lungs previous to operation disappeared, and engorgement of the liver lessened as evidenced by a diminution in the size and absence of tenderness. Within a few weeks patients who had been bedridden for a year or more were able to walk about with ease.

The first patient upon whom a total thyroidectomy was done was a man of 52. Previous to the operation he was bedridden; at the present time he is working in one of

the hospital laboratories eight hours a day most of which time is spent on his feet. He is able to walk a mile or more without becoming short of breath.

Total thyroidectomy was done in several cases of angina pectoris. In these patients following operation the amount of exercise which they were able to indulge in without precipitation of pain was greatly increased. The basal metabolism in most of the cases following operation maintained a low level of about minus 30 per cent.

It was not found necessary to administer thyroid extract except in a very few cases where distressing symptoms occurred and then only sufficient to relieve their symptoms but still maintain a low metabolic level.

In spite of the poor surgical risk which is inevitable in such patients, the operative mortality has been surprisingly low. Patients with active coronary disease, active infection, vascular accident, repeated pulmonary enfarction, renal insufficiency, or rapid progressive syphilitic cardiovascular disease were considered unfavorable subjects.

Because of the uncertainty as to the ultimate duration of the beneficial results, they have undertaken this operation only on patients who have failed to respond to medical procedures and who had been relegated to bed for life and in the majority of instances a short life. They have been able to restore to these people an existence wherein activity of varying degrees was again possible even to the extent of earning a livelihood. It must be remembered that the hearts of such patients even with the reduced load of the hypothyroid state have their limits of activity and such limits must be closely guarded.

—*Harold E. Marsh, Madison.*

AS OTHERS SEE US

Wholesome

AFTER nine months of operation under the new system through which county patients receive medical attention and hospitalization supervised by the La Crosse County Medical Society, the county and those in charge of its affairs must feel that under this plan the welfare of all of its citizens in this regard is adequately provided for.

Aside from the saving of $10,000 which will be effected by the end of the year—a substantial item in itself—the new plan grants to those who must depend upon free medical attention, if they are to have it at all, the choice of their family physician. However efficient the county physician may have been under the old plan, it is reasonable to doubt that he could not have given so complete a service to those requiring medical care as that which at once becomes available to the sick under the present plan.

The meaning of the County Medical Society plan is more significantly emphasized when it is realized that the full equipment and entire medical personnel of this hospital center is at the disposal of those who cannot afford to pay their way, just as freely as it is open to those who can. Such service is made possible through a contract with the county suggested by the medical profession itself, for which it receives a mere token in comparison with the care and service rendered.

But beneath the savings that are effected, and leaving the dollars and cents evaluation out of the picture entirely, it is a wholesome feeling for the community to know that nowhere in the county need there be suffering and illness for the lack of medical care under a plan so generously considerate of those who might otherwise just have to endure. For that, all of the people are grateful, indeed, to the La Crosse County Medical Society.

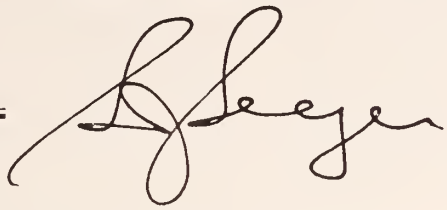
LA CROSSE TRIBUNE & LEADER,
Nov. 3, 1933.

A FINE RECORD

ELSEWHERE in this issue is printed a list of members of our State Society who have maintained their membership during this fourth year of the depression period. While other societies are reporting losses, Wisconsin reports a substantial gain.

What a splendid tribute this is to our state organization! We are going forward because the profession has a keen appreciation of the fact that our group problems can best be met by organization and that our State Society is almost weekly reporting actual accomplishments.

THE PRESIDENT'S PAGE



SOME THOUGHTS FOR THE HOLIDAY SEASON

THE practice of medicine calls equally for the exercise of the heart and the head; and when a man has done his best, to have his motives misunderstood and his conduct of a case harshly criticized, not only by the family, but by a colleague who has been called in, small wonder, when the opportunity arises, if the old Adam prevails and he pays in kind. So far as my observation goes, there are three chief causes for the quarrels of doctors. The first is lack of proper friendly intercourse, by which alone we can know our colleagues. It is the duty of the older man to look on the younger one who settles near him not as a rival, but as a son. He will do to you just what you did to the older practitioner, when, as a young man, you started — get a good many of your cases; but if you have the sense to realize that this is inevitable, unavoidable, and the way of the world, and if you have the sense to talk over, in a friendly way, the first delicate situation that arises, the difficulties will disappear and recurrences of a misunderstanding may be made impossible. The young men should be tender with the sensibilities of their seniors, deferring to their judgment and taking counsel with them.

Whether a man will treat his professional brethren in a gentlemanly way or in a narrow illiberal spirit is partly a matter of temperament, partly a matter of training. If we had only to deal with one another the difficulties would be slight, but it must be confessed that the practice of medicine among our fellow creatures is often a testy and choleric business. When one has done his best, or when a mistake has arisen through lack of special knowledge, but more particularly when, as so often happens, our heart's best sympathies have been engaged, to be misunderstood by the patient and his friends, to have evil motives imputed and to be maligned, is too much for human endurance, and justifies a righteous indignation.

* * * A man of whom you may have heard as the incarnation of unprofessional conduct, and who has been held up as an example of all that was pernicious, may be, in reality, a very good fellow, the victim of petty jealousies, the mark of the arrows of a rival faction; and you may be surprised to find that he loves his wife, and is devoted to his children, and that there are people who respect and esteem him. After all, the attitude of mind is the all-important factor in the promotion of concord. When a man is praised, or when a young man has done a good bit of work in your special branch, be thankful — it is for the common good. Envy, that pain of the soul, as Plato calls it, should never for a moment afflict a man of generous instincts who has a sane outlook in life. The men of rival schools should deliberately cultivate the acquaintance of each other and encourage their students and the junior teachers to fraternize. If you hear that a young fellow just starting has made mistakes or is a little "off colour", go out of your way to say a good word to him, or for him. It is the only cure; any other treatment only aggravates the malady.

* * * No class of men needs friction so much as physicians; no class gets less. The daily round of a busy practitioner tends to develop an egoism of a most intense kind, to which there is no antidote. The few set-backs are forgotten, the mistakes are often buried, and ten years of successful work tend to make a man touchy, dogmatic, intolerant of correction, and abominably self-centered. To this mental attitude the Medical Society is the best corrective, and a man misses a good part of his education who does not get knocked about a bit by his colleagues in discussions and criticisms. (Osler)

AND A MERRY CHRISTMAS TO YOU ALL.

SOCIETY PROCEEDINGS

BARRON–WASHBURN–SAWYER–BURNETT

A meeting of this Society was held on November 13th at the Land o' Lakes Hotel at Rice Lake. Drs. A. W. Adson and H. W. F. Woltman, both of The Mayo Clinic, Rochester, presented a symposium on "Brain and Spinal Cord Injuries."

CHIPPEWA

The Chippewa County Medical Society held its regular monthly meeting at the Hotel Northern, Chippewa Falls, November 7. A large attendance was present to listen to talks by C. B. Hatleberg, Chippewa Falls, upon "Acute Abdomen in Children," in which he stressed careful and painstaking diagnosis and especially the withholding of laxatives in any undiagnosed abdominal case. Statistics were presented showing the increased mortality from appendicitis when laxatives were used.

"The New Things at the Cleveland Meeting," was the subject of a talk by Dr. S. E. Williams, Chippewa Falls. Dr. Williams had taken copious notes and his report and observations were fine and well received.

Dr. F. P. Daly, Chippewa Falls, spoke on the State Board of Health. Considerable that was new in the activities of this important organization was presented as well as the personal work of himself as district officer of the organization in northwestern Wisconsin.

The work of the Chippewa County Medical Society has continued during the year without loss of an old member and with the addition of several new members. Increasing interest has been shown in the programs presented during the year. During the current year men from the Mayo Clinic, from the Marshfield Clinic, and from the University of Minnesota have appeared on our programs. An effort has been made to develop material from among the society's own membership with gratifying results. This will be in line with the work for 1934.

Election of officers was held with re-instating of the officers of 1933. M. F.

EAU CLAIRE AND ASSOCIATED

A meeting of the Eau Claire and Associated Counties Medical Society was held Monday evening, November 20th at the Hotel Eau Claire. Following the dinner at six-thirty, Mr. George Crownhart, Secretary, discussed medical care for the indigent.

FOND DU LAC

The Fond du Lac County Medical Society held a meeting on November 8th at the Hotel Retlaw. Following a talk on "Mastoid and Its Accomplishments", by Dr. M. R. Guttman of Chicago, election of officers took place. They are: President, Dr. L. Gardner; Vice-president, Dr. H. R. Sharpe; Secretary–Treasurer, Dr. J. C. Devine; Delegate, Dr. D. J. Twohig; Alternate, Dr. C. W. Leonard; Censor, Dr. H. C. Werner,—all of Fond du Lac.

GRANT

The thirty-first annual meeting of the Grant County Medical Society was held in the Grantland Club Rooms, Lancaster, Thursday, November 2. Dr. C. M. Schuldt, President, presided. The following program was given:

"Allergic Reaction" by Dr. W. A. Mowry, Madison.

"Development in the Treatment of Fractures" by Dr. James A. Jackson, Madison. Discussion by Dr. Ralph M. Carter of Green Bay.

"Observations on Duodenal Obstructions" by Dr. Gunnar Gundersen, La Crosse.

"Surgery" by Dr. E. R. Schmidt, Madison.

Obstetrics film by Mead Johnson & Company presented by Mr. L. J. Inderbitzen of Milwaukee.

At the close of the program a turkey dinner was served at Schmidt's Cafe and a social hour followed.

Election of officers resulted in the following: President, Dr. J. E. Donnell, Cuba City; Vice-president, Dr. C. F. Harris, Bloomington; Secretary–Treasurer, Dr. M. B. Glasier, Bloomington; Delegate, Dr. J. C. Doolittle, Lancaster; Censor, Dr. C. M. Schuldt, Platteville. M. B. G.

MANITOWOC

Members of the Manitowoc County Medical Society met at Rocky Knoll Sanatorium near Plymouth for a dinner meeting. Dr. William S. Middleton, Madison, presented a paper on "The Treatment of Lobar Pneumonia" and Dr. J. W. Gale, also of Madison, discussed "The Treatment of Empyema."

MARINETTE–FLORENCE

A meeting of the Marinette–Florence County Medical Society was held on Thursday evening, November 9th, following the day's celebration of the golden anniversary of the M. and M. Hospital at Marinette. A dinner was served at six-thirty o'clock at the Hotel Marinette to twenty-six physicians.

Following the dinner hour, Dr. Harold E. Marsh of Madison presented a paper on the subject of "Surgery in Heart Disease" with special reference to removal of the thyroid gland. A second interesting topic was discussed by Dr. Arnold Jackson, Madison, who spoke on "The Acute Surgical Abdomen."

In recognition of their services in the past, Dr. T. J. Redelings of Marinette was re-elected President and Dr. C. H. Boren, also of Marinette, was again chosen secretary.

MILWAUKEE

Dr. Reginald H. Jackson was the guest speaker at the November meeting of The Medical Society of

Milwaukee County, held on the 10th at the Milwaukee Athletic Club. He spoke on "Sciatic Pain Due to Chronic Sacro-Iliac Sprain."

Appearing on this program with Dr. Jackson was Dr. Frederick A. Stratton whose subject was "The Treatment of Brain Injuries."

An innovation at this meeting was the Social Hour which follows each monthly scientific meeting. Instead of the usual get-together at which a buffet luncheon is served, those present were entertained by a motion picture of Dr. E. L. Baum's fishing experiences in Florida, which was greatly enjoyed.

About three hundred members were in attendance.

PIERCE–ST. CROIX

At a meeting of the Pierce–St. Croix County Medical Society held in Hudson on November 2nd, the following officers for 1934 were elected: President, Dr. Julius Blom of Woodville; Vice-President, Dr. Chalmer Davee of River Falls; Secretary–Treasurer, Dr. A. E. McMahon of Glenwood City; Delegate, Dr. A. E. McMahon of Glenwood City; Alternate Delegate, Dr. O. H. Epley of New Richmond; Censor for three years, Dr. O. H. Epley.

The speaker of the evening was Dr. J. A. LePak of St. Paul who presented a very instructive paper on "Digestive Disorders" illustrated by lantern slides. A. E. McM.

POLK

The regular monthly meeting of the Polk County Medical Society was held at the home of Dr. George B. Noyes at Centuria. Members of the Woman's Auxiliary to the Polk County Society were guests as well as the Relief Administrator, and members of the Poor Relief Committee.

A seven o'clock dinner was served followed by round table discussion of topics of interest and election of officers. Those chosen were: President, Dr. L. A. Campbell of Clear Lake; Vice-president, Dr. J. D. Nicholson, Milltown, and Secretary–Treasurer, Mr. George B. Larson, Frederic.

PORTAGE

The Portage County Medical Society had a dinner meeting at the Hotel Whiting, Stevens Point, on October 31st. The speaker of the evening was Dr. Robert Burns of Madison who showed a series of lantern and x-ray pictures to illustrate his talk on several phases of orthopedics.

Members of the Auxiliary were invited and following the dinner had their own meeting. E. E. K.

RACINE

The October meeting of the Racine County Medical Society was held on the 26th at the Elk's Club. Racine.

A fine address was given by Dr. Rock Sleyster, Wauwatosa, Treasurer of the State Society, on the subject of "The Chronically Sick Patient."

Dr. Henry W. Howe of Racine was elected a member of the Society.

The attendance was good. Luncheon was served at the close of the meeting.

At the November meeting which was held on the 16th, Dr. F. C. Christensen of Racine gave a fine report on "The Fortnightly Medical Clinic" New York Academy of Medicine.

"Medical Shock and Its Treatment in the Course of Pneumonia" was discussed by Dr. L. M. Warfield, Milwaukee, which proved to be very interesting.

Mr. H. L. Emmerich, Milwaukee, President of the Wisconsin Pharmaceutical Association, gave an interesting talk on "Listed Drugs and Proprietaries."

S. J.

ROCK

Dr. S. R. Gifford of Northwestern University School of Medicine gave an address before the Rock County Medical Society at its monthly meeting held at the Hotel Hilton, Beloit, in October.

SHEBOYGAN

The Sheboygan County Medical Society met on November 23rd at the Rocky Knoll Sanatorium with a dinner at six-thirty o'clock. The following program was presented:

"The Treatment of Lobar Pneumonia" by Dr. W. S. Middleton, Madison.

"The Treatment of Empyema" by Dr. J. W. Gale, Madison.

TREMPEALEAU–JACKSON–BUFFALO

Members of this Society met at the Ettrick Hotel, Ettrick, on November 3rd to discuss "Medical Economics" at a round table luncheon. President R. R. Richards of Blair presided.

WAUKESHA COUNTY

The Auxiliary to the Waukesha County Medical Society was entertained by the Medical Society at their annual outing and dinner meeting in July at Chenequa Country Club. In August the Auxiliary reciprocated and sponsored a picnic at Golden Lake park for the doctors. It was decided that an "Auxiliary picnic" be made an annual affair.

The September meeting was held at the Avalon Hotel, Waukesha. Dr. Irene Stemper, Oconomowoc, gave an interesting history of Child Welfare. Mrs. Eben J. Carey, Milwaukee, state president, and Mrs. Walter A. Ford, Sheboygan, were welcome guests and both addressed the meeting. The Auxiliary joined the physicians at dinner.

The October meeting also was held in the Avalon Hotel. Dr. Herman Schumm, Milwaukee, gave an address on Orthopedic Surgery, illustrated with lantern slides, in which much interest was taken.

WINNEBAGO

A meeting of the Winnebago County Medical Society was held on November 15th at the residence of Dr. T. D. Smith of Neenah.

The meeting opened with a duck dinner at six-thirty o'clock after which Dr. Stanley J. Seeger, Milwaukee, President of the State Society, gave an address on burns and their treatment, illustrated with slides.

INTERURBAN ACADEMY OF MEDICINE

The Interurban Academy of Medicine composed of Superior and Duluth physicians held its annual meeting at the Androy Hotel, November 15th, at six-thirty o'clock.

Dr. W. McK. Craig of The Mayo Clinic, Rochester, read a paper on "Brain Tumor."

Dr. E. E. Carpenter, Superior, was elected president for 1934; Dr. W. G. Strobel, Duluth, vice-president, and Dr. M. H. Wall, Superior, Secretary–Treasurer.

MILWAUKEE ACADEMY OF MEDICINE

The Milwaukee Academy of Medicine had as honor guest at their November meeting, held on November 7th, Professor Arturo Castiglioni, Professor of the History of Medicine at the University of Padua. Dr. Castiglioni, who is one of the outstanding historians of medicine and who has written a number of books and monographs on the subject, is in this country in response to an invitation to deliver the Noguchi Lectures at Johns Hopkins University.

Dr. Castiglioni's subject was "The Conception of Infection and Contagion Through the Centuries."

Following the meeting, which was held at 4:30 in the afternoon, a dinner was given at the the University Club in honor of Dr. Castiglioni.

MILWAUKEE OTO–OPHTHALMIC

The November meeting of the Milwaukee Oto-Ophthalmic Society was held at the University Club on the 28th. The meeting was preceded by a dinner at 6:30 P. M.

The following scientific program was presented:

1. "Roentgenological Study of the Hypopharynx, Larynx, and Trachea." Dr. J. E. Mulsow. Discussion by Dr. H. C. Dallwig.
2. A case report by Dr. H. G. Schmidt. "Fracture of the Mastoid."

MOUNT SINAI HOSPITAL INTERNS

The first scheduled meeting of the Intern-Resident Alumni Association of Mount Sinai Hospital, for the year 1933–34, was held at the hospital on October 23rd.

The program consisted of a symposium of the Cardiovascular System. The speakers were:

Dr. Norman DeNosaquo—"Normal Anatomy and Physiology of the Heart."

Dr. B. Malnekoff—"The Congenital Cardiac Defects."

Dr. B. Birk—"Physical Diagnosis of the Heart."

A. J. L.

SEVENTH COUNCILOR DISTRICT

The ninth annual meeting of the Seventh Councilor District Medical Society was held at La Crosse on Wednesday, November 8th.

The morning program consisted of surgical and medical clinics held at all La Crosse hospitals with case demonstrations during the forenoon. The programs at the hospitals were as follows:

GRANDVIEW HOSPITAL

Dr. B. W. Mast, Chairman

9:00. Treatment of Varicose Veins by Injection Methods ----------Dr. W. A. Henke
9:30. Eclampsia----------Dr. B. W. Mast
10:00. Mastoiditis without previous Otitis Media history Case reports----Dr. R. L. Eagan
10:30. Agranulocytic Angina Case report---------Dr. N. P. Anderson
11:00. Postoperative Psychosis-----Dr. F. D. Roth
12:00. Luncheon

LA CROSSE LUTHERAN HOSPITAL AND GUNDERSEN CLINIC

Dr. Gunnar Gundersen, Chairman

8:00–10:00. Operative Clinics
10:00. Transurethral Prostatic Resection Present Status----------Dr. Alf H. Gundersen
10:30. Cancer of the Lung---------- ----Dr. M. Sivertson and Dr. E. C. Smith
11:00. Intestinal Obstruction ----------Dr. A. Gundersen, Sr. and Dr. Gunnar Gundersen
11:30. Treatment of Syphilis-Dr. Paul C. Gatterdam
12:00. Luncheon at Lutheran Hospital

ST. FRANCIS HOSPITAL

Dr. R. E. Flynn, Chairman

8:00–9:30. Surgical Clinics by Members of Staff
9:30. Osteomyelitis----------Dr. R. E. Flynn
9:45. Peritonitis in Children----Dr. J. E. McLoone
10:00. Skull Fractures----------Dr. A. A. Skemp
10:30. Treatment of Congential Syphilis----------Dr. S. M. Welsh
11:00. X-ray Museum of Surgical Pulmonary Tuberculosis and Demonstration of Cases-Dr. J. A. Evans, Dr. M. A. McGarty
11:30. Urologic Demonstrations --Dr. W. E. Bannen
12:00. Luncheon at Hospital

LA CROSSE HOSPITAL

Dr. W. J. Jones, Chairman

General Surgical Clinic

8:00–9:00. Repair of large Ventral Hernia with Live Fascia Transplants. Drs. Jones, Heraty and Alvarez
9:30. Radical Sequestrectomy for Chronic Osteomyelitis of the Tibia. Drs. Jones, Heraty and Gray
9:00–10:00. Eye, Ear, Nose and Throat Clinic----------Drs. Douglas and Eidam

Dry Clinic

10:30. Teratoma Testes----------Dr. G. R. Reay
10:45. Angioneurotic Edema with demonstration of case----------Dr. G. D. Reay
11:00. Industrial Aspect of Silicosis with report of case----------Dr. Edythe Swarthout
11:15. Semilunar Cartilage with demonstration of case----------Dr. L. Hanson
11:30. An Atypical type of Movable Kidney ----------Dr. J. E. Heraty

11:45. Various types of fractures and problems of treatments_____Dr. W. J. Jones

12:00. Luncheon at hospital. Hon. George Gordon of La Crosse spoke on some legal aspects of medicine.

AFTERNOON AND EVENING PROGRAM AT HOTEL STODDARD

2:00–4:00 Symposium on Anesthesia in Obstetrics —R. M. Waters, M.D., Professor Anesthesia, University of Wisconsin, Madison. John W. Harris, M.D., Professor of Obtetrics, University of Wisconsin, Madison.

4:00. Modern Methods in Diagnosis and Treatment of Pulmonary Tuberculosis—Jay Arthur Meyers, M.D. Minneapolis Professor of Preventive Medicine and Chief of Chest Clinic, University of Minnesota.

5:00. Motion pictures through courtesy of Eli Lilly and Company.

5:30. Visit exhibits.

6:30. Banquet.

7:30. Types of Nervous Indigestion—Walter C. Alvarez, M.D. Rochester, Minn. Section of Internal Medicine, Mayo Clinic.

8:30. Treatment of Burns—Stanley J. Seeger, M.D. Milwaukee, President of Wisconsin State Medical Society.

9:30. Brief business session of society.

Officers elected for the coming year are: Dr. R. L. MacCornack, Whitehall, President; Dr. A. R. Bell of Tomah, Vice-President; Dr. C. F. Peterson of Independence, Secretary and Treasurer. The place selected for the next meeting was Whitehall for first choice and Sparta for second choice.

NINTH COUNCILOR DISTRICT

The autumn meeting of the Ninth Councilor District Medical Society was held at Wausau on the afternoon and evening of November 8th.

At 3:30 P. M., a fracture clinic was conducted at St. Mary's Hospital by Dr. Kellogg Speed of Chicago.

Following the dinner at the Wausau Club at six o'clock Dr. George H. Stevens of Wausau spoke on "The Treatment of Abortion"; Dr. L. A. Copps of Marshfield gave a talk on "Bronchoscopy" and Dr. Kellogg Speed discussed "Unhappy Results in the Treatment of Fractures."

SPECIAL TENTH DISTRICT MEETING

A special meeting of the 10th District Society was called at Osceola on November 14th at the invitation of the Polk County Medical Society to discuss the status of the profession under the Federal Emergency Relief Administration.

Rumor had been going around to the effect that the Wisconsin Industrial Commission, as representatives of the F. E. R. A., had adopted a state-wide schedule of compensation for physicians, and that there was no alternative but to accept the offered figures. To clarify this question Mr. Crownhart was called to the meeting to advise the district members of the recent developments in the administration of poor relief.

Mr. Crownhart made the following points:

1. That no state schedule had been adopted, and that the probabilities were that one would not be adopted.

2. That it is not the policy of the Industrial Commission to import salaried physicians into the local communities. That the funds being distributed to the states, under the F. E. R. A., were to help the physicians "carry on".

3. That the compensation given the physicians in the care of persons coming under the F. E. R. A. was not a fee for service, but an allowance to help pay for the physicians' overhead.

Dr. N. O. Pearce, President of the Minnesota State Medical Association, gave a short talk of the experiences of the Minnesota physicians under the F. E. R. A.

The representatives from both State Societies emphasized the fact that in all their dealings with the State Directors of Relief they have found them fair and cooperative.

Committees were appointed and offered the following resolutions which were adopted:

"Your committee on the schedule of allowances respectfully submits the following resolution:

> "In consideration of the present set-up of emergency medical relief in Wisconsin under the Federal Emergency Relief Administration, we believe a fixed schedule of services unwise, but express our willingness to accept such allowances for service as may be arranged after consideration by our county societies, state officers and state administrators, such schedule of allowances to exist only for the period of the emergency."

Your committee on the spring meeting of the Society submits the following resolution and moves its adoption:

> "That the Tenth District Medical Society hold a spring meeting, in addition to the annual fall meeting, at Menomonie. That the arrangements for the exact date and program be left in the hands of Dr. F. E. Butler (Menomonie)."

Dr. C. A. Dawson, River Falls, discussed the question of "The Medical Care of the Veteran." A motion was passed that the Tenth District Society go on record and instruct its representative as favoring the treatment of the veteran by the family physician and at local hospitals. G. B. L.

MILWAUKEE NEURO-PSYCHIATRIC

The Milwaukee Neuro-Psychiatric Society held its regular meeting on November 23, 1933, at 8:00 P. M.

at the University Club. President: Dr. M. Kasak; Secretary-Treasurer: Dr. A. Augur.

The meeting was preceded by dinner at six-thirty o'clock.

The scientific program was as follows:

"Tuberous Sclerosis" (with presentation of case) by Dr. M. Kasak.

"Problem in Extramural Psychiatry" by Dr. R. A. Jefferson.

The meeting was well attended. A. A.

THE WOMAN'S AUXILIARY

MRS. EBEN J. CAREY, Milwaukee, *President*

MRS. ROCK SLEYSTER, Wauwatosa, *President-elect*

MRS. GEORGE H. EWELL, Madison, *Secretary*

MRS. R. G. ARVESON, Frederic, *Treasurer*

MRS. WALTER A. FORD, Sheboygan, *Press and Publicity Chairman*

MRS. JAMES BLAKE, Hopkins, Minn., *National President*

Doctors' Wives*

By MRS. RICHARD W. McCRACKEN
Union Grove

In most instances, doctors' wives are like all other men's wives. We are sisters under the skin. You may like especially, and I may like especially, entirely different avocations—even vocations. One may like the cinema, another the bridge game, or golf. You may like the baking, cooking, meal preparation part of your duty; I may care more for sewing or house furnishing, or child raising duties. Each has a peculiar ability as has every other woman.

Then why should we be different from other wives? Because our husbands and our communities expect a different *code*, (if you will) from our group than from others.

In the case of the community, it figures that the doctor has given a long period to the preparation of his work, not only professionally but culturally. He must be not only a good physician or surgeon, but he must be well informed and in touch with conditions, local, state, national, and world-wide. Now a man who is all this is not naturally going to marry some-one who is not prepared and in sympathy with these things. His wife too must be educated to fill effectively a worth while place in life. That means a good teacher, nurse, home-maker, whatever her peculiar talent may be. Doctors may not always be wise in their choice of wives any more than we are always wise in our choice of husbands. You know, my friends, we marry men and not doctors, and very often both man and maid must radically re-adjust habits of life and even of thought.

Are there hardships? Oh yes, a plenty. But there are compensations too. There are the hardships our neighbors see—never being certain of the meal hour, never being sure of an entire night's rest, frequently going places alone, or staying at home if you do not like that. These are annoying. Having your children held up as models in health habits, especially if you have been a nurse, or in text-book ability if you have been a school teacher; these are hard to live up to, and especially for the child, for every healthy child hates to be the model and hates the model. But when your community trusts your ability so completely that they put you on the school board, or to help you put over the Red Cross drive you are gratified.

Only the other day a friend said, "You know I believe that a doctor's wife has the best opportunity to do charitable giving of any woman in the community. She knows home conditions, need of clothing, bedding and food, through her husband's contacts. In a small town where I lived in the Dakotas, the doctor's wife is the recipient of all out-grown, mendable material, clothing, bedding, and excess of gardens and fruits. Her husband keeps her informed of want, and she passes appropriate articles on—this helps shield the proud recipient and relieves the donor of knowing where her gift went."

You listen to your husband's patients' troubles, real or imaginary. Some times it is a real hardship (if your cake is in the oven or you are hoping to find time to do your shopping), but you know that person trusts you, that he knows you will not broadcast what he has told you, that you are sympathetic, and that just talking it out has helped.

Several doctors have told me, some quite unconsciously, what they consider essentials in a doctor's wife. Most of them put *tact* first. We must be interested in our homes. The doctor's social life is of necessity a limited uncertain factor. We must entertain for his pleasure for that is the only time he gets away from professional thoughts and worries. This is not always an easy matter. Those who best understand the limitations and uncertainties are obviously other doctors and their wives. That means a small group of friends, especially in smaller communities. This is why, I believe, you find the doctors' wives interested in women's clubs, school society or church organizations. To these places she can go alone. She can do some research work for the Woman's Club, while listening for the telephone. She can help carry on in the community projects, and at least keep alive some of the interests she had before she was married. Perhaps she will be

* Presented at a meeting of the Woman's Auxiliary to the Racine County Medical Society.

interested in organization work, or religious education, or of bringing some of her experiences to others for their pleasure. A trip and its mementos, a beautiful picture, churches or buildings visited, a musical treat—these are her compensations for less frequent social times.

To go back to qualifications:—a wife should not know her husband's private business. If she is so unfortunate as to learn some fact or item, she absolutely must not publish it. In other words we must be wonderfully good forgetters and even white liars at times.

Wives must be agreeable to people whether they like them or not. A pleasant voice over the telephone is a real asset. And incidentally she must be a competent and ever watchful operator.

I have heard many arguments on the advantages of celibacy among doctors. Some of the arguments are logical and since that is so, the wife should take over the entire management of the household, the training and correction of the children. She should be an economical, careful housekeeper, always living within her means, in other words, shield the doctor from all financial worries. She should help in the business, but not in professional matters. If she has business training she should take over the bookkeeping and collections.

In these times of stress, our husbands are just as busy as ever. The other day a man said, "Well, Doc, you are sitting pretty. I see you out every day and often many times a day. There's a lot of us haven't any work." Your answer and mine is, "Yes, we are busy, we are burning gasoline, supplying drugs and supplies, but never a cent are we getting. It used to be that the doctor was the last to be paid, and now he is never paid."

And now my friends, we are the ones who must cut our allowances, do with less in every line for the sick must be cared for.

Now these are probably not all that our husbands expect of us. I feel sure every one will confess to being short in some of these standards. We are human and no one knows this better than the doctor. If he expects almost the impossible from us, it's because he has great faith in us. Let us be thankful for that faith.

God grant that whatever else we may be, we can make our men better doctors—because of our help—and our children better citizens because their father was a success.

BROWN–KEWAUNEE–DOOR COUNTY AUXILIARY ORGANIZED

An Auxiliary to the Brown–Kewaunee–Door County Medical Society was organized at a meeting in St. Mary's Nurses Home auditorium on Wednesday afternoon, November twenty-second, with thirty-five doctors' wives present.

The meeting was addressed by Dr. Emil G. Nadeau, Green Bay, president of the County Medical Society; Mrs. Eben J. Carey, Milwaukee, state auxiliary president; and Mrs. Robert Fitzgerald, Wauwatosa, national press and publicity chairman. These speakers outlined the purpose and scope of auxiliary work.

Mrs. A. O. Olmsted, Green Bay, presented a resolution recommending the formation of an auxiliary which was accepted as read, after which a constitution committee, with Mrs. A. J. McCarey, Green Bay, as chairman, presented a tentative constitution and by-laws which were approved and adopted. A nominating committee of which Mrs. G. F. Goggins, De Pere, was chairman then presented a slate of officers who were elected as follows: Mrs. D. F. Gosin, Green Bay, president; Mrs. J. R. Minahan, Green Bay, president-elect; Mrs. Frank Wochos, Kewaunee, 1st vice-president; Mrs. E. G. Nadeau, Green Bay, 2nd vice-president; Mrs. F. L. Crikelair, Green Bay, recording secretary; Mrs. W. A. Killins, Green Bay, corresponding secretary; Mrs. R. W. Kispert, Green Bay, treasurer; and Mrs. T. J. Oliver, Green Bay, auditor. Chairmen of standing committees were appointed.

At the close of the meeting members were asked to give their signatures as charter members of the Auxiliary, the fifteenth to be formed in the state. The next meeting will be held in January at the home of Mrs. A. O. Olmsted, Green Bay.

EXECUTIVE BOARD MEETS IN MILWAUKEE

The regular meeting of the Executive Board of the Woman's Auxiliary to the State Medical Society was held on Wednesday, November 15th, at the Y. W. C. A., Milwaukee. The president, Mrs. Eben J. Carey, Milwaukee, presided. Stimulating reports were presented by the State Officers, State Chairmen, and the presidents of the county auxiliaries.

TO PRESS AND PUBLICITY CHAIRMEN

As Press and Publicity Chairman, I do want to express my appreciation and thanks for the prompt and interesting replies that have been sent to me in response to my plea for news. We hope that you will leave no interesting meeting or material unreported.

While news items can occasionally be obtained from the clipping service of the State Medical Society, your own reports of the work you are doing are most valuable to us.

Sincerely yours,
(Mrs. W. A.) Marietta Ford.

COLUMBIA COUNTY

The Columbia County Auxiliary met with the Medical Society at Westfield on November 14th for a 6:30 dinner at Hotel Hammond. A six piece orchestra, tap dancing and cello solo furnished the entertainment. Dr. Arnold Jackson, Madison, was the guest speaker of the evening.

MANITOWOC COUNTY

Members of the Woman's Auxiliary to the Manitowoc County Medical Society held a luncheon at the Catholic Community Center on Wednesday, Nov. 15th. The next meeting will be held at the home of Dr. and Mrs. F. E. Turgasen on December 20th and will be in the nature of a Christmas party.

POLK COUNTY

All of the physicians of Polk County and their wives were present at a seven o'clock dinner given at the home of Dr. and Mrs. George B. Noyes, Centuria, the last of October.

The Auxiliary discussed plans of work for the coming year and added a lighter touch to their program by having contests of various kinds. The Auxiliary is one of the few in northern Wisconsin and as their project last year furnished the county schools with Hygeia.

PORTAGE COUNTY

The Auxiliary to the Portage County Medical Society held a joint meeting with the Medical Society on October thirty-first.

RACINE COUNTY

Following a business meeting and a tea, the members of the Racine County Auxiliary enjoyed hearing a paper entitled "Doctors' Wives" written by Mrs. Richard W. McCracken, Union Grove.

On November 7th the Auxiliary held a luncheon meeting at Sunny Rest Sanatorium which was followed by a trip through the building.

SHEBOYGAN

On November 1st the Woman's Auxiliary held their regular meeting at Pfeilers Restaurant at Sheboygan. Following the luncheon a very interesting talk on "Activities of the Juvenile Court" was presented by Miss Esther Nichols.

NEWS ITEMS AND PERSONALS

Dr. J. B. MacLaren, Appleton, District Governor of Rotary, addressed the Green Bay, Black River Falls, Eagle River, and the New London Rotary Clubs recently.

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Dr. Arnold S. Jackson, Madison, was elected president of the Madison Club at its annual meeting.

—△—

Dr. Arthur Genter of Sheboygan together with five of his friends returned the middle of October from a hunting trip to South Dakota. It is reported that all returned with their limit of pheasants and ducks.

—△—

Dr. C. A. Dawson of River Falls, past commander of the American Legion, spoke before a meeting of the tenth district of the Legion held at Independence.

—△—

At the annual meeting of the International Medical Assembly held in Cleveland in November, Dr. G. V. I. Brown of Milwaukee was re-elected Speaker of the Assembly, and Dr. Arthur G. Sullivan of Madison was again chosen director of exhibits, and Dr. Edwin Henes, Jr., Milwaukee, was elected to the newly-created post of historian.

—△—

Dr. C. E. Zellmer of Antigo was appointed a lieutenant governor of the Wisconsin–Upper Michigan Kiwanis district.

—△—

Announcement has been made of the engagement of Miss Helen E. Carter, daughter of Dr. and Mrs. H. M. Carter of Madison to Mr. Roger A. Hamilton of Clinton, Wis.

Dr. Allan S. White of Rice Lake attended the International Clinical Congress of Surgeons held in Chicago in October.

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Dr. H. P. Bowen of Watertown acted as chairman of the meeting of the Jefferson County Democrats at a dinner held on November 8th.

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Dr. H. E. Kasten of Beloit spoke on his trip to Europe, showing slides and moving pictures, before the Catholic Woman's Club of Beloit.

—△—

Dr. William Snow Miller, Madison, professor emeritus of anatomy, University of Wisconsin Medical School, was chosen a member of the Beaumont Celebration Committee of the New York Academy of Medicine for its meeting of October 5th. This meeting was devoted to celebration of the hundredth anniversary of the publication of William Beaumont's experiments and observations. Wisconsin was honored with a second member of the Committee in Dr. Curtis A. Evans of Milwaukee. There were but thirty members on the Academy Committee from New York and the nation.

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Dr. George H. Conklin of Superior was chosen superintendent of Middle River Sanatorium in Douglas County, at a meeting of the trustees held in November. Dr. Conklin recently returned from a three month's stay in California where he studied at the University of California.

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Dr. T. J. Snodgrass and Dr. W. L. Johnson of Janesville spoke on the poor relief work of the Janesville Kiwanis Club over station WCLO in November.

On Saturday, November 11th, Dr. and Mrs. D. M. Kelly of Baraboo celebrated their 25th wedding anniversary.

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Returning from a hunting trip in northern Canada on November 1st, Dr. W. C. Edwards of Richland Center and his party brought back four deer, one moose and a number of partridges. The moose was a special dish at the Kiwanis dinner at Richland Center.

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The M. and M. Hospital of Marinette celebrated its golden anniversary on November 9th with an all-day program to observe the founding of the institution.

The hospital was founded by Dr. Horace E. Mann in 1883, whose ancestors included Sir Horace Mann, an ambassador to the Court of France under Queen Elizabeth; Dr. James Mann, surgeon in the Revolutionary War, and Hon. Horace Mann, who succeeded John Quincy Adams in Congress. Dr. Mann came with his mother from Vermont to Fond du Lac and studied medicine in a physician's office. After graduating from Rush Medical College he came to Marinette to establish his practice.

The festivities opened in the morning with an informal meeting of the hospital staff to honor Supt. John E. Boren, father of Drs. C. H. and J. W. Boren of Marinette, who has been affiliated with the institution for the past forty-nine years. The anniversaries of Dr. M. D. Bird, Dr. A. T. Nadeau and Dr. H. F. Schroeder, who have been members of the staff for the past 25 years, were also celebrated and each was presented with a token of appreciation of their continuous services.

While open house was being held, a program was also arranged for the visitors which included an address by Dr. C. H. Boren who spoke on the early history of the hospital and of Marinette. A motion picture entitled "How Biological Products Are Made" was presented by the Parke Davis Company.

A buffet luncheon at six-thirty followed by a meeting of the Marinette County Medical Society concluded the day's festivities.

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Drs. Albert R. Tormey and Carl S. Harper of Madison were speakers at the surprise banquet given by the seventeen members of the "Tom" Jones Club, honoring Thomas E. Jones, University of Wisconsin track coach on November 10th.

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Dr. C. O. Hertzman of Ashland, who has been ill for the past several months, has now recovered and has resumed his duties as city health commissioner.

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Dr. Nathan Schneck of Manitowoc spoke on "The Use of Medicine in Eye Conditions" over Station WOMT. This address was sponsored by the Manitowoc County Medical Society. Dr. E. J. Ball, also of Manitowoc gave a talk on "Appendicitis" over this Station.

The members of the staff of the Holy Family Hospital at Manitowoc held a meeting recently at which Dr. Louis D. Moorhead of Loyola University gave an interesting address on "Goitre—Its Causes and Treatments." A number of visiting physicians from out of the county were present.

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Fire, believed to have been started from defective wiring, practically destroyed the office and residence of Dr. J. W. Ehmer of Muscoda. Plans have been made to rebuild in the near future.

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Dr. E. L. Schroeder of Shawano and his daughter, Betty Rae, returned from their European trip on October 18th.

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Mrs. Letitia E. Lightner of Randolph, 85, aunt of Dr. O. H. Epley of New Richmond, died in October. Mrs. Lightner was the first registered woman pharmacist in Wisconsin.

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Dr. James H. McNamara, who was recently licensed to practice in Wisconsin, has opened an office in La Valle, Wisconsin.

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Dr. Charlotte Calvert of the State Board of Health spoke to the members of the professional Panhellenic Association on "The Development and Present Status of Child Welfare Work" at Madison.

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Dr. F. M. Corry of Menasha was elected chairman of the Democratic Organization of Winnebago County at a meeting held in Oshkosh in November.

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Dr. E. A. McKenna of Antigo returned on October 30th with his party from a two weeks' hunting trip to Canada and brought back three moose.

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Drs. F. J. Diamond and L. B. Hansen of Stevens Point have announced the establishment of a clinic to be known as the Diamond–Hansen Clinic.

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Dr. C. A. Dawson and Mr. R. L. Williams of River Falls were winners of the first round at the annual contract bridge tournament held at the Minneapolis Athletic Club on November 7th.

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Drs. H. M. Carter, A. W. Bryan, and J. C. Elsom, all of Madison, were among the Armistice Day speakers at the local schools.

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Dr. W. W. Kelly of Green Bay spoke before the Lions Club of Two Rivers and the Truck Drivers' Union of Green Bay in November.

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Dr. R. K. Irvine of Manawa was elected commander of the local American Legion post.

—△—

Ellen, twelve year old daughter of Dr. and Mrs. M. N. Pitz of Neenah died on October 30th at the home of her parents after a long illness.

Dr. C. M. Gleason of Manitowoc spoke on "The Doctor and the Druggist" before a meeting of pharmacists in the eighth district at Green Bay on October 23rd.

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Dr. C. F. Dull of Richland Center was re-elected as one of the directors of the Richland Center Kiwanis Club.

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Application blanks are now available for space in the Scientific Exhibit at the Cleveland Session of the American Medical Association, June 11th to 15th, 1934. The Committee on Scientific Exhibit requires that all applicants fill out the regular application form and requests that this be done as early as convenient. The final date for filing applications is February 26th, 1934. Any persons desiring to receive an application blank, should address a request to the Director, Scientific Exhibit, American Medical Association, 535 North Dearborn St., Chicago.

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Dr. Burton F. Weston, 72, father of Dr. F. L. Weston of Madison, died on November 18th at his home at Mason City, Iowa, after an illness of several weeks.

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Dr. W. C. Henske of Chippewa Falls was elected president and Dr. S. E. Williams, also of Chippewa Falls, vice-president, of the Chippewa Kiwanis Club for the coming year.

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Dr. H. H. Hull, formerly of North Fond du Lac, has purchased the practice of the late Dr. E. L. Shepard at Brandon.

—△—

Dr. W. M. Wochos of Kewaunee was reappointed county physician at a meeting of the county board.

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Dr. and Mrs. L. H. Nowack, Watertown, have announced the engagement of their daughter, Harriet Amy, to Dr. Anthony Hahn, also of Watertown.

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The State Medical Society of Wisconsin broadcasts over Stations WHA, Madison, and WLBL, Stevens Point, every Tuesday, Wednesday, and Thursday at 10:45 A. M. Following are the subjects of the talks which were delivered during November by Ruth Buellesbach Naset, R. N.:

Nov. 1. What Should the Public Know About Vitamins?
2. When a Child Goes to School.
7. Smallpox.
8. Superstititions and Phobias.
9. It May Be Loaded.
14. Open Season for Colds.
15. Rickets.
16. High Blood Pressure.
21. Cultivating Children's Appetites.
22. Cultivating Children's Appetites (Continued).
23. Something for Nothing.
28. Common Sense and the Common Cold.
29. Exercise and Rest.
30. A Reminder (Thanksgiving).

Dr. George W. Bartels of Janesville, formerly associated with the Munn–Farnsworth Clinic, has opened offices at 322 Hayes Block, Janesville.

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Dr. J. W. McGill, Superior, spoke on child welfare at a monthly meeting of St. Mary's Hospital Auxiliary.

—△—

Dr. Hugh P. Greeley, Madison, spoke before the Madison Altrusa Club, giving an illustrated talk on his work with the Grenfell Expedition.

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Dr. P. J. Dailey, who has been associated with Dr. M. J. Donohue of Antigo since early last spring, has moved back to Elcho where he had practiced for over twenty years before coming to Antigo.

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Members of the Society from out of the city who visited the offices of the State Society recently included the following: Dr. H. F. Ringo of Montreal, Dr. J. M. Dodd of Ashland and Dr. Michael Kasak of Wauwatosa.

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MILWAUKEE

Dr. William H. Studley has been appointed superintendent and resident physician of The Shorewood Hospital-Sanitarium. Dr. Herbert W. Powers has joined the staff of The Hospital-Sanitarium as consulting physician.

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Dr. Benjamin Lieberman returned on November 4th from New York where he took a two-week postgraduate research course at the New York Academy of Medicine.

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Dr. S. N. Franklin, who spent last year traveling in Russia, addressed Milwaukee Jewish college students on "Conditions in the New Russia" on October 29th. He spoke before the Hillel College Club.

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Drs. Arthur W. Rogers and G. A. Carhart left the latter part of October for St. Louis where they were to join a group of friends for a ten-day trip to Mexico.

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On November 5th, the Milwaukee Hospital unveiled a tablet to its former chiefs of staff, signalizing the seventieth anniversary of its founding. The tablet, which is erected in the lobby at the right of the main entrance to the Hospital, bears the names of the three men who preceded Dr. C. A. Evans as Chief of Staff. They are Dr. Nicholas Senn, 1874–1891; Dr. William Mackie, 1891–1908; Dr. Harry A. Sifton, 1909–1928.

Speakers on the program included Dr. Stanley J. Seeger, President of the State Medical Society of Wisconsin, and Dr. Robert Sayle, a member of the Hospital's medical staff for twenty-five years.

Observance of the seventieth anniversary continued throughout November 6th. A dinner in the nurses' home was held for the five hundred and twenty-eight graduate nurses. At the dinner held

for the medical staff, the auxiliary board, and the Milwaukee Hospital Interns' Association, Drs. C. A. Evans, H. A. Sifton, and William P. O'Malley, President of the Interns' Association, were among the speakers.

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Dr. and Mrs. A. W. Gray returned to Milwaukee on the first of November from a two-weeks' holiday in Hot Springs, Virginia.

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The "Silver Anniversary" meeting of the Wisconsin Anti-Tuberculosis Association was held in Milwaukee on October 27th and 28th. Dr. E. J. Carey, Dean of the Marquette University School of Medicine, addressed the meeting held on Friday afternoon, October 27th, on the "Need of Tuberculosis Education in Medical Schools." At this same meeting Dr. Oscar Lotz spoke on "The Why and How of Surgical Procedures in the Treatment of Tuberculosis by Surgery."

On Saturday, October 28th, Dr. A. A. Pleyte addressed the meeting on "The Next Step," under the caption of "The Child and Tuberculosis."

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Dr. D. W. Roberts, of Sacred Heart Sanitarium, spoke before a general meeting of the Whitefish Bay teachers, October 31st, on the subject of "Keeping Mentally Fit."

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Dr. William C. Liefert, chief surgeon at the Veterans' Hospital, was the principal speaker at a good fellowship meeting of North Shore Post No. 331, about the middle of October.

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Dr. Roland Jefferson spoke at a meeting of the Wisconsin chapter of the American Physiotherapy Association at their meeting held at the White Manor Inn on November 3rd.

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Members of The Medical Society of Milwaukee County are contributing their services to a new program inaugurated by the Milwaukee District of the Wisconsin State Nurses Association. Lectures were given in November by Drs. R. E. McDonald, Carl Henry Davis, James C. Sargent, President of the Medical Society, A. B. Schwartz, and R. M. Hall.

During the month of December the following lectures will be given before nursing classes which meet on Monday evenings from 7:30 to 9:00 P. M.

Dec. 4. Burns. Dr. H. O. McMahon.

Medicine

Dec. 11. Diabetes. Dr. Francis D. Murphy.
Dec. 18. Apoplexy. Dr. Joseph Lettenberger.

Surgery

Jan. 8. Principle Underlying Treatment of Intestinal Obstruction and Peritonitis. Dr. E. H. Mensing.

Laboratory

Jan. 15. Newer Diagnostic Tests. Dr. Norbert Enzer.

Orthopedic

Jan. 22. Casts—Bradford Frames. Dr. H. C. Schumm.
Jan. 29. Summary. Dr. Millard Tufts.

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At a meeting of the Nominating Committee of The Medical Society of Milwaukee County, held on November 9th, the following physicians were nominated for offices during the coming year:

President-elect: Dr. Joseph Lettenberger; Secretary: Dr. Dexter H. Witte; Treasurer: Dr. Harvey E. Webb; Director on Board: Dr. James C. Sargent; Censors (1934–1935): Dr. Millard Tufts, Dr. F. A. Stratton.

Delegates (1934–1935)—Drs. Millard Tufts, N. E. McBeath, L. W. Hipke, S. H. Lippitt, R. A. Toepfer, U. A. Schlueter, Wm. M. Jermain.

Alternates (1934–1935)—Drs. William A. Ryan, S. M. Markson, T. S. O'Malley, Elmer H. Gramling, E. O. Gertenbach, W. F. Grotjan, P. E. Oberbreckling.

The personnel of the Nominating Committee is as follows: Dr. E. L. Baum, Chairman; Drs. S. A. Baranowski, H. B. Podlasky, D. D. Mehigan, C. C. Schneider, John E. Guy, John McCabe, W. J. Egan, William M. Jermain.

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Dr. and Mrs. E. F. Peterson, who were called to London, England, by the serious illness of their daughter, Mrs. Mark Osterer, the latter part of October, returned to their home in Wauwatosa on November 18th. Mrs. Osterer returned with her parents and will remain in this country for several months.

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"The Place of Mental Hygiene in Helping Camp Directors Increase Their Service to Campers" was the subject of an address given by Dr. G. J. Rich, of the Milwaukee County Mental Hygiene Clinic, before the Milwaukee Camp Directors' Association at their recent meeting.

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Mrs. Laura Howard McMahon, mother of Dr. Henry O. McMahon, and a former resident of Milwaukee, passed away at her home in Columbus, Ohio, on November 14th, after a long illness.

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On October 26th, Dr. Samuel Plahner addressed the Mothercraft Class of the Milwaukee General Hospital on the subject of "Do We Understand Our Children?"

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Dr. and Mrs. John D. Madison spent the week-end of November 11th at their summer cottage on Lake Wisconsin.

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Dr. D. E. W. Wenstrand represented the Milwaukee area at the alumni conference on educational policies held by Northwestern University, Evanston, Illinois, on November 10th and 11th.

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"Vitamins" was the subject of Dr. S. Baumgarten's address before the Milwaukee Engineers' Forum on November 10th.

Dr. James C. Sargent, President of the Medical Society of Milwaukee County, was the guest speaker at the November 14th meeting of the Business and Professional Women's Club.

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Drs. John W. Powers and John O. Dieterle attended the convention of orthopedic surgeons held in Minneapolis on November 10th and 11th.

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On October 16th Dr. Norbert F. Dettmann addressed the Parent–Teacher Association of the McKinley School in Wauwatosa on the subject of "The Prevention of Diphtheria."

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Three lectures to lay groups were given by Dr. Samuel Plahner during the month of November. On November 19th he spoke at the Grand Avenue Congregational Church on "What Are The Three Questions of Life?" On November 26th he addressed a group of the same church on "What Determines Our Character," and on November 28th he appeared before the Association for Social Advancement, at which time his subject was "Why We Misbehave."

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The first postgraduate course for the fall–winter season got under way on November 10th, when the Wisconsin Urological Society gave over the first day of its two-day meeting to the Postgraduate Course in Urology, sponsored by the Educational Committee of The Medical Society of Milwaukee County especially for the general practitioner.

The following program was presented:

Introductory remarks on "Recent Advances in Urology." E. A. Fletcher, M. D., Milwaukee.

"Hematuria." George H. Ewell, M.D., Madison. Discussion by Charles W. Giesen, M.D., Superior.

"Enuresis." W. E. Bannen, M.D., La Crosse. Discussion by John Schneider, M.D., Oshkosh.

"Intravenous Urography." Cyril G. Richards, M.D., Kenosha. Discussion by A. Schlapik, M.D., Kenosha.

"Pain in Prostatic Infections." Walter K. Gray, M.D., Milwaukee. Discussion by H. E. Kasten, M.D., Beloit.

"Relationship of the Urinary Organs to Systemic Disease." Walter Sexton, M.D., Marshfield. Discussion by H. M. Stang, M.D., Eau Claire.

"Interdependence of Roentgenology and Urology." S. A. Morton, M.D., Milwaukee. Discussion by Erich Wisiol, M. D., Stevens Point.

"Pyelitis." Damon Brown, M.D., Madison. Discussion by Alf. H. Gundersen, M.D., La Crosse.

"Postoperative Considerations in Urological Surgery." Ira Sisk, M.D., Madison. Discussion by W. E. Leaper, M.D., Green Bay.

"Traumatic Lesions of the Urogenital Tract"—Diagnosis and Treatment. Vincent J. O'Conor, M.D., Chicago.

Following Dr. O'Conor's address, those enrolled for the course were assigned to the following instructors: Drs. N. Warren Bourne, S. J. Silbar, W. M. Kearns, James C. Sargent, A. J. Hood.

These members of the Society enrolled for the course:

Drs. E. B. Gute, D. C. Ausman, S. A. Baranowski, A. J. Baumann, C. J. Becker, S. E. Biller, B. I. Bender, L. A. Bernhard, E. P. Bickler, A. L. Bork, M. B. Byrnes, P. C. Callan, E. F. Cook, E. L. Dallwig, N. F. Dettmann, M. M. Guzzetta, S. E. Coffey, Edward Jackson, J. A. Jenner, J. M. L. Jensen, J. L. Kinsey, L. H. Kretchmar, Maurice Kretchmar, F. Kretlow, B. Krueger, A. F. Kustermann, A. R. Langjahr, A. Levine, C. A. Marquardt, Edith McCann, E. Festerling, H. G. Brehm, H. F. Scholz, H. S. Smith, F. J. Stirn, W. L. Stranberg, A. L. Suhr, G. E. Thill, L. A. Van Ells, P. C. Wagner, W. B. Walton, B. Warshauer, W. F. Weingart, R. P. Wiesen, W. P. Zmyslony, P. M. Kauth, C. C. Reinke, W. J. Rauch, J. R. Dundon, C. M. Echols, L. A. Eisenberg, P. J. Eisenberg, J. A. Enright, W. J. Fleming, R. H. Frederick, R. W. Garens, L. T. Gilmer, Nat Goldberg, C. W. Harper, E. Harrington, E. C. Heifetz, George Hoffmann, R. I. Hiller, J. J. McGovern, H. B. Miner, I. D. Mishoff, S. M. Mollinger, W. J. Murphy, A. C. Nugent, P. E. Oberbrechling, E. B. O'Leary, J. B. Ozonoff, C. D. Partridge, Albert Popp, I. B. Reifenrath, H. P. Robinson, E. J. Schelble, C. R. Schneider, D. P. Thill, H. E. Webb, F. J. Mantell.

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The following health talks, sponsored by the State Board of Health and delivered by Mr. Theodore Wiprud, will be broadcast over The Milwaukee Journal Station, WTMJ, during the month of December:

December 7—"The Eyes Have It."

December 14—"How Tuberculosis Can Be Prevented."

December 21—"What Is There To Do?"

December 28—"Profit Or Loss."

These talks are given each Thursday afternoon at 1:45 P. M.

BIRTHS

A daughter to Dr. and Mrs. R. A. Toepfer, Milwaukee, on October 22nd.

A son to Dr. and Mrs. W. F. Grotjan, Milwaukee, on November 2nd.

A daughter to Dr. and Mrs. E. R. Ryan, Milwaukee, on November 11th.

A son to Dr. and Mrs. F. M. Frechette, Janesville.

MARRIAGES

Dr. Sylvester M. Welsh of La Crosse to Miss Eleanor Agnes La Vaque, also of La Crosse, on October 28th at St. Mary's Catholic Church, La Crosse.

Dr. Roman D. Galasinski of Milwaukee to Miss Florence M. Stamm on October 25th at Milwaukee.

DEATHS

Dr. William E. Kramer, a practicing physician and surgeon of Milwaukee for the past thirty-three years, died at his home, 1129 N. Twenty-first Street,

on October 27th, at the age of sixty-five years. Dr. Kramer had retired from active practice but six months before his death.

Dr. Kramer was born in Madison, Wisconsin. He was graduated from the University of Wisconsin; from there he went to the Rush Medical School for his medical training. He served his internship at St. Luke's Hospital, Chicago, and practiced in that city for some time before coming to Milwaukee.

Surviving Dr. Kramer are his widow, a daughter, and a brother.

Dr. Anthony J. Taugher, a practicing physician in Milwaukee since his graduation from the Rush Medical College in 1898, died suddenly at his home, 4308 N. Lake Drive, on November 1st. Dr. Taugher had been in ill health for several months.

Dr. F. E. Shaykett, Brandon, died suddenly at his home on November 8th of heart disease.

He was born in Rosendale Center, March 27, 1865. He was a student at Ripon College and before completing his medical course at Rush Medical College in 1894, he taught school at Markesan and New London. He established an office at Brandon about forty years ago.

Dr. Shaykett was a member of the Fond du Lac County Medical Society, the State Medical Society, and the American Medical Association.

He is survived by his widow and four sisters.

Dr. Gustav A. Kletzsch, Milwaukee, died at a Milwaukee Hospital after an illness of two weeks.

He was born in Newburg, Wisconsin, in 1857 and was a graduate of Bellevue Hospital Medical College, New York City, in 1882.

He is survived by his widow and two daughters.

Dr. O. P. Voigt, Gillett, died on November 19th. He was born in Concordia, Mo., Dec. 15, 1871, and was a graduate of Starling Medical College of Columbus, Ohio. Following graduation he practiced at Sister Bay for a time and came to Gillett in 1901 where he has since resided. He is survived by his widow and one son.

Dr. T. R. Hawkins, Cameron, died on November 17th. He was born in the year 1862 and was a graduate of the State University of Iowa College of Medicine in 1888. He had practiced in Cameron for forty years. Dr. Hawkins is survived by his widow.

Dr. G. H. Dickinson, Milwaukee, died on November 21st at his home after a year's illness.

Dr. Dickinson was born in the year 1868 and was a graduate of Milwaukee Medical College in 1903. He was a former principal of the Howell school in Racine, and taught for several years in Pontiac, Michigan, before going to Racine.

He is survived by his widow and one daughter.

SOCIETY RECORDS

New Members

Randolph W. Kreul, Washington & Grove Aves., Racine.

George P. Dempsey, 1217 Milwaukee Ave., South Milwaukee.

Rudolph P. Gingrass, 208 E. Wis. Ave., Milwaukee.

Raymond James Henderson, Tomahawk.

Changes in Address

Otto S. Blum, Monticello to Albany.

R. C. Mundt, Oconomowoc to Co. 1671, Bay City, Mich.

» » » CORRESPONDENCE « « «

AMOEBIC DYSENTERY

City of Chicago
Board of Health
Herman N. Bundesen, M. D.
President of the Board

November 23, 1933.

Mr. J. G. Crownhart,
Sec'y, State Medical Society of Wisconsin,
119 East Washington Avenue,
Madison, Wisconsin.

Dear Mr. Crownhart:

To keep you informed of the progress of the outbreak of amoebic dysentery having its probable origin in Chicago, I am writing to advise you that to date we have had 302 cases, involving 96 cities, 265 carriers and 22 deaths. It has been traced to almost every state, as well as to Canada and several foreign countries.

In the November 18, 1933, issue of the Journal of the American Medical Association, there is a preliminary report of the Chicago outbreak of amoebic dysentery, together with an editorial, as well as information on the diagnosis and treatment of this disorder.

In the editorial, page 1643, is the statement, "Repeatedly, American investigators and clinicians have emphasized the increasing menace of amebiasis in this country." The number of cases of this disease that we have traced from Chicago, indicates that amoebic dysentery threatens to become a major public health problem in your state.

We are daily learning of cases of amoebic dysentery in which a diagnosis of appendicitis or ulcerative colitis has been made with subsequent operation and usually fatal outcome. The correct diagnosis is made only by autopsy on these cases. Many cases of amoebic dysentery are being treated as intestinal influenza and mucous colitis, appendicitis, or ulcerative colitis.

We would appreciate it greatly if every physician

would advise us of any cases of amoebic dysentery with which they come in contact where there is a probable Chicago origin, giving us the name and address of the patient. It is our purpose to contact these patients by letter, so that we may learn the names of the hotels and restaurants used by them in Chicago. In this way, we hope to get important data which will enable us to find the carriers or cases responsible for their infestation.

Any assistance which you may give us in this matter will be deeply appreciated.

Very truly yours,
HERMAN N. BUNDESEN,
President, Board of Health.

QUESTION OF PROBATE LAW

Sauk City, Wis., November 13, 1933.

To the Editor:

I believe that the attention of the medical profession of the state should be called to a patent source of danger in the matter of collection of accounts from estates of deceased persons. This applies especially to small estates.

The law states that the expenses of administration must be paid first, and these expenses are usually quite high. Secondly, the necessary funeral expenses must be paid; and in the third place, the expenses of the last illness.

One can readily see where the the rub lies; if there is anything left after administration and funeral expenses have been paid, the doctor can collect. I believe this procedure is unjust to the profession. Certainly a more equitable procedure would be a percentage distribution in cases where the estate is obviously not sufficient to cover all these final expenses. Naturally, the law having been laid down by the attorney, he would understandably give preference to his profession.

Let me cite a concrete illustration of how the law works, taken from an actual case: The value and amount of the estate, $290.00; expenses of administration, $76.50 (over 25% of the estate); funeral expenses, $243.00. The law was duly applied, with the result that the doctor received nothing for his services, nor, indeed, were all the funeral expenses paid.

A further point which should be brought forward is the fact that there is no limitation to administration expenses, thus offering a tempting opportunity to unscrupulous administrators, of whom there are always a good many.

In protection for ourselves, the profession should attempt to bring about satisfactory changes in the existing law.

HAROLD A. BACHHUBER, M.D.

RADIUM THERAPY FOR INDIGENT

The Tumor Clinic of the Michael Reese Hospital is conducting a clinical investigation on the treatment of a special group of neoplasms by means of massive radium therapy, and will be glad to accept free of charge a limited group of indigent patients suffering from these conditions. The tumors under investigation are cancer of the tonsil, pharynx, larynx, and prostate; also benign prostatic hypertrophy occurring in patients in whom operation is contraindicated. It is essential that these patients should not have received any previous radiation treatment.

It is requested that the referring physician submit data concerning case before sending the patient.

MAX CUTLER, M. D.,
Director, Tumor Clinic,
Michael Reese Hospital,
29th Street and Ellis Ave.,
Chicago, Ill.

COMMENDS SUMMARY

November 8, 1933.

Mr. George Crownhart, Secy.
State Medical Society of Wisconsin,
Madison, Wisconsin.

Dear Mr. Crownhart:

May I have two copies of the Digest of Poor Relief Laws affecting Care of the Indigent Sick in Wisconsin? I desire them for the local Relief Administration. The copy has been of inestimable value in our deliberations in securing compensation for services and hospitalization for the indigent in Racine County. Would recommend its careful scrutiny and use by each society in their relations with their local relief administrations.

Thanking you, I am

Very truly yours,
T. CHARLES HEMMINGSEN, M. D.,
1332 State Street,
Racine, Wisconsin.

Officers—Committees, State Medical Society of Wisconsin

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Joseph F. Smith, Wausau____Sept., 1935

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Eleventh: Ashland–Bayfield–Iron, Douglas County Societies. *F. G. Johnson*, Iron River, 1936.

Twelfth: Milwaukee County Society. *R. W. Blumenthal*, Milwaukee, 1936.

Thirteenth: Forest, Oneida–Vilas, Langlade, Price–Taylor County Societies. *I. E. Schiek*, Rhinelander, 1935.

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Increased Membership Reported for State Medical Society; Over 2,000 Listed for 1933

Abbotsford:
Shields, G. G.

Abrams:
Faulds, R. C.

Adams:
Shapiro, Harry

Adell:
Bemis, Ira M.

Albany:
Allen, W. E.
Blum, O. S.

Algoma:
Foshion, H. V.
Witcpalek, W. W.

Allenton:
Fisher, R. S.

Alma:
Larson, J. A.

Almena:
Arneson, Thomas

Almond:
Meyer, M. W.

Amery:
Cornwall, W. B.

Antigo:
Bloor, E. G.
Donohue, M. J.
Dorzeski, E. F.
Flatley, M. A.
Lambert, J. W.
McKenna, E. A.
Moore, G. E.
Steffen, L. A.
Wright, J. C.
Zellmer, C. E.

Appleton:
Benton, J. L.
Bolton, E. L.
Brooks, E. H.
Carlson, G. W.
Cooney, E. W.
Dehne, W. O.
Dohearty, F. P.
Gallaher, D. M.
Harrington, Wm. J.
Hegner, G. T.
Huberty, F. J.
Krueger, E. N.
Landis, R. V.
MacLaren, J. B.
Marshall, V. F.
McCarty, R. T.
McGrath, E. F.
Mielke, E. F.
Mills, N. P.
Neidhold, C. D.
Pardee, C. A.
Rector, A. E.
Reeve, J. S.
Ritchie, G. A.
Ryan, C. E.
Swanton, M. E.

Arcadia:
Comstock. E.
Palmer, J. A.
Weber, F. T.

Argyle:
Williams, W. B.

Ashland:
Dodd, J. M.
Grigsby, R. O.
Hosmer, M. S.
Kamm, A. X.
Prentice, J. W.
Smiles, C. J.
Tucker, W. J.
Young, M. L.

Athens:
Bachhuber, H. M.
Frick, Lewis

Augusta:
Prill, H. F.

Baldwin:
Kunny, B.
Swenson, G. B.

Balsam Lake:
Meilicke, W. A.

Bangor:
Ruppenthal, K. P.
Ward, M. W.

Baraboo:
Cahoon, Roger
Farnsworth, A. L.
Irwin, H. J.
Kelly, D. M.
McGrath, E.
Snyder, A. F.
Tryon, F. E.
Winslow, F. R.

Barron:
Coleman, H. M.
Post, C. C.
Ruethin, K. A.
Schlomovitz, H. H.
Smith, Russell C.

Barton:
Driessel, S. J.

Bayfield:
Robertson, M. J.
Shumate, J. K.

Beaver Dam:
Corso, Xavier
Hammond, A. W.
Hoyer, A. A.
Hoyer, G. H.
O'Hora, C. M.
Riopelle, W. G.
Roberts, R. R.
Rosenheimer, A. M.
Schoen, R. E.
Webb, E. P.

Belleville:
Kammer, A. G.

Beloit:
Allen, Jessie P.
Allen, W. J.
Brinckerhoff, F. E.
Brown, E. B.
Burger, H. E.
Crockett, W. W.
Flarity, T. H.
Fosse, B. O.
Fox, P. A.
Friend, L. J.
Friske, Oscar W.
Helm, H. M.
John, George W.
Kasten, H. E.
Keithley, J. W.
Lemmel, J. T.
Ottow, A. F.
Raube, H. A.
Schram, C. F. N.
Shearer, H. A.
Smith, C. E.
Thayer, F. A.
Wilson, R. F.
Zwaska, A. B.

Benton:
Leitzell, P. W.

Berlin:
Casper, S. L.
Scott, B. E.
Wiesender, A. J.

Birchwood:
Ainsworth, H. H.

Birnamwood:
Stauff, G. R.

Black Creek:
Laird, J. J.

Black River Falls:
Krohn, Irwin
Krohn, Robert
Mannis, Harry

Blair:
Richards, R. R.

Blanchardville:
Stuessy, M. F.

Bloomer:
Clauson, C. T.
Fortner, W. H.
Hudek, D. F.
Trankle, H. M.

Bloomington:
Baldwin, F. H.
Glasier, M. B.
Harris, C. F.
McLaughlin, H. J.

Blue River:
Randall, M. W.

Bonduel:
Terlinden, J. H.

Boscobel:
Betz, J. C.
Freymiller, E. F.
Hayman, C. S.
Spiegelberg, E. H.
Tuffley, F. S.

Brandon:
Hull, H. H.

Brillion:
McComb, I. N.
Wagner, A. J.

Brodhead:
Darby, G. S.
Mitchell, E. J.
Ross, M. E.
Taylor, A. R.

Brooklyn:
Gray, Rodney J.

Brownsville:
Fuller, J. D.
Raymond, R. G.

Bruce:
Whalen, M. L.

Burlington:
Bennett, J. F.
Fulton, W. A.
Prouty, W. A.

Cable:
Clark, Kate

Cambria:
Ronneburger, E. O.
Williams, W. E.

Cambridge:
Amundson, K. K.
Bilstad, G. E.

Campbellsport:
Guenther, O. F.
Hoffmann, L. A.

Casco:
Fencil, Y. J.
Kerscher, E. J.

Cashton:
Cremer, C. H.
Mauel, N. M.

Cassville:
Blackbourn, F. E.
Houghton, E. M.

Cato:
Guttman, Paul
Kelley, J. M.

Cedarburg:
Hurth, O. J.
Katz, H. M.
Warnshuis, G. J.

Cedar Grove:
Van Altena, L. A.
Voskuil, A.

Centuria:
Noyes, G. B.

Chaseburg:
Remer, W. H.

Chetek:
Adams, R. W.

Chilton:
Goggins, J. W.
Knauf, N. J.
Minahan, J. J.

Chippewa Falls:
Beier, A. L.
Ellenson, E. P.
Field, Merton
Hatleberg, C. B.
Henske, W. C.
Kelly, J. A.
McCarty, E. O.
McHugh, F. T.
McRae, J. D.
Schwartz, R.
Somers, A. J.
Williams, S. E.

Clear Lake:
Campbell, L. A.
Nelson, A. N.

Cleveland:
Reinert, E. N.

Clinton:
Parker, A. S.
Thomas, W. O.

Clintonville:
Auld, Irving
Finney, W. H.
Miller, E. A.
Murphy, J. H.

Cochrane:
Meili, Emmett A.

Colby:
Christofferson, H. H
Schemmer, A. L.

Coleman:
Graner, L. H.

Colfax:
Cooper, C. A.
Felland, O. M.

Columbus:
Bellack, B. F.
Caldwell, H. M.
Mudroch, J. A.
Poser, E. M.
Schmeling, A. F.
Watson, E. L.

Coon Valley:
Solberg, A. A.

Cornell:
Foster, J. H. A.

Crandon:
Decker, C. O.
Huth, Edgar W.
Ison, G. W.

Cross Plains:
Froggatt, W. E. L.

Cuba City:
Bair, F. M.
Donnell, J. E.
Terry, R. E.

Cudahy:
Fine, J. M.
Krueger, B.
Partridge, C. D.
Smith, H. S.

Cumberland:
Babcock, I. G.
Grinde, G. A.
Lund, S. O.
Thompson, R. C.

Dale:
Archer, W. E.

Darien:
O'Brien, H. N.

Darlington:
Orton, Susanne

De Forest:
Bertrand, J. H.

Delafield:
Barnes, H. T.

Delavan:
Bachelle, C. V.
Crowe, N. F.
Doughty, J. W.
Jacobson, T. L.
Kenney, H. J.
Rice, Fern A.
Wright, C. A.

Denmark:
Hager, F. J.

De Pere:
Kersten, N. M.

DeSoto:
Myrick, A. L.

Dodgeville:
Hagerup, T. A.
Hamilton, D. B.
Morton, H. H.
Reese, William
Walker, H. M.

Dorchester:
Foley, F. P.

Dousman:
Schneider, Hans

Durand:
Schulberg, P. A.

Eagle River:
Oldfield, R. A. A.

East Troy:
Meany, S. G.
Mullen, R. A.
O'Leary, T. J.

Eau Claire:
Anderson, F. G.
Baird, J. C.
Beebe, G. W.
Cook, F. S.
Derge, H. F.
Falstad, C. H.
Flynn, L. H.
Haag, A. F.
Hayes, E. P.
Hayes, E. S.
Henke, Samuel L.
Hoyme, G.
Kinsman, F. C.
Kohl, Martha
LaBreck, F. A.
Manz, Walton
Mason, E. L.
Midelfart, H. C. U.
Mitchell, R. E.
Payne, A. L.
Scullard, G.
Seemann, W. O.
Spelbring, P. G.
Stang, H. M.
Stoland, I.
Tanner, J. W.
Tupper, E. E.
Werner, Nels
Werner, R. F.
Ziegler, J. E. B.

Eden:
Hardgrove, J. H.

Edgerton:
Burpee, G. F.
Cleary, B. L.
Morrison, W. W.
Shearer, A. T.
Shearer, F. E.
Sumner, W. C.

Elcho:
Dailey, P. J.

Eldorado:
Jackson, F. A.

Elkhart Lake:
Rothenmaier, G. L.

Elkhorn:
Herzog, J. V.
Ridgway, E. T.
Sorenson, E. D.

Ellsworth:
Nylander, E. G.

Elmwood:
Breed, A. L.

Elroy:
Ferguson, F. H.
Vogel, C. A.
Vogel, C. C.

Ettrick:
Rogne, C. O.

Evansville:
Guilfoyle, J. P.
Smith, C. M.

Fall Creek:
Zboralski, F. F.

Fall River:
Hunt, F. O.

Fond du Lac:
Alexander, W. S.
Borsack, K. X.
Boudry, M. O.
Boyd, G. T.
Devine, H. A.
Devine, J. C.
Finn, W. C.
Florin, A. C.
Folsom, W. H.
Gardner, L.
Gavin, S. E.
Helz, J. W.
Hutter, A. M.
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McCabe, P. G.
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Mills, R. G.
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Pullen, A. J.
Rehorst, J. J.
Sharpe, H. R.
Sharpe, J. J.
Simon, L. J.
Smith, E. V.
Twohig, D. J.
Twohig, H. E.
Twohig, J. E.
Waffle, R. L.
Waldschmidt, W. J.
Walters, D. N.
Werner, H. C.
Wier, J. S.
Wiley, F. S.
Wojta, W. C.
Yockey, J. C.

Footville:
Harvey, J. R.

Forest Jct.:
Wollersheim, P. J.

Forestville:
Hirschboeck, J. G.

Ft. Atkinson:
Bennett, L. J.
Caswell, H. O.
Chase, Estelle S.
Franzel, J. E.
Gruesen, Frank A.
Morris, R. C.
Venning, J. R.
Young, Will

Fountain City:
Reinhardt, J. P.

Fox Lake:
Elliott, E. S.

Frederic:
Andrews, W. C.
Arveson, R. G.
Diamond, J. A.

Friendship:
Treadwell, G. F.

Galesville:
Alvarez, R. L.
Jegi, H. A.
Younker, F. T.

Gays Mills:
Ackerman, E. T.

Genoa City:
Bill, B. J.

Gillett:
Berg, W. R.

Glenbeulah:
Hansen, John

Glenwood City:
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Wink, R. H.

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Gosin, D. F.
Gosin, F. J.
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Kispert, R. W.
Knox, E. S.
Levitas, I. E.
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Milson, Lewis
Minahan, J. R.
Minahan, P. R.
Minahan, R. E.
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Quigley, L. D.
Robb, J. J.
Rose, Felix
Saunders, O. W.
Schmidt, E. S.
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Tippet, W. P.
Troup, R. L.
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Wolter, H. A.

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Baldwin, G. E.

Greenleaf:
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Gresham:
Litzen, Floyd L.

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Johnson, A. W.
Pierce, D. F.
Wolf, R. C.

Hammond:
Olson, C. A.

Hartford:
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Lehmann, F. W.
Loughlin, T. F.
Sachse, F. W.

Hartland:
Grover, F. L.
Nixon, H. G. B.

Hazel Green:
Fillbach, H. E.

Helenville:
Treskow, Frank

Highland:
Erickson, M. T.
Trentzsch, M. W.

Hillsboro:
Hansberry, P. H.
MacKechnie, R. S.

Hixton:
Petzke, E. A.

Holmen:
Hanson, L. E.

Horicon:
Karsten, J. H.

Hortonville:
Towne, W. H.

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Bradford, E. B.
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Newton, J. E.

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Goetsch, O. F.
Panetti, P. A.

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Peterson, D. R.
Stack, G. F.

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Wilker, W. F.

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Binnewies, F. C.
Clark, W. T.
Cunningham, M. A.
Edden, R. W.
Farnsworth, F. B.
Farnsworth, R. W.
Fifield, G. W.
Hartman, E. C.
Hartman, R. C.
Johnson, W. L.
Klein, Theodore
Kuegle, F. H.
Lapp, H. D.
McGuire, W. H.
Metcalf, G. S.
Munn, W. A.
Neupert. C. N.
Nuzum, T. O.
Nuzum, T. W.
Overton, O. V.
Pember, A. H.
Snodgrass, T. J.
Stevens, J. V.
Sutherland, F. E.
VanKirk, F. W.
Waufle, G. C.
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Evans, J. A.
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Wolf, H. E.

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Jensen, A. B.
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Bardes, Albert
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Barth, G. P.
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Blong, Theo. E.
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Callan, P. L.
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Cron, R. S.
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Epperson, P. S.
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Everts, E. L.
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Fellman, G. H.
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Fidler, Charles
Fitzgerald, Gilbert
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Fitzgibbon, Wm.
Fletcher, E. A.
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Greenthal, R. M.
Griffith, J. C.
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Gute, E. B.
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Haessler, Bertha T.
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Harlow, G. A.
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Jurss, C. D.
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Kretchmar, L. H.
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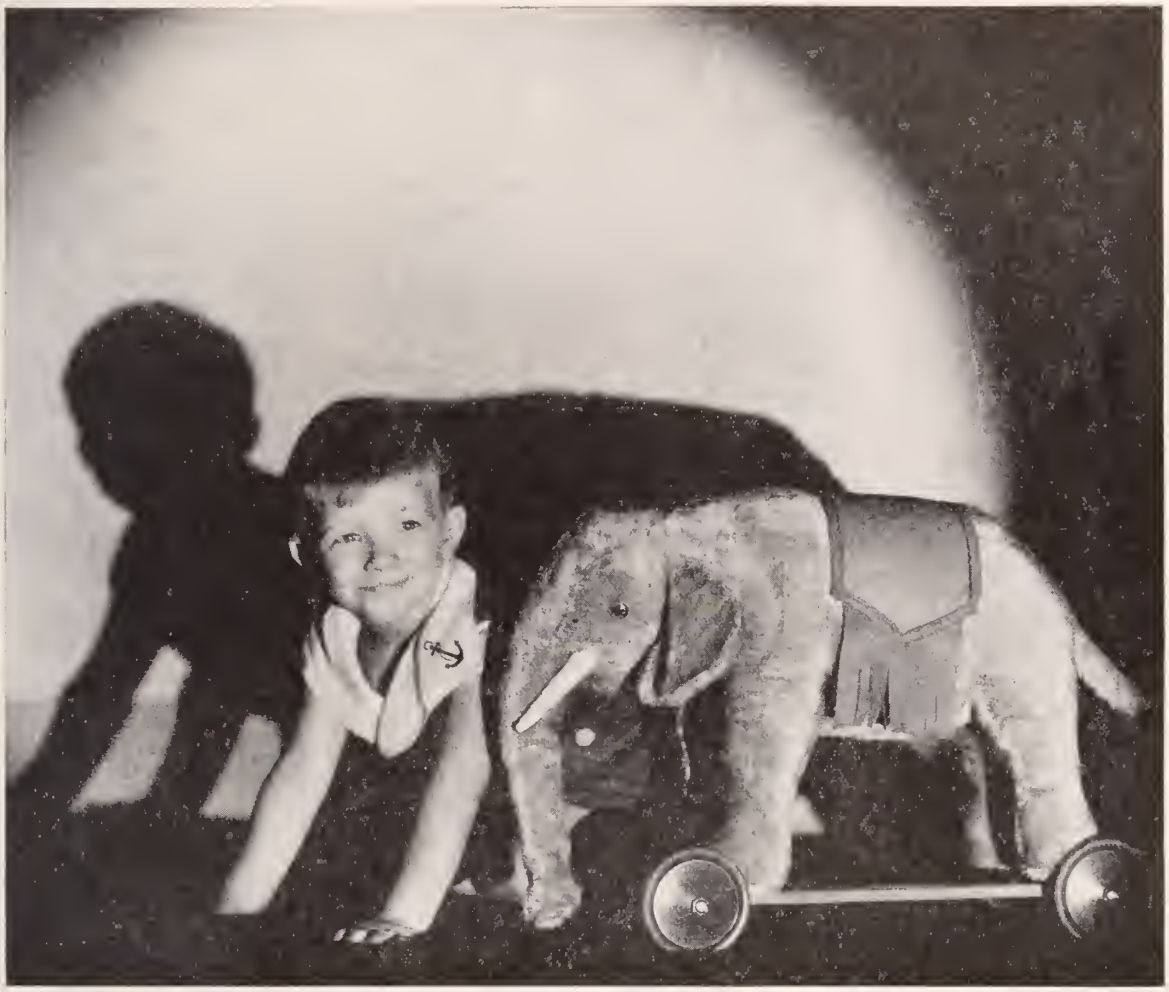

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NASAL POLYPI

(Continued from page 826)

was not definitely known just what type of case was best suited for radium. Neither were the dosage and screening methods entirely familiar. It is therefore all the more remarkable that our conclusions in regard to radium closely parallel the findings of others who have reported on it up to date and who are without exception distinctly favorable to its use.

We believe that the treatment for nasal polypi must ultimately reach the underlying bone condition. Surgery can do this in many

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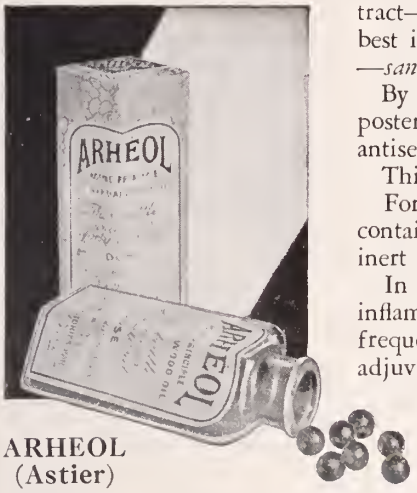

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cases but in many other cases surgery alone is inadequate. Surgery can be aided, however, in those chronic proliferative types involving the ethmoid labyrinth and the recurrence of polypi inhibited by the proper use of radium, which by this time surely has proven of benefit in selected cases.

We believe that the use of the beta rays, especially the more penetrating or "hard" rays, are sufficiently penetrating for use in the ethmoid cells. Consequently we use a higher concentration over a shorter period of time than those using only the gamma rays.

There have been no unfavorable reactions of any importance in any case. The nasal tissues seem to be peculiarly resistant to radium, which seems to have an especially selective action on beginning polypoid tissue.

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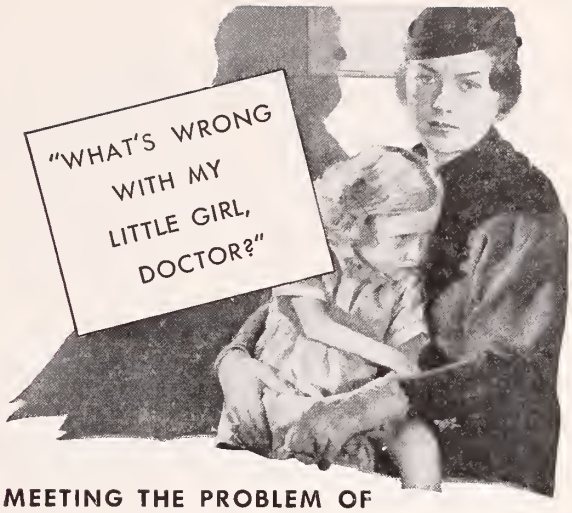

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Bacterial Infection. With Special Reference to Dental Practice. By J. L. T. Appleton, Jr., B.S., D.D.S., professor of microbiology and bacteriopathology, The Thomas W. Evans Museum and Dental Institute School of Dentistry; University of Pennsylvania. Second edition, revised. Lea & Febiger, Philadelphia, 1933.

BOOK REVIEWS

Any scientific publication reviewed in this column may be obtained for inspection. Orders for such inspection should be directed to the Medical Library Service, 424 N. Charter Street, Madison, Wis.

The Physiological Effects of Radiant Energy. By Henry Laurens, Ph. D., professor of physiology in the Tulane University School of Medicine, New Orleans, La. This is an American Chemical Society Monograph. Price $6.00. The Chemical Catalog Company, Inc., 330 W. 42nd St., New York, 1933.

This volume comprises another in a series of monographs sponsored by the American Chemical Society. As stated in the introduction these monographs are to serve two purposes. The first is to present the knowledge available on a chosen topic in a readable form, intelligible to those whose activities may be along a wholly different line. The second purpose is to promote research in the branch of science covered by the monograph, by furnishing a well digested survey of the progress already made in that field and by pointing out directions in which investigation needs to be extended. The author has thoroughly fulfilled these in the present book which concerns itself with the physiological effects of radiant energy. The volume brings together a large source of material in abstract form. Chapters are devoted to the physics of radiant energy, effects on the skin, on wounds and skin diseases, on the eye, circulatory system, blood, metabolism and on body temperature, respiration and blood reaction. One chapter is given over to the effects on tuberculosis and a final one on the mode of action of radiant energy on physiological and pathological processes. The largest section is that on metabolism for it is in this field that the greatest amount of work has been done and some of the most brilliant results obtained. The book offers a complete survey of the present status of infra-red, luminous and ultraviolet energy in their relationship to health and disease. It should prove particularly valuable to research workers in this field but can also be recommended to physicians who utilize these forms of energy in the treatment of disease as an up-to-date summary of their therapeutic value. L. W. P.

The Vitamins in Health and Disease. By Barnett Sure, Ph. D., professor of agricultural chemistry, University of Arkansas, Fayetteville, Arkansas. Price $2.00. The Williams and Wilkins Company, Baltimore, 1933.

The foreword by Dr. Walter H. Eddy is certainly justified: "There exist today several excellent texts summarzing the properties of the vitamins, the chemical operations that have been employed in their isolation and identification, and their distribution in natural and manufactured foodstuffs. But what human effects result if these vitamins are omitted from the diet?

"Information on this point is still largely in the original research articles and often expressed there in terms incomprehensible to the general reader.

"There existed, then, a need for an authoritative summation of this type of information about vitamins, a need for its expression in simple, comprehensible language.

"It seems to me that Dr. Sure has accomplished this task, has provided a readable and comprehensive summary of existing data."

The introduction by the author includes the following statement, which is a very fair appraisal of the content and value of this book: "Available texts on vitamins require a knowledge of advanced chemistry. In this book the story of the vitamins is told in non-technical language with emphasis on human relations and applications. Clinical evidence is presented concerning effects on milk secretion, infant nutrition, growth, appetite, and the teeth. The vitamin content of foodstuffs is emphasized, and specific recommendations are offered on how to insure maximum vitamin content in the diet. Detailed information is also given about the vitamin diet during pregnancy, the nursing period, and the first year of life.

"This book is a suitable text for nutrition courses in junior and senior colleges for students without any chemistry, or insufficient preparation in this field. It is a book that medical practitioners may recommend to patients suffering from dietary deficiency diseases. It will assist dietitians and nurses who have had little training in chemistry. It will also assist the housewife in planning the daily menu."

Although Dr. Sure is not a clinically trained man, it is gratifying to note that his conclusions about clinical conditions and recommendations for the human diet are conservative and dependable. This book is consequently a very useful one for clinicians as well as the laity. E. L. S.

The Interpretation of Dreams. By Prof. Sigmund Freud, translated by A. A. Brill, New York. The Macmillan Co., 1933.

This new edition of Professor Freud's magnum opus is the third English edition translated from the latest or eighth German edition which was revised by the author. It contains Prof. Freud's most recent formulations of the psychic apparatus in so far as they relate to the psychology of dreams. About eighty pages of new material have been interpolated, partly in the form of closely printed footnotes containing new illustrative material from contem-

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porary sources. The theory of dream interpretation set forth in the new edition is substantially the same as in the two earlier English translations, except that the revision includes the new psychoanalytic vocabulary which has come into use since the earlier publications. The chapter headings remain the same as in the earlier editions, except for some minor changes in wording. The bibliography has been considerably increased, and is extensive through the literature prior to 1914.

After an introductory chapter dealing with the pre-Freudian literature of the dream, the author devotes his second chapter to the analysis of a specimen dream by which he demonstrates his method of dream analysis and illustrates his thesis that *the dream is the fulfillment of a wish.*

Chapters three and four contrast the simple wish dreams of children and naive grown persons with the disguised and distorted dreams of sophisticated adults. In the latter, social censorship causes a marked discrepancy between the suppressed thoughts which give rise to the dream, and the dream's manifest or literal content. From the consideration of dream distortion the author rewords his formula: *The dream is the (disguised) fulfillment of a (suppressed or repressed) wish.*

Chapter five considers the materials of which dreams are made. This "dream stuff" is characterised as (1) preferring impressions of the last few days, from which the dream selects often (2) those subordinate and disregarded things which would be passed over in waking memory; the dream also makes use of (3) apparently forgotten incidents from the remote past from early childhood. (4) Somatic sources, such as bodily discomforts, play a part in the dream content, usually in a disguised form.

While the meaning of many dreams must be deduced from the individual associations confided by the dreamer himself, certain typical dreams have, within limits, a similar signifigance for each dreamer. This correspondence depends on certain racially typical forms of symbolism.

A long chapter is devoted by the author to the "dream work". Dreaming is set forth as an active psychic process whereby the dream materials are worked into a continuity which more or less satisfies the creative effort of the suppressed emotion seeking fulfillment. Part of the dream method is *condensation*, in consequence of which a complex and involved dream thought may seek expression in a meager part of the dream pattern. Another characteristic of the dream work is *displacement* by which parts of the dream pattern become disarranged from their logical position in the sequence. The manifest obscurity of dreams arises, in part, from a real technical difficulty in representing certain kinds of ideas, such as abstract relationships, which must be presented in some concrete symbol. Most of the characteristic obscurity of dreams, however, is due to the conflict between the egoistic instinctive tendencies which lack fulfillment in waking life and the socially accepted ways of reacting. Tabooed ideas must be set forth either in accepted symbols or in almost unrecognizable disguise.

Sexual symbolism in the dream becomes elaborate and manifold largely because of social suppression. The manifest form of the symbolism depends on the refractory nature of the dream stuff and on the peculiar method of the dream work. Practically any dream materials may be woven into a pattern which has an erotic motive.

The last chapter of Prof. Freud's book concerns itself with the psychology of the dream process. The author proposes a theory of the relationship between the unconscious substratum of the psyche and the preconscious level of the dream. During dreaming, by a process which the author calls regression, the unconscious dream thought emerged into the dream consciousness, not in the more logical form which conscious thoughts assume in waking life, but in some "raw material" of thought, in what appears to be a sort of symbolic emotional language.

The same regression to childish or primitive modes of thinking is to be observed in neurotic symptom formation. Dreaming thus assumes for Mr. Freud an infantile character, a childish way of getting while one is asleep, what is denied by circumstances or taboos in the waking life. If this tendency to live the unreal life of the dreamer persists in the waking state we have the symptoms of the various neuroses, but if it is confined to dreams as in the normal individual, the illusion of wish-fulfillment acts as a safety valve to release during sleep the unconscious suppressions which might distort the personality. The salutary effect of dreaming may be heightened by dream-analysis, whereby the dreamer may be able to discern and to rationalize his unconscious life.

From the foregoing summary it is evident that Prof. Freud's theory is not only one of the outstanding modern contributions to psychopathology, but has profound implications for a rational mental hygiene program both for the child and for the adult. L. N. B.

Diseases of the Chest and the Principles of Physical Diagnosis. By George William Norris, A. B., M. D., formerly professor of clinical medicine in the University of Pennsylvania, chief of medical service "A", Pennsylvania Hospital, and Henry R. M. Landis, A. B., M. D., Sc. D., professor of clinical medicine in the University of Pennsylvania; director of clinical and sociological departments of the Henry Phipps Institute of the University of Pennsylvania. 997 pages with 478 illustrations. Cloth $10.00 net. W. B. Saunders Company, Philadelphia, 1933.

The 5th edition of Norris and Landis' Diseases of the Chest is a welcome revision of a standard text. The conspicuous importance of the section on electrocardiography has been effected largely through the use of very illuminating diagrams in conjunction with each electrocardiogram. The in-

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clusion of the familiar figure 146 might to advantage be supplanted by one of the more contemporary apparatuses; but this section is one of the most comprehensive and useful in the volume.

The inclusion of a section on the "Transmission of Sounds Through the Chest", by Dr. Montgomery, is a very substantial advance. The brief consideration of bronchoscopy in diagnosis by Dr. Louis H. Clerf is suggestive rather than exhaustive.

Certain errors have been perpetuated in the text as for example figure 44 implies that ulnar palpation may replace palmar palpation in the eliciting of tactile fremitus. Physiologic studies have definitely proved that vibratory sense is best developed over the palmar surface of the hand at the level of the heads of the metacarpal bones. It is an interesting commentary that special percussion signs (page 78) to which so much time was devoted by the past generation, now exact only one-half page for their elucidation. In the reviewer's judgment, the space assigned in the text is at least adequate. It is surprising not to find attention given to the recent French work relative to the metallic tinkle of râles in the lung adjacent to pneumothorax. It has been established that the resonating qualities of such air pockets may definitely modify the quality of râles and induce a sound indistinguishable from the metallic tinkle of the hydro-pneumothorax.

The important work of Bedford and Parkinson on the progressive changes of the electrocardiogram in coronary thrombosis has escaped the attention of the editor of this section. There have been a few surprising oversights in the proof-reading of the text, as for example "purcussion" (page 92), capitals in "Studies of Hearts" (page 202), "Clinical and Experimental" (page 295), "penumoconiosis" (page 304), and "diphtheretic" (page 568).

The above cited criticisms in no sense detract from the text, which is a standard in all libraries. No medical student or physician should be without this volume. It is particularly fitting that the dedication should be to the memory of the late Dr. George Fetterolf, whose anatomic sections contribute such a distinctive part to the volume. W. S. M.

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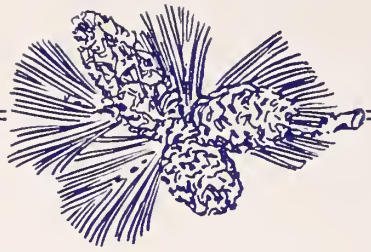

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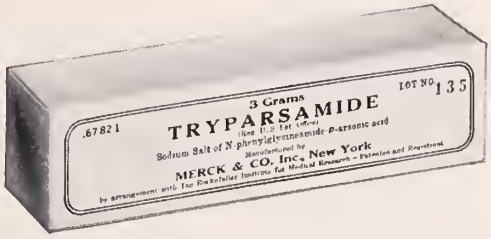

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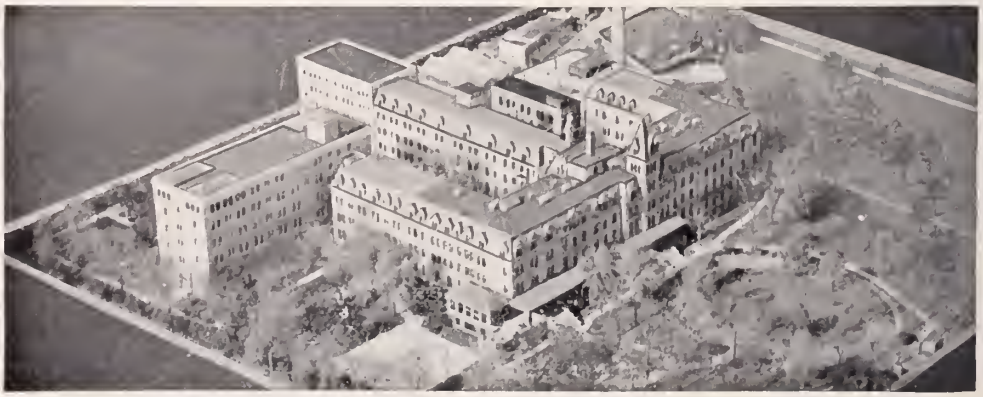

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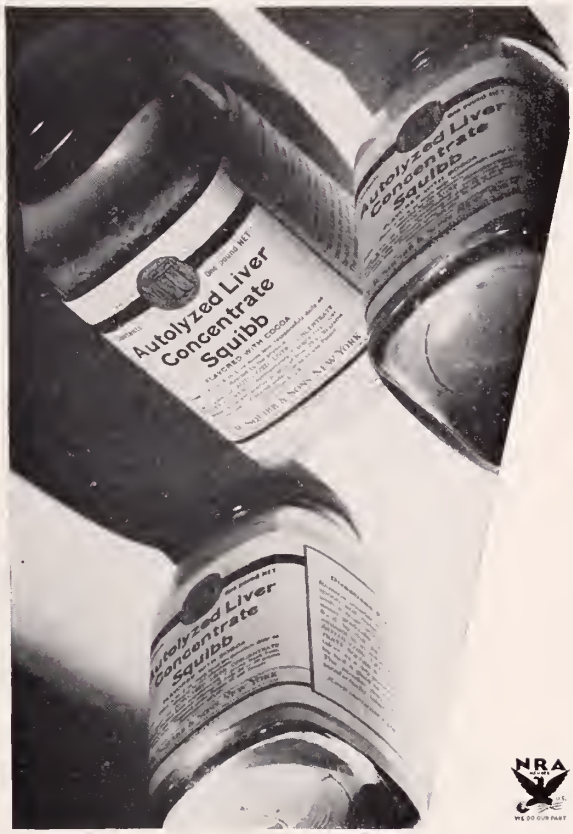

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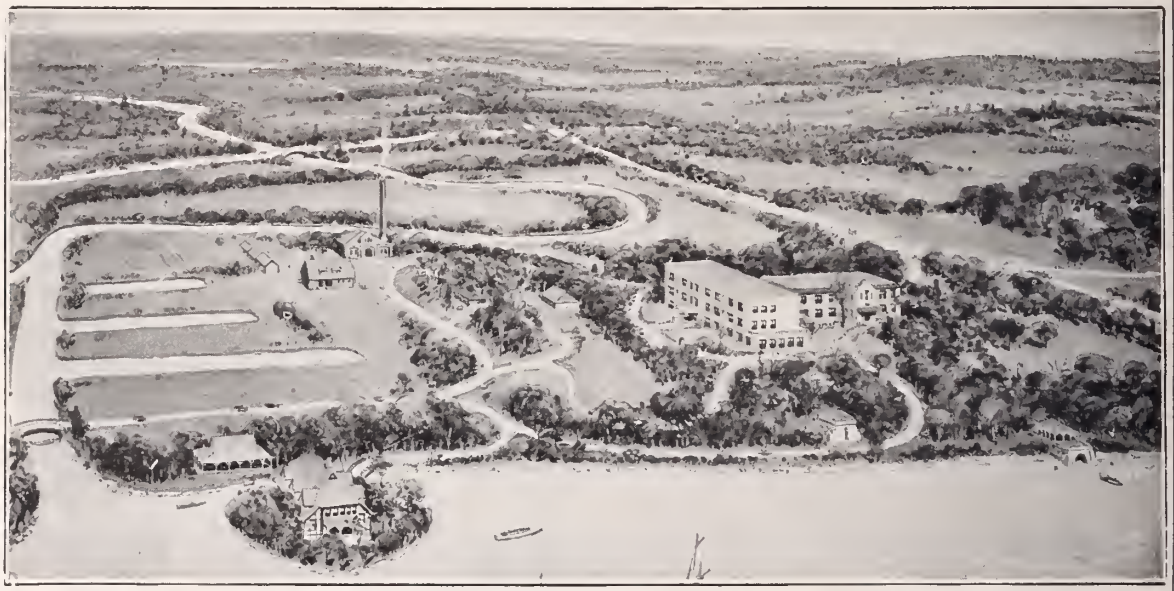

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The La Crosse Medical School*

By WILLIAM SNOW MILLER, M. D.
Madison

IN THE upper reaches of the Mississippi, where the Black and La Crosse Rivers on the east and the Root River on the west join the Great Father of Waters, there was a broad prairie to which these rivers gave the Indians easy access; it was a neutral ground where the various tribes met and engaged in their favorite game of lacrosse. For this reason it was called Prairie la Crosse. Such is the origin of the name of the city of La Crosse, Wisconsin.

French traders were the first white men on the ground, but no regular trading post was established before 1840, when a man by the name of Le Batt opened a post just below the present city; he did not remain long. The first permanent establishment was in 1841, when Nathan Myrick came there to trade with the Indians. In the spring of 1842 he went through the formalities of making a claim to government lands, and, having associated H. J. B. Miller with him in business, he entered into the regular Indian trade.

In 1843 Myrick returned to his native state of New York and while there married Rebecca Isman, of Charlotte, Vermont; he then returned to La Crosse accompanied by Miss Louisa Pierson, who later married his partner, H. J. B. Miller. These two ladies were the first white women in La Crosse.

In 1845 there were seven males and five females in the place, and in 1846 the first frame building was erected. Real growth began in 1851 when La Crosse was organized as a township. At the town election, held in April of that year, there were 36 votes polled. La Crosse was organized as a city in 1856, with a population of 3000; in 1892 its population was 26,000; in 1930 it was 39,600, and it is still growing.

That the statement made in the La Crosse Democrat of April 25, 1864, that "there is no city in the west able to boast of better physicians than can La Crosse," was not an exaggeration is attested by the fact that on December 24, 1859, with a population of about 5,000, a group of physicians met and organized *The La Crosse County Medical Society* "for the purpose of electing officers for the ensuing year."

The following officers were elected:

President, P. S. McArthur.
Vice President, S. C. Johnson.
Recording Sec'y, Dugald D. Cameron.
Corresponding Sec'y, A. P. Blakeslee.
Treasurer, W. L. Kennett.
Censors, Doctors Baxter, Johnson and Wisson.

A committee of three was appointed for the purpose of reporting a Code of Medical Ethics. A committee of three was also appointed "to obtain, if possible, the passage by the State Legislature of a Charter for a Medical College to be located in the City of La Crosse." The meeting adjourned to meet January 11, 1860.

At the meeting January 11, 1860, it was reported that "The Constitution and By-Laws having been burned in the house of Mr. Martindale," a committee of three was, therefore, appointed "to draft a Constitution and By-Laws and submit the same to the Society at its next regular meeting." The report of the committee on Medical Ethics was accepted, as was also a report on a Fee Bill. A committee on Hospitals was also appointed.

At the meeting January 28, 1860, the Fee

* Read at the December, 1932, Meeting of the Wisconsin Medical History Seminar.

Bill and the Constitution and By-Laws were taken up item by item and finally passed and ordered recorded in the Record Book of the Society. Nothing of importance was transacted at the meeting held February 4, 1860, or at that of February 18, 1860.

The meeting held March 3, 1860, was an important one. The Committee on a Medical College "Reported verbally that they have upon due consideration of the subject of establishing a Medical College in the City of La Crosse determined:

"First—to make no application to the legislature for any special act of incorporation at present.

"Second—if practicable and in accordance with the wishes of the Trustees of the Galesville University to establish the Medical Department of said University in this City."

It was resolved "That Dr. Kennett in making effort to procure the passage of a Bill to charter a Medical College in this City does not meet the approval of this Society as the Committee on a Medical College had decided against such effort."

It was also resolved "That our Corresponding Secretary be requested and directed to address a communication in writing to Senator Hutchinson and representative McKay desiring them to oppose the passage of a Bill for an act to incorporate a Medical College in this City at the present session of the Legislature."

This is the last meeting to be recorded until 1885, after which date there are irregular entries until the permanent reorganization in 1897 with a new Constitution and set of By-Laws, which was signed by 41 members.

Although the meeting of the La Crosse County Medical Society on March 3, 1860, was the last one recorded it was not, however, the last one of which we have a record. Through the courtesy of Mr. Arthur F. Giere, the secretary of Gale College at Galesville, Wisconsin, I have the following item copied from the Galesville Transcript of April 6, 1860:

> Meeting of La Crosse Medical Society, March 17, 1860. Hon. George Gale elected an honorary member of Society.
>
> *Resolved*, That we solicit the Trustees of the Galesville University, to locate the Medical Department of the University in the City of La Crosse, as soon as practicable, and we hereby pledge ourselves to aid to the extent of our ability in establishing, and carrying out of the same.
>
> O. O. CAMERON, *Secy.*

This is evidently a mistake; the "D. D."s of Doctor Cameron's signature can, at times, be easily mistaken for "O. O."s.

Mr. Giere also furnished me the following taken from the Minutes of Galesville University Trustees:

> Meeting of Trustees 4–5–1860. Present, Gale, Young, French, Luce, Rublee. Heuston's resignation accepted. S. Fellows elected treasurer and successor to Heuston.

Madison, Wisconsin.

Dear Mr. Crownhart:

I am sending you my manuscript on the La Crosse Medical School. There are gaps in the story that, after five years' search, I have not been able to fill.

The sketch of J. B. G. Baxter is incomplete. I was not able to obtain any data in regard to W. L. Kennett, W. T. Wenzell, or Agustus Brummel, all founders of the College. A photograph of W. T. Wenzell was identified and sent me by Miss Mary E. MacMillan of Chicago. Although I wrote to many persons, no one could furnish me with a photograph of W. L. Kennett or Agustus Brummel. A request for information, or a photograph, of these three in the La Crosse papers brought no answer.

This emphasizes the fact that items dealing with the early history of medicine, and medical men, in Wisconsin are fast being lost. The pioneer doctor was thrown on his own resources and was often obliged to meet emergencies single handed. There must be many interesting items dealing with these early doctors in Wisconsin and their successes that are now known and of interest but lack an historian. It is possible that there may be an old diary hidden away in some attic that should see the light.

The more I learn of the achievements of those hard working doctors, struggling against adverse surroundings, the more respect I have for them.

Sincerely yours,

William Snow Miller.

Resolved to accept proposition of the La Crosse County Medical Society.

LUCE, *Secy.*

Mr. Giere quotes, apparently from the same source, "During the summer of 1860, Dr. William M. Young was elected teacher in the medical department of Galesville University."

In reply to my request for further information about Doctor Young, Mr. Giere sent me a short biographical sketch taken from an "old document pertaining to the genealogy of the Gale family."

William McKowan Young was born March 31, 1829, in Schenectady County, New York. He graduated from the Chicago Medical College in 1852, receiving the degree of Doctor of Medicine. Doctor Young was a brother of Mrs. Gale, whose husband was the founder of Galesville and Galesville University. Doctor Young practiced a few months in La Crosse and came to Galesville in 1854. He is said to be the first teacher of medicine in any school in Wisconsin.

Dr. George H. Young, a pioneer physician in Elkhorn, Walworth County, Wisconsin, was a brother of Dr. Young of Galesville.

It is possible that disagreement over methods leading to the formation of a Medical College and the impending outbreak of the Civil War caused dissolution of the Medical Society. We must now turn to the records of the La Crosse Medical College for further information.

LEGISLATIVE CHARTER ISSUED

In the early days there came to La Crosse four brothers by the name of McMillan; Donald, John, Ewen, and Duncan. Of these brothers Ewen is the only one to enter into our sketch. In the first Constitution of The La Crosse County Medical Society the 9th section reads, "In all suits instituted or defended by the Society, the services of the *attorney* will be required, and for all such services a fair compensation shall be allowed." It is not improbable that the attorney was none other than Ewen Hugh McMillan, for he plays an important part in the final establishment of the La Crosse Medical College.

The La Crosse Sunday Press of February 3, 1895, contains the following statement: "In 1860 E. H. McMillan who was at that time very prominent in the social, political and intellectual life of the City, began to agitate the formation of a medical college in this city. The breaking out of the war interfered materially with the project." On April 18, 1864, the La Crosse Medical College was granted a charter by the Legislature of the State of Wisconsin, then in session. There were seven men, five of whom were physicians in regular practice, who were named as "The Board of Trustees of the La Crosse Medical College to remain in perpetual succession." The five physicians were Dugald D. Cameron, P. S. McArthur, John B. G. Baxter, William L. Kennett and Agustus Brummel; the remaining two were William T. Wenzell, a chemist and druggist, and Ewen Hugh McMillan, a member of the legal profession, and, as previously stated, a prime mover in establishing the Medical College.

The Board of Trustees was granted unlimited power. Section 4 of the charter reads as follows:

SECTION 4. The board of trustees shall have full power in their corporate names, to sue and be sued, to plead and be impleaded, in any Court of law or equity, to have a common Seal, which they may alter at pleasure, to acquire, use, hold and convey property, real and personal. Provided always that the annual income arising from the same shall never exceed ten thousand dollars, to see that every donation or bequest made to the institution be applied in conformity to the conditions on which the same is made, to make all necessary by-laws for the due ordering of their own affairs, and for the governing of the College; to fill all vacancies in their own body from whatever cause occurring; to remove members of their own body, for long neglect of duty; to confer such degrees and other honors upon those they may deem qualified and worthy to receive the same, as are usually conferred by the Colleges of the United States, and in testimony of such grants, to give suitable diplomas under their Seal, which diploma shall entitle the possessor thereof to the immunities and privileges which by usage or Statute are allowed to the possessor of similar diplomas granted by Universities and Colleges, to elect a president who shall be the chief executive officer of the institution, and head of the collegiate faculty, to elect such professors and other officers as in their opinion the interests of the institution may demand; to define the duties of the officers elected, and on sufficient cause to suspend or remove them from office; to determine the amount of all salaries paid or to be paid by the institution, to regulate the course of

instruction and provide the books, subjects, authorities and apparatus to be used in the various departments, to keep a dissecting room and provide subjects therefore, and to have such general powers not herein enumerated and not inconsistent with the letter and spirit of this act, as are granted to Corporations under the name of "gen-provisions" in Chapter seventy-eight of the Revised Statutes of the State.

Although it has been stated that the La Crosse Medical College was primarily organized to make it legal to carry on dissecting, such does not seem to have been the general impression at that time. In the issue of the La Crosse Democrat for April 27, 1864, it is clearly stated that "The intention, which will be sincerely and faithfully carried out, is to have as soon as possible a first class Medical College in the City of La Crosse, with the best apparatus to be found in such institutions, lectures, a dissecting room, etc., etc., complete. Students will be taken and put through a complete course of study at moderate expense."

I have no doubt that this was the ambition of E. H. McMillan, for later events point that way. The La Crosse Tribune and Leader–Press of a later date, however, says the College was "organized to make it legal to carry on dissection. — Besides the name all there was to the College was the dissecting room," and, I might add, a few lectures by the members of the faculty to each other. Again the same publication states "La Crosse once had a medical college which existed for a period of close to twenty years, though it never was a regularly established institution of learning in a building of its own."

In accordance with the act of incorporation a meeting of the Board of Trustees was held April 25, 1864. Of the seven incorporators of the medical college Dr. J. B. G. Baxter was the only one absent. The following chairs were established: Surgery; Anatomy and Physiology; Theory and Practice of Medicine; Materia Medica and Therapeutics; Chemistry and Pharmacy; Obstetrics and Diseases of Women and Children; Medical Jurisprudence.

The following were elected to Professorships:

P. S. McArthur----------Surgery
D. D. Cameron----------Anatomy and Physiology
W. L. Kennett-----Materia Medica & Therapeutics
W. T. Wenzell----------Chemistry and Pharmacy
A. Brummel----------Obstetrics and Diseases of Women and Children
E. H. McMillan----------Medical Jurisprudence

No appointment was made for the chair of Theory and Practice of Medicine.

The first Tuesday in October was designated as the day for the annual meeting of the Board of Trustees. Doctors McArthur, Kennett, and Cameron were appointed to draft the By-Laws of the College. (No copy of the By-Laws can be found.)

The faculty of the college was organized by electing D. D. Cameron, President; E. H. McMillan, Secretary; and W. T. Wenzell, Treasurer. Each member present contributed one dollar towards the expenses of the school; from this fund one dollar and twenty-five cents was expended for a certified copy of the Charter. (This has not been found; the only copy is that in the Records of the college.)

The Board of Trustees met on the fourth day of October, 1864, with D. D. Cameron, A. Brummel, W. L. Kennett and E. H. McMillan present. The only business transacted by these four was to reelect for three years E. H. McMillan and W. L. Kennett to the Board of Trustees, their time of office having expired.

The Board of Trustees and Faculty met November 30, 1864. Dr. J. B. G. Baxter, never having accepted or entered upon the duties of his trusteeship, his office was on motion declared vacant and he was removed therefrom. Dr. M. R. Gage, of Sparta, was unanimously chosen to fill the vacancy and at the same time chosen to fill the chair of Theory and Practice of Medicine. Dr. Palmer, of Salem, was appointed Demonstrator of Anatomy. The Secretary was directed to procure anatomical material as soon as convenient. On motion it was unanimously "Resolved by the Faculty that the Degree of Doctor of Medicine be conferred on W. T. Wenzell, and that a Diploma (be) issued to him in the usual form." (Although this is the only diploma granted in regular form by the College, no trace of it can be found.)

Evidently steps had been taken before the meeting on November 30, 1864, to procure anatomical material, for I found enclosed

in the Records of the college the following letter:

Chicago, Novbr. 26, 64.

Prof. E. H. McMillan, M. D.,
La Crosse, Wisc.

Sir! Dr. J. P. Lynn, Demonstrator of Anatomy in R. M. College, handed me your letter of 24 inst. to answer the same. In reply to it I wish to say that I can furnish you subjects without any injection, at $15.00 delivered to the Express Office. I have no time to inject the subjects for you and I think it better to ship them before they are injected as the arteries break very easy when they are filled up. In regard to the embalming there is no danger that the subjects will spoil without it, as I should send you only fresh ones.

If this suits you please send me your orders and I will fill them as quick as possible.

Respectfully yours,

CHAS. KEIL,
Janitor of R. M. College.

On December 15, 1864, "an assessment of Five Dollars each was levied on the faculty, and that any person choosing to attend the anatomical rooms should have the privilege on paying Five Dollars to the Secretary of the College." All members of the faculty, M. R. Gage excepted, paid their Five Dollars, and in addition H. I. Bliss, a surveyor, paid the fee.

The anatomical material evidently was sent promptly from Chicago, for on December 20, 1864, there was paid to Dr. D. D. Cameron twenty dollars and thirty cents, money expended in procuring anatomical material. The number attending the anatomical rooms was increased on February 9, 1865, by the addition of five persons; one physician, three lawyers, and one dentist.

No meeting of the Trustees of the College was held in October, 1865, as required by the vote of April 25, 1864; but on the fourth day of December, 1865, there was a full meeting of the Trustees and Faculty. Be-

Building in which the rooms occupied by the La Crosse Medical College were situated. The foundations of this building are said to have been laid in 1859.

cause Dr. M. R. Gage had not attended to his duties as a Trustee, or Professor of Medicine, he was removed from office, and Dr. W. H. Stanley of West Salem was elected in his place as Trustee, and Dr. H. Palmer was elected Professor of Medicine. Each person holding office in the College was assessed five dollars to meet current expenses. The rooms occupied thus far by the College were to be given up, and a committee of three was appointed to secure other rooms. Each professor was to deliver five lectures during the ensuing winter, to be delivered in the order of the formation of their chairs. The Secretary was instructed to correspond with the janitor of Rush Medical College, Chicago, in regard to procuring anatomical material. There is no record of any material being sent; but in an account paid to Professor Kennett on December 23, 1865, there is a charge of four dollars for the services of an undertaker.

Nothing of importance was transacted at the meeting of the Trustees, December 11, 1865. The record of the meeting December 18, 1865, is written with a lead pencil on a slip of paper. The professors met at the office of Doctor W. L. Kennett. Doctors D. D. Cameron, P. S. McArthur, W. L. Kennett, W. T. Wenzell, and E. H. McMillan were the only persons present. Doctor McArthur delivered a lecture. Doctor Cameron was to lecture December 21, and Doctor McArthur again on December 23. The only lecture recorded in the Records of the College is that delivered by Doctor McArthur on the evening of December 18, 1865. The subject of the lecture is not given. Letters of some nature had been received; for an entry states "Letters be accepted and placed in the Archives of the College." No trace of them can be found.

At the Annual Meeting held the first Tuesday in October, 1866, four members of the Board of Trustees were present, and the following changes in the Board of Trustees and Faculty were made. Dr. W. L. Kennett no longer appears as a Trustee or as Professor of Materia Medica and Therapeutics; Dr. J. Renggley was elected in his place as Trustee and Dr. A. Brummel was transferred to the chair of Materia Medica and Therapeutics, leaving the chair of Obstetrics and Diseases of Women and Children vacant. Dr. A. P. Blakeslee was appointed Professor of the Theory and Practice of Medicine. It was "Moved and carried that the faculty deliver lectures on Thursday and Saturday evenings of each week after January, 1867. The different chairs to deliver lectures in the order in which they were appointed." No report of these lectures appears in the Records of the La Crosse Medical College.

As will appear later, Dr. D. D. Cameron met his death by drowning August 6, 1867. At a special meeting of the Board of Trustees held on August 20, 1867, Dr. P. S. McArthur was elected President of the faculty and college. Dr. Fox was elected to fill the vacancy in the Board of Trustees. Dr. Anderson was elected Professor of the Theory and Practice of Medicine, the fifth to be appointed in three years. At no time is there any suggestion that lectures were given by a Professor of Medicine.

From this time, until 1881, there is a perfunctory record of a meeting of the Trustees in October of each year in which there is recorded a constant succession of changes in the membership of the Board of Trustees and Faculty. Throughout all these years E. H. McMillan acted as Secretary; it was, no doubt, his desire to keep the charter alive, hoping that something might turn up which would enable the La Crosse Medical School to become an actuality; otherwise he would not have made these formal records of annual meetings.

That La Crosse has developed into a medical center is shown by the fact that there are, at the present time, four hospitals there with the following bed capacity:

Grandview	116
La Crosse Methodist	46
La Crosse Lutheran	140
St. Francis	300

La Crosse can still boast of the excellency of its medical practitioners.

DISSECTIONS AT LA CROSSE

If, as frequently stated, the college were incorporated for the purpose of legalizing dissections, there are scanty records of its being done. We know that a body was ob-

tained from Rush Medical College and dissected in the winter of 1864–65; possibly the undertaker's bill paid December 23, 1865, was for another cadaver.

About 1885–6 or 1887 a body was dissected by some of the physicians still living. The reply to my letter asking where this body was dissected, says: "The room where this body was dissected was rented in a building occupied by a woman of the oldest profession in the world, and the cadaver was obtained by one of our members, who was City Physician at the time, and was probably the unclaimed body of a pauper."

DIPLOMAS

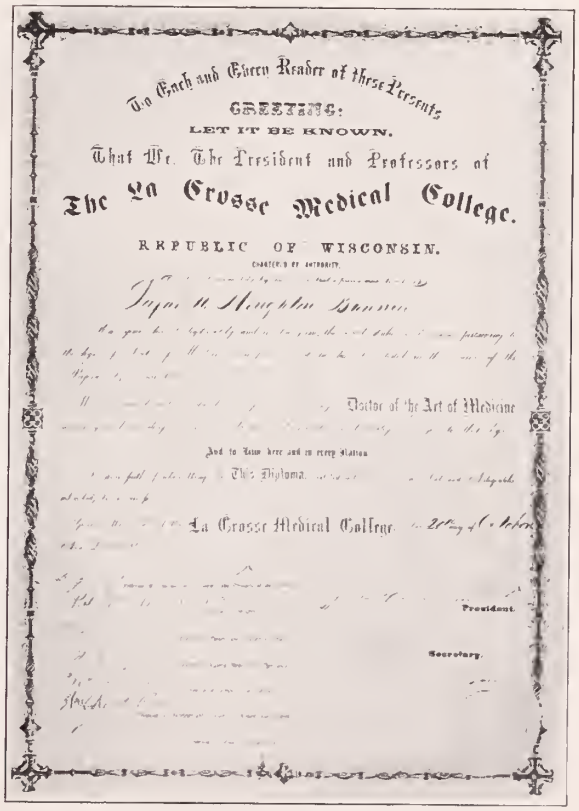
No candidate for a medical degree was ever enrolled at the La Crosse Medical College; the only person now known to have made inquiries in regard to courses in medicine did so after its activity had lessened if not ceased; nevertheless, three diplomas were issued by the college, two of which are in existence at the present time.

The La Crosse Medical College was incorporated April 18, 1864. The first meeting of the Trustees was that for organization, April 25, 1864. The second meeting was held October 4, 1864, at which the only business recorded was the reappointment of three Trustees whose term of service had, under the charter, expired. The third meeting was held on November 30, 1864, at which the degree of Doctor of Medicine was conferred upon W. T. Wenzell, the Professor of Chemistry and Pharmacy; because, as told to me, "it was thought best that the Professor of Chemistry and Pharmacy in a Medical College should have a medical degree;" no trace of this diploma can be found.

Between the meeting of the Trustees on October 4, and the meeting on November 30, 1864, an unrecorded diploma was issued on October 20, 1864, to Lafayette Houghton Bunnell. The diploma of Dr. W. T. Wenzell was granted in due form and recorded in the Records of the college; but nowhere is there any reference to the Bunnell diploma and we should be ignorant of its existence but for the research of Dr. Howard A. Kelly, who finally located a copy in the possession of the Minnesota Historical Society.

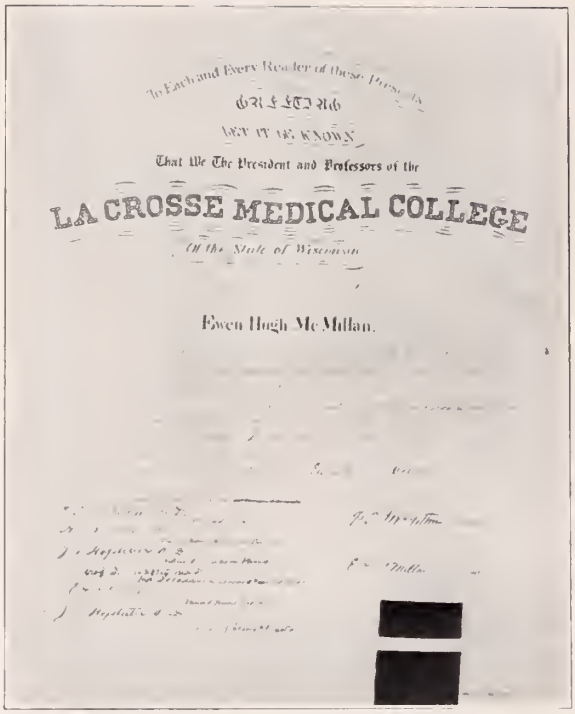
Seal of the La Crosse Medical College.

The third diploma was issued to the Secretary of the College, Ewen Hugh McMillan, October 11, 1869. No record of the granting of this diploma is found in the Records of the College. My attention was called to its existence by an article in the La Crosse Sunday Press of February 3, 1895. Correspondence was opened with children of Ewen Hugh McMillan, and I found that they had in their possession not only their father's diploma but also the seal of the college, both



To Each and Every Reader of these Presents
GREETING:
LET IT BE KNOWN,
That We, The President and Professors of
The La Crosse Medical College,
REPUBLIC OF WISCONSIN.
CHARTERED BY AUTHORITY.
Doctor of the Art of Medicine
And to Have here and in every Station
This Diploma
La Crosse Medical College
President.
Secretary.

Diploma of Lafayette H. Bunnell.


To Each and Every Reader of these Presents
GREETING
BE IT BE KNOWN
That We The President and Professors of the
LA CROSSE MEDICAL COLLEGE
Of the State of Wisconsin
Ewen Hugh McMillan.

Diploma of Ewen Hugh McMillan. Owing to the fact that it was "done in ink," which was none too black, it was not possible to obtain a clear cut reproduction.

of which were generously placed at my disposal.

Marked differences are found between the diploma of Lafayette H. Bunnell and that of Ewen Hugh McMillan; the Bunnell diploma is thirteen and one-half inches wide and nineteen inches long, while the McMillan diploma is nineteen and one-half inches wide and twenty-four inches long; the Bunnell diploma is "printed from a zinc etching — on paper of a good quality," while the McMillan diploma is on parchment and done "With the Pen by B. M. Worthington." The remarkable statement is made on the Bunnell diploma that it is from "The La Crosse Medical College of the Republic of Wisconsin." No *Republic* of Wisconsin ever existed. The McMillan diploma is from "The La Crosse Medical College of the State of Wisconsin." If it were not for the signatures of the professors, which are genuine, it would not be difficult to call the Bunnell diploma a "fake". Miss Grace Lee Nute, of the Minnesota Historical Society, has furnished me with the information about the size and character of the Bunnell diploma.

THE FOUNDERS

Dr. P. S. McArthur

Dr. McArthur was born at Wales, Erie County, New York, October 30, 1822. His father's name was Moses Little McArthur. His mother's name was Mary (Salisbury) McArthur. When eighteen years old he attended the Aurora Academy for three years, teaching school in the winters. He studied medicine with Dr. Paul of Honeoye Flat, Ontario County, New York; then at Geneva, New York, and finally went to Buffalo where he attended the Buffalo Medical College, from which he was graduated in February, 1843. He practiced medicine for three years at Holland, Erie County, New York, and at Caledonia, Livingston County, New York, for six years.

Dr. McArthur came to La Crosse on October 22, 1855. He frequently went to New York for work in the hospitals. He became the leading surgeon in La Crosse and the surrounding country. He married January 1, 1852, Mary Louise Dean. He died at La Crosse September 19, 1896, six weeks before his seventy-fifth birthday.

He had what was probably the only microscope (a Nachet) in La Crosse, and was called upon to examine specimens of suspected pork for trichinae. The only thing in the way of equipment purchased by the Medical College, was a Valentine knife, for which $8.43 was paid on November 13, 1865, and, as Dr. McArthur was the only one who had a microscope, it was evidently for his use.

Dr. Dugald Dudley Cameron

Dr. Cameron was born at Caledonia, New York, May 14, 1826. He graduated from the Cleveland Medical College in March, 1852; he was listed by Rev. Spencer Carr in "A Brief Sketch of La Crosse, Wisconsin," among the "single gentlemen" living in La Crosse in 1854; he was made a member of the Wisconsin State Medical Society, January 30, 1856; secretary of the La Crosse County Medical Society, December 24, 1859; was one of the incorporators of the La Crosse Medical College, April 18, 1864; was appointed President of the College and Professors of Anatomy and Physiology at the

Upper left: D. D. Cameron. Upper right: J. B. G. Baxter. Photograph taken during his service in a New Orleans Hospital. Center: P. S. McArthur. Lower left: W. T. Wenzell. Lower right: E. H. McMillan.

time of the organization of the College, April 25, 1864; was Surgeon of the 14th Wisconsin, Volunteers, Infantry, in the Civil War, and resigned August 5, 1862. He met his death by drowning at La Crosse, August 6, 1867.

DEATH OF DR. D. D. CAMERON, LA CROSSE, WIS., AS RELATED IN LA CROSSE DAILY DEMOCRAT, AUG. 6—SEPT. 23, 1867

Aug. 6, 1867. MYSTERIOUS AFFAIR. About one o'clock this morning the watchman on the steamer *Alice*, and the night clerk in the Northern Line boat office, noticed a man walk deliberately off the Pearl Street levee into the river. Efforts were immediately made to rescue the person, but of no avail, he having been borne down by the swift current. He appeared as though walking in his sleep, or intended to commit suicide, as he made no great efforts to get out.

Circumstances point very strongly to Dr. Cameron as the person, he having been seen about that hour passing down Pearl Street, and has not been seen or heard of since. Officers and his friends have been all day dragging the river and several expert divers strove in vain to find the body, but up to the hour of going to press it was of no avail.

We hope that it will not prove true as concerns the Doctor, as he is an old and highly respected citizen, and would be a great loss to the community in which he has resided for a number of years.

Aug. 7, 1867. The body of Dr. Cameron is as yet unrecovered. One hundred dollars is offered for the recovery of the body, and a number of persons are constantly diving and dragging the river in search of him.

Aug. 8, 1867. Numbers of Dr. Cameron's friends are constantly exploring the river for half a mile down stream in search of his body. Capt. Bantam succeeded in exploding a torpedo under water today in hopes of raising it but of no avail. It forced one end of a raft of logs two feet into the air, throwing water 30 feet and the shock being perceptibly felt 40 feet in shore.

Aug. 11, 1867. About half an hour after the firing of the cannon last evening — after the people had given up hopes of finding the body and gone home, a little son of Mr. Fischer, living on the bank of the river, says he saw the body rise, the face coming out of the water and at once recognized it as being the Doctor. It turned at once in the current and floated down stream with the face to the bottom. He informed some gentlemen what he had seen, but they would not believe the boy's story. Mr. Losey dispatched four men with skiffs to search the river near Brownsville today, but nothing has as yet been heard from them.

Aug. 12, 1867. Notwithstanding reports to the contrary, the body of Dr. Cameron has not yet been found. We think it doubtful if it ever will be recovered, it having probably floated down into some slough filled with brushwood, where it is not likely to be discovered.

Aug. 16, 1867. The body of Dr. Cameron has not yet been found. His relatives offer $200 and the gold watch on his body, or a reward for its discovery. Several have gone below among the sloughs in search.

Aug. 22, 1867. Yesterday afternoon a Norwegian boy found Dr. Cameron's hat where it had lodged about half a mile south of the city against the eastern bank of the slough somewhere near opposite the Fair Grounds. The hat had in it portions of the scalp parted from the head by process of decomposition. Parties are searching for the body in that vicinity but as yet without success.

Sept. 3, 1867. Dr. W. A. Anderson has been appointed examining surgeon for this district, in place of D. D. Cameron deceased. He will enter upon the duties of the office at once. The Doctor has had considerable experience in the army, and we deem him the right man in the right place.

Sept. 22, 1867. DR. CAMERON'S BODY FOUND. The body of Dr. Cameron was found yesterday afternoon, about four miles below the city, at the head of Prairie Island, lying across a log 30 feet from any water. The high water had washed it there and when it receded, the body stuck to the log. It was recognized by the clothing, the flesh

being almost gone. Particulars Monday. Several gentlemen have gone down to bring the body back.

Sept. 23, 1867 (Monday). THE FINDING OF DR. CAMERON'S BODY * * * BROUGHT BACK TO THE CITY AND BURIED. Between six and seven weeks ago, Dr. Cameron, a well known physician of this city was supposed to have walked into the river at the foot of Pearl Street and was drowned, at about midnight. Nothing was positively known until a few weeks after his hat was found in the slough below the city. Since that time no traces could be found of the missing man until last Friday evening when Mr. John Moulton, a farmer living on Prairie Island, seven miles below the city, while hunting his cattle about half a mile from his house, was attracted by his dog barking, and on going to the spot he discovered a man lying in the bushes, in the last stages of decomposition. He at once supposed it to be the dead body of Dr. Cameron, and on Saturday morning came to the city and told the news, when a few friends and relatives repaired to the spot in boats. At first it was thought not to be the Doctor, but on finding a plain gold ring on the third finger of the left hand, it was immediately recognized by his brother. The body was the same, undoubtedly, as that seen by the Fischer boy, immediately after the firing on the evening of the 10th of August. It must have floated down the river to Isle La Plume, when it took the large slough to the left, keeping in a straight current for a couple of miles, then turning to the left again kept on in the high water directly over the head of Prairie Island, and was swept against some willows which held the body. He was lying with his face down, with his head to the east, with his neck against some willows and feet also, and arms extended as if in the act of swimming. His right hand, which had rested on a willow twig, had dropped off, and the bones lay beneath, complete — his left hand had dried and shriveled up so that the ring hung on a finger about the size of a small pencil. The head was separated from the body by decomposition, the reason, we suppose, was that the neck was continually surged against the willows by the flood which wore away the softened flesh.

When the water went down, he lowered with it, and when found was 100 yards from the slough or water. The grass had grown almost waist high since it had lain there. The body had been undisturbed as we found his watch safe in his pocket, hair chain, with the four gold dollars in the centre, hung in his vest, his wallet in the right hand pants pocket, a silver fruit knife, a large gold coin, two keys, a pin-cushion, a letter, etc., on his person. We opened the watch, found that it denoted just twenty-three minutes past 12 o'clock, and as good jewelers say that it would have stopped within five minutes after he struck the water, we have the exact time when he was drowned, which corresponds with the time previously stated.

His wardrobe was complete, except his hat, and his clothes being tightly on him, is all that saved the body from being washed away, a piece at a time. He was carefully placed on a sheet and put in the coffin which had been brought from the city. The remains were then covered with another sheet and the lid closed, and the body of Dr. D. D. Cameron was thus secured from rotting in the lonely morass, and brought to this city, where loving hands can strew his grave with flowers and other tokens of regard be offerred.

The funeral took place yesterday, from the residence of his brother, Hon. Angus Cameron, and was largely attended. A talented gentlemen and true friend has gone and a community is united in its grief. May many years elapse before a like melancholy occurrence happens. Undisturbed may he rest.

Dr. John Bannister Goodnow Baxter

The following is all that I have been able to find out about Dr. John Bannister Goodnow Baxter. He was 2nd assistant surgeon of the 3rd Wisconsin Infantry and resigned January 18, 1862. He then transferred to the Regular U. S. Army. He was commissioned Brev. Lieut. Col. U. S. Vol., October 16, 1865, and was mustered out October 23, 1865. During the last years of the Civil War he had charge of a hospital in New

Orleans, La. After his time of service was over he returned to La Crosse and was, for some years, in partnership with Dr. P. S. McArthur. He next moved to Black River Falls, Wisconsin, and when he retired from practice he obtained a position in the Pension Office at Washington, D. C. The following notice is from the La Crosse Morning Chronicle, Dec. 24, 1892.

Dr. J. B. Baxter died at his home in Washington, D. C., last Sunday afternoon, December 18, aged 68 years. He was an old settler at La Crosse and lived before the war in a house on Cass Street near Sixth, which is still standing though its appearance has been considerably changed. He enlisted as a surgeon in the army, and attained the rank of major. He was medical director for Gen. Banks in the Shenandoah Valley, and went with that General to New Orleans in 1862. At the close of the war in 1865, he returned to Wisconsin and finding the field pretty well filled here, settled at Black River Falls, and went into partnership with Dr. H. B. Cole who served with him in the army.

Not only was he an eminent physician, but was also prominent in politics and was a member of the legislature from Jackson and Clark counties in the session of 1869. Two or three years later he was appointed to membership on the board of expert medical examiners in the pension office at Washington, which position he held until he became, a few years ago, too much enfeebled in health (resulting from his service in the army) for active service.

Dr. Baxter's wife survives him, and he leaves two sons and two daughters — Hawley and Frank Baxter of Washington, Mrs. H. B. Cole of this city, and Mrs. W. B. Hawley of Minneapolis.

Ewen Hugh McMillan

Ewen Hugh McMillan came to La Crosse in 1856; he was of Highland Scotch ancestry, and was born at Finch, Ontario, Canada, July 3, 1834. His father was Duncan G. McMillan, his mother was Mary (McMillan) McMillan; although the name was the same, she was not related to the man she married. Hugh McMillan was tutored in his home town by a Scotch minister by the name of Munroe, under whom he obtained a good classical and general education. He began the study of law before leaving Finch. On coming to La Crosse in 1856, he entered the law office of Tucker and Flint. After a few months' study he was admitted to the bar in the spring of 1857; he then began the practice of law in La Crosse and continued in the same until his death May 10, 1889. During this period he held at different times the position of City Attorney and that of County Attorney. He was fifty-five years old at the time of his death.

Although he was not a physician, he took deep interest in medicine and medical education. He was an earnest student until the time of his death, having a large law and medical library which, unfortunately, has entirely disappeared. That he had a high ambition to make La Crosse a leading medical center is shown by the part he took in establishing the La Crosse Medical College and in trying to keep it alive.

SKETCH OF BUNNELL

Lafayette Houghton Bunnell was born in Rochester, New York, in March, 1824. His father, Bradley Bunnell, was a physician who wandered from place to place. In 1828 he had been in Detroit, Michigan, and in 1832, he and his family moved to Detroit. At this time Lafayette was eight years old. As he grew older he attended various schools until financial reverses compelled him to go to work with Benjamin Le Britton, a druggist in Detroit.

Willard Bunnell, an older brother, who was in the fur trade at Little Bay du Noquet, asked his father to let Lafayette "come up and assist him." Lafayette was at this time seventeen years old. Willard feared tuberculosis, a family disease, and wanted to move to the upper Mississippi. Choice lay between La Crosse and Trempealeau. It was decided by tossing a chip; Trempealeau won.

In 1847 he served in the Mexican War, and in 1849 he went to California seeking gold. In 1849–50, while ascending the old Bear Valley trail, he noted the stupendous peaks of the Sierra Nevadas. Trouble arose near Mariposa creek with the Indians, and the "Mariposa Battalion", of which he was a member, was organized.

To cut a long story short, the Battalion followed the Indians until they finally arrived in a beautiful valley surrounded by high cliffs. Bunnell, in his account of the discovery of the Yosemite says: "The immensity of rock I had seen in my vision on

the Old Bear Valley trail from Redley's Ferry was here presented to my astonished gaze. The mystery of that scene was here disclosed. My awe was increased by this near view." That night a vote was taken for a name, and that suggested by Bunnell, Yo-sem-i-ty, was adopted. (The original spelling; later the final *Y* was changed to *E*.) The name signified in the Indian language, "a grizzly bear." In this manner the valley was discovered, and received its name on the suggestion of Bunnell. This was in the winter of 1850–51.

Bunnell remained in California until his return to La Crosse in April, 1861. He then enlisted in the United States Army. He was appointed hospital steward July 22, 1861, and discharged in May, 1862. He then enlisted in Company B, Second Wisconsin Cavalry Volunteers in November, 1863, and was discharged March 1, 1865, in order that he might accept a commission as assistant-surgeon Thirty-sixth Wisconsin Infantry Volunteers. The tradition at La Crosse is that he was eligible for promotion to Major-surgeon, but could not qualify without a diploma, so the La Crosse Medical School presented him with a diploma in consideration of his record. If this be the case it is strange that nothing is said in the Records of the College. He became surgeon in July, 1865, and was mustered out with his regiment the same month and year. He died at Homer, Minnesota, July 21, 1903, at the age of seventy-nine.

For further information in regard to Bunnell, consult Volume III, 1921, of the Annals of Medical History where the article by Howard A. Kelly will be found which contains a full bibliography.

ACKNOWLEDGMENTS

In addition to the acknowledgments made in the body of this paper, I have received valuable information from Drs. D. S. MacArthur, James A. Evans, and Prof. Albert H. Sanford, of the State Teachers College, all of La Crosse, Wisconsin. The photograph of the building in which the first meetings of the La Crosse Medical College were held was obtained for me by Dr. Herbert Townsend, of La Crosse.

I am especially indebted to Miss Mary E. Mac Millan and her brother A. W. Mac Millan, of Chicago, Illinois, for many items and the photograph of their father, Ewen Hugh Mac Millan, who did so much towards the attempt to organize a medical school in La Crosse.

Dr. W. A. Werrell Named Director for Civil Works Service Projects

The Director of Civil Works Service of the Civil Works Administration, appointed December 29th, is Dr. William A. Werrell, who has been a member of the State Medical Society since 1928. Dr. Werrell served with the American Expeditionary forces for a year and a half. He graduated from the University of Wisconsin Medical School in 1927, having been instructor in the College of Engineering, University of Wisconsin, for eight years previous to his graduation from medical school. Dr. Werrell was a resident physician at Wisconsin General Hospital from 1928–1930. He is now associated with Dr. Everett B. Keck and Dr. Stuart A. McCormick at 1 W. Main Street, Madison.

Dr. Werrell is adjutant of the 135th medical regiment of the Wisconsin National Guard which is commanded by Colonel James P. Dean of Madison.

The office of the Civil Works Service is located in the State Bank Building, 1 W. Main Street, Madison.

Dr. J. Newton Sisk, Madison, Chairman of the Board of Trustees of the Dane County Medical Society, was loaned to the Civil Works Administration at the inception of the Wisconsin program to advise on the medical phases of the work.

Glioma Retinae (Neuro-Epithelioma); Report of a Case*

By RICHARD C. SMITH, M. D. and G. BERDEZ, M. D.
Superior

THIS case is reported because it demonstrates the urgent need of early diagnosis and prompt operative interference in case of glioma of the retina. Glioma of the retina is not hopeless if the treatment is radical and undertaken in the early stages. On the other hand, if the diagnosis is not made early and the disease is allowed to take its course, death is inevitable. Thorough and timely enucleation is the only treatment. In private practice control over the patient is limited and in the case we are presenting the attending physicians were unable to get the entire cooperation of the parents.

REPORT OF CASE

History: On September 4, 1929, a girl, aged two and a half years, was brought to our office by her father. He stated that the child's left eye was "different" from the right. He had noted that the pupil of the left eye was large and it appeared red in a dark room. There was no history of eye trouble in the other two children who were aged ten and twelve years, nor was there history of eye trouble in any of the other members of the immediate family. A brother of the mother died of carbon monoxide poisoning a year previously and an uncle died at the age of sixty-three from cancer of the lung.

When we attempted to examine the child, she cried and fought so that no observation could be made. It was suggested that she be brought in the next day when an anesthetic could be given which would make possible a thorough study of the case. However, the parents did not return with the child until December 27, more than three months later. At this time they stated that for the past six weeks the child had been cross and irritable and they were now willing to permit the patient to undergo anesthesia for the purpose of examination. This was done on the same day.

Examination: The eyebrows were symmetrical. The left eye was markedly exophthalmic and the eyeball was larger than the right. The eyelid was slightly swollen; the margins showed no pathologic change. Puncta lacrimalia were patent, with no swelling of lacrimal sacs. There was circumcorneal injection of the left eye and slight bulging, and bluish discoloration of the sclera at the upper border of the limbus. The left cornea was slightly larger than the right; both were clear and transparent. The anterior chamber of the left eye was almost obliterated. The aqueous was clear in both eyes, and the iris was not discolored. The left pupil was dilated to 5 mm. and did not react to light. The intra-ocular tension of the left eye was 4 plus and stone-like; in the right eye it was normal. There was homogeneous cloudiness of the lens of the left eye with no reflex from the fundus. In the right eye the media were clear and the fundus apparently normal. The nose and sinuses showed no pathologic change. The teeth were normal, the tongue was slightly coated, and the tonsils were enlarged. No adenopathy was noted in the neck.

Diagnosis—A tentative diagnosis was made of intra-ocular tumor, probably glioma of the retina, with secondary glaucoma.

Treatment—Immediate enucleation was advised but the parents refused permission. However, they consulted a reliable oculist eleswhere, who concurred with our diagnosis and advised the parents to return immediately for the enucleation. This was done January 4, 1930. The globe was sent to a general pathologist who returned the following report:

"Section of the eye received from you shows a malignant tumor and also a chronic suppurative process—with much necrosis of exudate and calcification (which prevents perfect sectioning). I should not regard the tumor as a glioma—at least if it is so its histology is very atypical. Architecturally it is a perithelial angiosarcoma with its cellular elements suggesting very immature endothelial cells. It appears to have arisen—outside of the choroid coat—or at least the pigment cells of the coat have been dislocated inward. I find no evidence of retina." (Fig. 1.)

The healing period following the operation was uneventful, and for four weeks the patient did well, the appetite improved, and she slept well. A glass eye was fitted after two weeks and was worn for two weeks with comfort. Slight edema began to appear in the socket and gradually increased. The child lost her appetite, and became cross and fretful. The swelling in the socket increased rapidly. Another operation was done February 26, seven weeks following the enucleation. The orbit was filled with rather hard tumor masses. A complete evisceration was performed. There was profuse bleeding. A specimen of orbital contents was obtained for pathologic examination and the findings were as follows:

* Presented before 91st Anniversary Meeting, State Medical Society, Milwaukee, September, 1932. Revised to publication date.

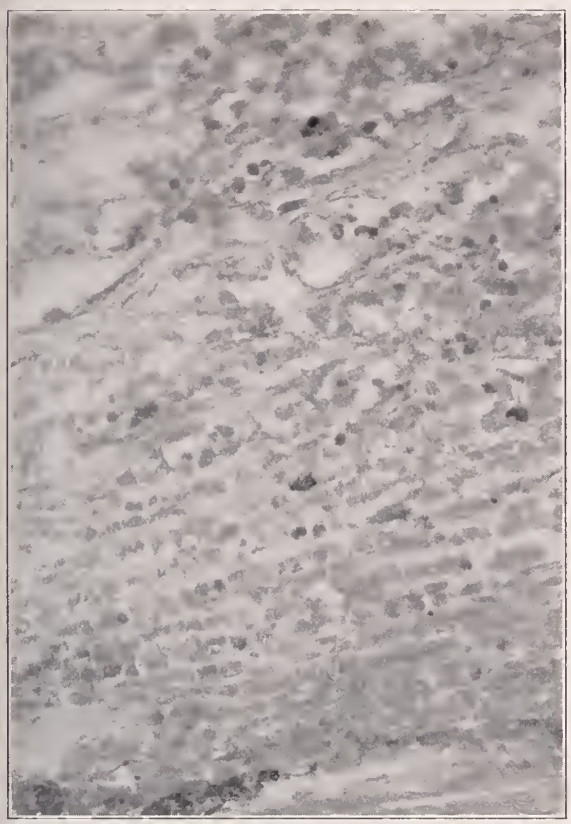


Fig. 1. Primary tumor infiltrating sclerotic membrane.

"Macroscopically the material consists of four pieces of hard tumor tissue. One of the specimens measures 2.2 by 1.5 by 1.4 cm., is largely formed of a grayish-red mass having the appearance of edematous brain tissue. The other specimens are smaller, formed mainly of adipose tissue.

"Microscopically the gray mass is formed by numerous small round cells with relatively large nuclei rich in chromatin. In places, rests of connective tissue can be seen, and these rests show a diffuse infiltration with the tumor cells described above. These tumor cells often form more or less large rows, and these have often the appearance of small low cuboidal epithelial cells. Sometimes the tumor cells show a perivascular arrangement; that perivascular arrangement is seen only occasionally, and is not a dominant feature in the examined areas. The tumor cells are sometimes of irregular size, and occasionally show mitoses. This is a tumor with marked infiltrative tendencies.

"Anatomical diagnosis: recurrence of a glioma retinae, after enucleation of the bulbus oculi."

Immediately following the second operation, the patient seemed to be somewhat better but this state was quite transitory. A little later she seemed to be blind in the right eye. X-ray treatment was instituted after enucleation, but the condition became markedly worse. Three weeks after the second operation we first observed a choking of the disc

Fig. 2. Glioma retinae. (Neuroepithelioma) of left eye, (at time of autopsy).

Fig. 3. Metastasis in the skull.

in the right eye and paralysis of the right side of the face, but no evidence of intra-ocular tumor in this eye. The condition gradually progressed from bad to worse; the child went into a semi-comatose condition and expired April 10.

Report of post mortem examination (Berdez, pathologist).—The eyelids of the left eye are quite prominent (Fig. 2); the left eye is absent and the orbit filled with soft, grayish, granulating tumor masses which show extensive areas of necrosis. There is a prominence about 1 cm. in diameter just above the lateral angle of the right orbit. When the scalp was removed, a tumor mass, about 1 cm. in diameter, was found infiltrating the periosteum (Fig. 3), and showing extensive hemorrhagic softening. A smaller tumor mass is seen infiltrating the upper part of the left fronto-parietal suture; the tumor mass is flat, reddish, of somewhat irregular shape, and measures about 1 by 1.5 cm. Another similar flat tumor mass is seen infiltrating the posterior portion of the sagittal suture. When the cap of the skull was removed the dura was found to be edema-

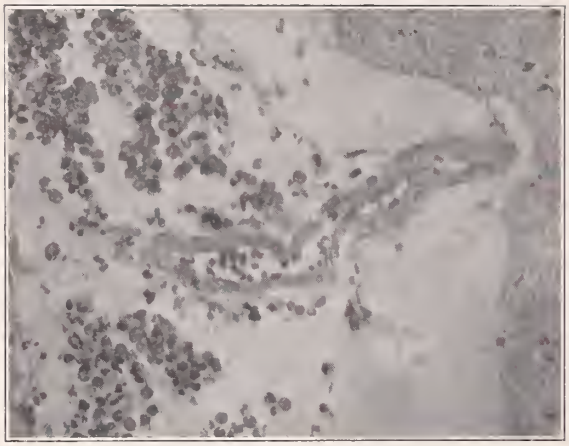


Fig. 4. Neoplastic infiltration of the soft meninges over the left cerebral hemisphere.

tous and it was relatively easily separated from the internal surface of the cranial bones, except at the level of the sutures. The sinuses of the dura contain fluid blood. The cerebrospinal fluid shows increase in amount and is slightly opalescent. The soft meninges are rather pale, edematous, and along the veins of the pia there are extensive whitish cloudy deposits sometimes forming smaller flat nodules; apparently a diffuse infiltration of the meninges and of the subarachnoidal spaces with tumor cells (Fig. 4). These neoplastic infiltrations are especially abundant over the upper surface of the cerebellum (Fig. 5), along the medulla oblongata, and the upper part of the cervical cord. When the brain was removed it was noted that the lower surfaces of the frontal lobes, of the left temporal lobe, of the middle brain, and of the floor of the third vertricles, were very much distorted by large coarsely lobulated tumor masses which had the appearance of grapes. The olfactory bulbs and nerves are completely infiltrated by these tumor masses which also compress and infiltrate the two optic nerves; these fill up the venous cavernous sinuses and the structures which they contain. The position of these tumor masses suggests that they might be an extension of the tumor through the left optic foramen, the superior orbital fissure, and the lamina cribriformis. They are similar to brain tissue but much softer, grayish-white, with several small whitish points on the cut surface. The masses infiltrate the periosteum. The hypophysis is completely surrounded by tumor masses, and flattened. The orbit is also filled with tumor masses showing extensive areas of necrosis. The tumor masses, prominent at the base of the skull over the roof of the left orbit, reach into the anterior horn of the left ventricle. The floor of the third ventricle is also partly destroyed, and replaced by tumor tissue. These tumor masses could, without too much difficulty, be separated from the brain itself, because of the extreme edema of the brain tissue immediately in contact with the tumor masses. The ventricles of the brain are dilated, especially their pos-

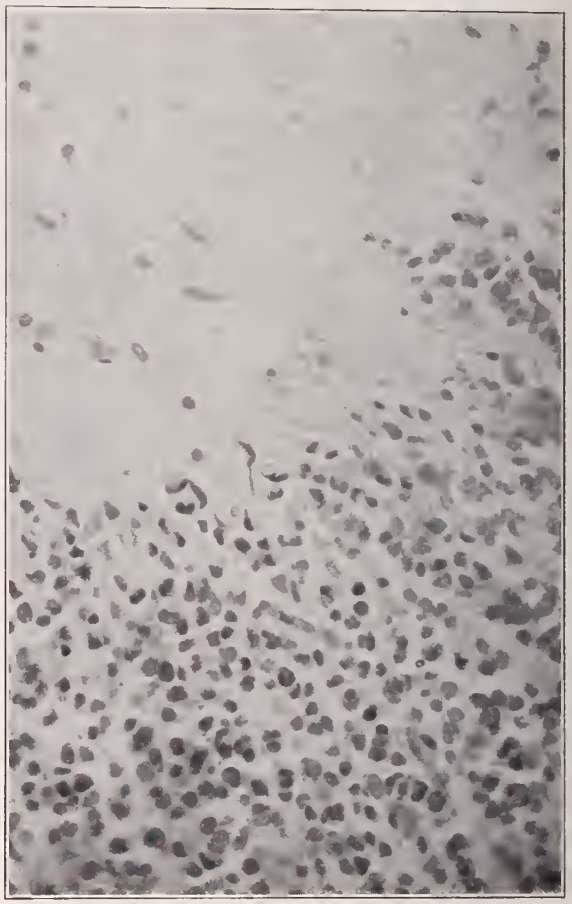


Fig. 5. Neoplastic infiltration of the cerebellum.

terior horns. The ependyma show white deposits in places. The brain substance is pale and edematous. The middle ears show nothing of note. The dural sac is distended. The spinal cord is much larger than normal; the subdural spaces are filled with tumor masses in which are imbedded the roots of the spinal nerves and the cauda equina. The spinal cord itself is much thicker and softer than normal, and on cut surface is extensively replaced by tumor masses some of which are softened.

The ovaries are larger than usual at that age. On cut surface, the left ovary shows a tumor mass about 1 cm. in diameter which has the appearance of brain tissue. A small similar tumor mass is found on cut surface of the right ovary.

The surface of the liver is smooth; the anterosuperior surface shows a slightly prominent yellowish tumor mass. On cut surface, this mass is about 2 cm. in diameter. The liver tissue is rather pale; the markings are distinct.

Microscopic examination: Sections through the fungating masses partly filling the left orbit show that they are formed mainly by tumor tissue in which rests of muscle tissue, of nerves, and of blood vessels can be recognized. The tumor tissue is formed by small round cells with little or no apparent cytoplasm; the nuclei are round

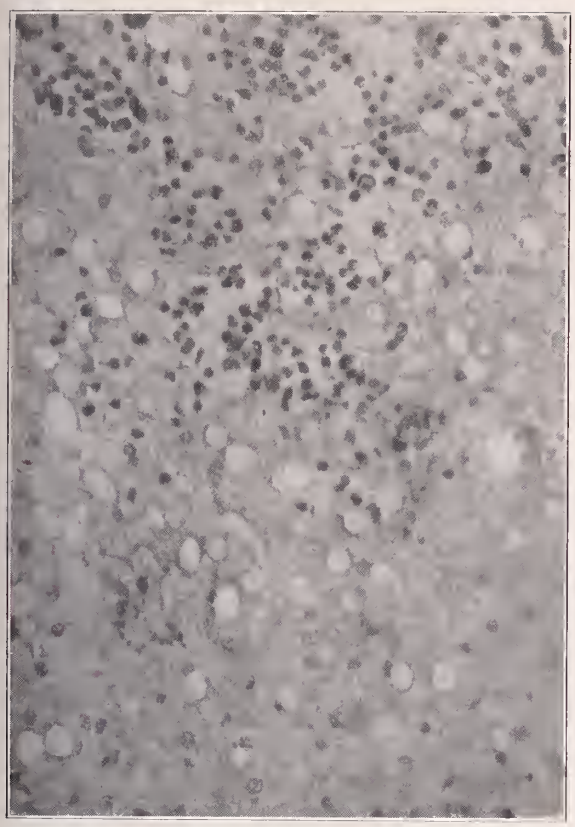


Fig. 6. Tumor metastasis in the liver. (Edge of the metastasis).

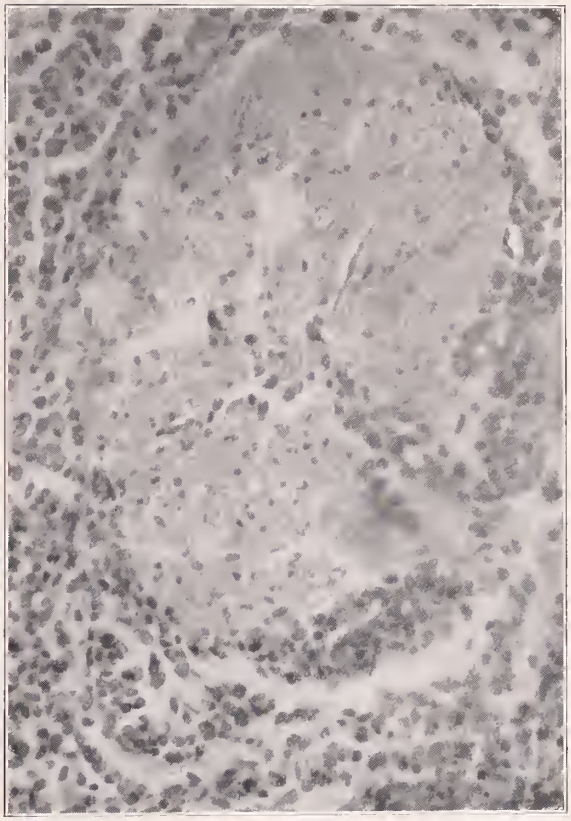


Fig. 7. Infiltration of a spinal nerve by tumor cells.

and rich in chromatin. Occasional mitoses can be seen. The tumor cells for the most part show no definite arrangement. At a few places, they show a slight tendency to form rows or cords, and occasionally a tendency to perivascular arrangement; no "rosette" can definitely be recognized, a few thin fibrillar elements can sometimes be seen between the tumor cells.

Sections through the cerebrum, the cerebellum, and the medulla, show that these formations are the seat of neoplastic infiltrations with tumor cells similar to those already described; there, no definite arrangement of the tumor cells can be recognized. In places the tumor cells are densely grouped, forming compact cellular tumor masses; at other places the tumor cells infiltrate massively the meninges, infiltrate and sometimes replace the tissue of the cerebrum and of the cerebellum, showing here and there a tendency to spread along the blood vessels of these structures. At the limit between the infiltrating tumor tissue and infiltrated structure, there is no reaction or almost no reaction; this is especially striking in sections of the cerebellum and of the medulla where in places extensive replacement of the normal structure by tumor tissue has occurred. The roots of the spinal nerves are often completely surrounded and embedded in tumor masses. Some of these roots are infiltrated by tumor cells to such an extent that the root can scarcely be recognized as such. This infiltration of the spinal cord and spinal nerves is quite especially marked in the lower part of the cord and in the nerves of the cauda equina.

Sections through the yellowish tumor described in the liver show that it is formed by a very marked localized fatty change of the liver tissue and areas of extensive infiltrations with tumor cells similar to those found in the neoplastic masses of the orbits and of the central nervous system. The tumor cell infiltration apparently starts from the periportal spaces and spreads from there into the liver lobules. Tumor cells can be seen often within the capillaries of the liver. Rests of atrophic liver cells, often loaded with fatty droplets, can be recognized in places, embedded in more compact infiltrations of tumor cells.

The tumors described in the ovaries show a structure similar to that of the tumor masses infiltrating the meninges and the central nervous organs. There is only very little or no reaction at the limit between ovarian tissue and tumor tissue.

A diagnosis is made of extensive local recurrence of glioma after removal of the left eye; invasion of the base of the skull; diffuse infiltration of the meninges of the brain and of the cord; extensive metastases in the spinal cord, in the liver, in the ovaries, and in the periosteum of the skull.

DISCUSSION

Glioma retinae is a disease of childhood, most cases occurring before the age of three. This is a malignant growth of the retina composed chiefly of small round cells with large nuclei characteristically arranged around blood vessels and showing great tendency to degenerative changes. It bears no resemblance to glioma of the brain and probably originates in fetal, undifferentiated retinal cells. It may occur in both eyes and is often found in members of the same family. The disease progresses rapidly, and, since time is an important element, the importance of early diagnosis and early enucleation is emphasized. These cases are extremely rare in private practice and the patient is sometimes treated for acute inflammation of the eye. The examining physician should be warned that when there is a suspicion of neuro-epithelioma there should be a thorough examination under general anesthesia if possible. In the case just reported, we were unable to get the cooperation of the parents, although we suspected some intra-ocular condition when the child was first brought to the office. They objected to the administration of the anesthetic and did not return with the patient until nearly four months later when they became alarmed over the child's condition. By this time the crystalline lens was opaque and we were unable to get a view of the posterior chamber. However, it could be noted that there was slight enlargement of the eyeball and slight anterior scleral staphyloma which resulted in a bluish-gray color of the zonule. The intra-ocular tension was markedly increased.

The tumor was probably in the third stage of development. In this stage the tumor sometimes grows out from the eye. In our case it probably extended along the optic nerve before enucleation as perforation had not taken place in the anterior segment of the globe. The metastases in this case were typical; The tumor masses infiltrating the meninges, the central nervous organs and the cerebrospinal nerves were evidently due to irruption of tumor cells in the subdural and subarachnoidal spaces, and their transportation by the cerebrospinal fluid. The metastases to the skull may have taken place by the lymphatic vessels. The metastases to the ovaries and to the liver show definitely that tumor cells were also transported by the blood stream, thus reaching probably every organ of the body.

Many investigators believe that when glioma retinae occurs in both eyes it is primary in each eye and not due to metastasis. The right eye in our case was examined with the ophthalmoscope but we did not observe any evidence of tumor in this eye. However, in the later stages there was retinal edema and some choking of the optic disc. Unfortunately no postmortem examination of this eye was obtained.

Vossius reports one recovery in ten cases. The immediate result from the use of radium was, on the whole, good. In our own case we used x-ray therapy, instituting treatment after enucleation. Many authorities have recommended this form of therapy but in our case it seemed to stimulate the growth. The tumor flared up and spread like wild fire, and, within three or four days after the application of x-rays, the socket filled rapidly with tumor masses. The child died six weeks after the second operation.

CONCLUSIONS

Glioma retinae (neuro-epithelioma) is a disease of early childhood, most cases occurring before the age of three. In suspicious cases both eyes should be thoroughly examined ophthalmoscopically under general anesthesia. Early enucleation is the only treatment, and this should be done promptly because of the rapid progress of the disease.

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Radiation Therapy in Medical Practice*

II. Carcinoma of the Lung

By ERNST A. POHLE, M. D.
Madison

PRIMARY carcinoma of the lung is a disease which is being diagnosed more frequently since the advent of the roentgen rays. We hear from many sources of a definite increase of these neoplasms in the last ten years. However, there may be several factors responsible for this observation. In the first place, more people reach older age, the so-called "cancer period", and our diagnostic facilities have been greatly improved. It is quite possible, therefore, that the higher percentage of lung tumors seen now is not due to an absolute or true increase of incidence.

From the pathological standpoint there are two distinct forms of lung carcinoma, the primary carcinoma of the lung proper and the bronchiogenic carcinoma. It is often difficult to differentiate the two types in the roentgenogram although one is described as the nodular type presenting dense round masses near the hilum, well demarcated from the surrounding parenchyma, while the second form represents an "infiltrating" type, growing along the bronchi. Often enough the picture is of a combination of both and does not permit differentiation as to type.

The metastatic form of lung tumor may be seen in three forms. The first involves the hilum and gradually grows into the lung tissue. It is difficult to diagnose, in the early stages because of a considerable variation in the appearance of what we call "hilum within normal limits". The second form is perhaps best known, namely, the appearance of round spots from penny to dollar size, scattered throughout the lung parenchyma. The third form simulates miliary tuberculosis since the lung fields appear mottled. The history of the patient, however, is of help here in differential diagnosis. Needless to say, mixed forms occur and not very often does one see one of these three types of involvement in a clear cut roentgenological picture[1].

The prognosis of lung tumors is as a rule rather poor. Surgery is mostly out of the question since patients rarely present themselves at an early stage of the disease. It is remarkable how much involvement may be seen on the first roentgen examination and how little the patient complained until then of any symptoms. This also holds true of metastatic growths; roentgen findings and subjective findings frequently present a sharp contrast which is hard to understand. Even a slight dry cough which will not yield to proper medical treatment should induce the physician to request a careful roentgen examination. This holds particularly true if the patient is older than 40 years or has had a primary malignancy at another site before or has it still at the present time.

Bronchoscopy with biopsy is often of great assistance. However, it must be remembered that a negative biopsy report does not always exclude the presence of a malignancy. It depends entirely on the site from which the tissue was removed; it is well known that around the edge of such a growth there is considerable inflammatory reaction. If the surgeon happens to obtain a piece of that marginal tissue the pathologist must render of course a negative diagnosis. However, a second or even third attempt finally reveals the true nature of the process.

More recently encouraging reports have been published regarding the treatment of lung tumors by roentgen deep therapy, radon implantation and the endotherm knife[2–3–4]. A radiosensitive tumor may respond very quickly and the almost immediate improvement of the patient's condition is nothing short of a miracle. A case of this type will be briefly reported here.

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Fig. 1. Roentgenogram of chest 3–22–33. Note mass in left hilum growing into lung.

Fig. 2. Roentgenogram 6–26–33. Three months after beginning of x-ray deep therapy. Marked decrease of tumor mass.

X-ray No. 2969, male, 62 years old, admitted to the hospital on 3–26–33 with a chief complaint of cough. Patient had noted this cough for the past five years and stated that it had increased in intensity during the past two years. He would awaken at midnight with a cough and raise blood-tinged sputum. This had been growing worse during the last few months. He described the cough as being hacking and tickling in character. He also noticed a gradual weight loss; since March 12, that is during the last two weeks, he lost 13 pounds. Physical examination revealed a definite area of dullness in the left upper chest with decreased breath sounds over this area and fine crackling rales. The heart and great vessels were within normal limits as to size and shape. Blood pressure 124/86. Laboratory findings were essentially negative. Roentgenograms of the chest showed an irregular, triangular density extending off the left hilum with feathery margins extending out into the lung parenchyma (see Fig. 1). These findings were very suggestive of a malignant growth, probably a carcinoma of the bronchiogenic type**. On 3–28–33 bronchoscopy revealed an obstructive constrictive mass in the upper left main bronchus. A biopsy specimen of this tissue was taken; the sections showed chronic inflammation with a few scattered foci of atypical epithelial cells permitting the histological diagnosis of a slow-growing carcinoma. Patient was referred for x-ray deep therapy on 4–1–33. From April 1, 1933, to May 29, 1933, a total of 2250 r (measured in air) were applied according to the saturation method over an anterior and a posterior field with the central ray focused over the geometrical center of the growth. (High voltage technic; copper filtration, λ eff. = .15Å). After the first series of 6 treatments the patient noted definite relief from cough; he could sleep at night and his general condition improved. A roentgen examination on June 26, 1933, (see Fig. 2) showed marked decrease in the size of the neoplasm. Patient had gained weight and was feeling so well that he could resume work. His blood count at that time was 4,800,000 R. B. C., 6000 W. B. C. with 80% Hb; the differential count was within normal limits. When last seen on September 7, 1933, the patient was still well and the roentgen findings were essentially the same as described in June. (Patient still well now: Dec. 14, 1933).

** Dr. B. R. Kirklin of the Mayo Clinic, who kindly viewed these films, concurred in this diagnosis.

SUMMARY

1. A persistent cough in people over 40 years of age which cannot fully be explained and does not respond to medical treatment within a reasonable time is a definite indication for careful roentgen examination and if necessary bronchoscopy and biopsy. One

negative biopsy finding does not exclude the diagnosis of malignancy.

2. Roentgen therapy if properly applied not only brings about relief from symptoms but also may definitely prolong the life of a patient with lung tumor and permit even the resumption of a useful occupation.

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Observations on Abdominal Conditions in Childhood*

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THE cases which I am about to report are cases of intestinal lesions which, to me at least, proved of unusual interest. In the first four cases there was partial or complete obstructions. In two of these partial, dynamic ileus of the small intestine was the main clinical feature.

The peculiar type of these latter lesions offers special problems concerning the mechanism which produced them. There was no mechanical obstruction, and the duration of the lesion was unusually prolonged. Apparently the nervous control of the bowel was disturbed.

REPORT OF CASES

Case 1. The patient was a boy, aged ten years, when admitted to the hospital. At the age of four years, a wagon loaded with corn fodder had passed over the upper part of his abdomen, apparently without serious injury. He had no bloody discharges then or later. But since the injury he had complained about abdominal pain and occasional headache. He had vomited several times a week, and in the year previous to his admission almost every day, usually after eating a full meal. At times he refused to eat. Two years before his admission he underwent laparotomy elsewhere, but without relief. I was unable to obtain further data about this operation. During the year before his admission he had spent about half his time in bed. Intestinal movements which had been rather regular and normal had become white and of offensive odor but the boy never had been jaundiced. The vomiting seemed to come on more readily on consumption of meat.

The boy was about three pounds underweight and severely anemic, with a concentration of hemoglobin of 33 per cent, and an erythocyte count of 2,800,000 in each cubic millimeter of blood. The skin was sallow. The main attention was claimed by the abdomen, which was full, particularly in the lower portion, and it was tympanitic. It was not tender on palpation nor was any mass palpable. Visible peristalsis was absent. The central nervous system was negative to examination. On account of the suspected partial obstruction, laparotomy was advised.

About a foot below the beginning of the jejunum the bowel was found dilated in a gradually increasing measure, so that about 5 feet down it had a diameter exceeding 4 inches. It was flaccid and atonic. This dilatation ended abruptly; the bowel at this point appeared perfectly normal, and no evidence of any mechanical obstruction could be detected. No other abnormalities were found. About 115 cm. of the bowel was resected. The pathologist reported dilated intestine with hypertrophic walls. The diagnosis was probable posttraumatic paralytic ileus resulting from disturbances of innervation of the small intestine incident to the injury six years previously. The patient made a good recovery, which has lasted four years.

The important features of this case are: (1) the initiation of symptoms apparently by an injury; (2) the gradually increasing partial obstruction over a period of six years, and (3) the localization of the lesion.

Case 2. This patient was a girl, aged nine years, whose chief complaint was of abdominal pain which had been annoying for the last seven months before admission. About six months previously she had been operated on, elsewhere, for appendicitis, having suffered from attacks of pain and vomiting for one month, the symptoms becoming aggravated about two days before the appendectomy. She made a good recovery from the operation, but soon vomiting and pain recurred, she became very constipated, and catharsis did not give much relief. The stools became infrequent, but not bulky, hard, or dry. Once, for a period of four days, no stools passed in spite of exhibition of cathartics. Because roentgenograms gave evidence that part of the in-

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testine was adherent to the incision, she was subjected to another operation, but the attacks of pain became more frequent. The colicky pain occurred about four hours after eating, and was ordinarily relieved by vomiting after several hours of pain. The patient was 13½ pounds below average weight at the time of admission. Her color was rather good. The value for hemoglobin was 70 per cent, and erythrocytes numbered 4,600,000 in each cubic millimeter of blood. A mass was felt in the lower part of the abdomen, mainly in the left lower quadrant, suggesting spastic intestine.

At operation, many adhesions were found in the region of the cecum and appendix, but no evidence of obstruction at this point. About 6 to 8 feet above the ileocecal valve the small bowel was greatly distended and its walls were hypertrophic. This distention began rather abruptly and extended for about 4 feet, when the bowel became normal again. No bands or any other mechanical obstruction could be made out. The ileocecal valve was patent, whereas the distal part of the ileum was collapsed. A conservative operation was decided on, namely, short circuiting by means of entero-anastomosis. This gave only partial relief, so that on a second operation most of the dilated intestine, consisting of ileum and some jejunum, was resected, giving complete relief. The walls of the resected intestine were edematous, hypertrophic, and covered with serous exudate. Thrombosis of vessels was also found. Part of these changes are referable to the first operation. A recent report 3 years after operation states that the patient has occasional attacks of abdominal pain.

It was not possible to get any further information about the operations performed elswhere, but it certainly is necessary to keep in mind the probability that the distention of the small intestine antedated the appendectomy. In this case, no history of trauma was given.

In cases 1 and 2 there was dilatation of portions of the small intestine well in between the duodenum and the ileocecal valve, leading to symptoms of partial obstruction of increasing severity. In the light of the second case, some doubt may arise whether the trauma in the first was really the only etiologic factor or whether the intestinal abnormality had not existed previously. In both cases mechanical obstruction was excluded, and in making this exclusion, distortions caused by developmental peritoneal bands, such as have been described by Haynes, were absent.

Fraser called attention to the points of predilection of disturbances of the involuntary nervous system met with in the alimentary tract in early infancy, as the pyloric, the ileocecal, and the pelvirectal sphincters, and furthermore to the fact that patients of the age from late infancy to adolescence were remarkably free from such disturbances. In these two cases, it seems most likely that the blame should be laid on a disturbance of the involuntary nervous mechanism, and the remarks of Fraser may explain why I have been unable, so far, to find reports of comparable cases. The explanation of Fraser, based on antagonistic action of parasympathetic and sympathetic nerves, can hardly be pertinent because he assumed a purely sympathetic innervation of the small intestine.

I have mentioned that trauma as the sole cause of the intestinal lesion in case 1 may be open to doubt. Such long duration of traumatic, paralytic ileus also would be very unusual. In neither case can assumed injury of the extrinsic nerves shed much light on the condition at present. I may cite a passage from Kuntz, "We have observed that both sympathetic and parasympathetic nerves may conduct both motor and inhibitory impulses to the gastro-intestinal musculature," and further, "Section of extrinsic nerves does not interrupt gastro-intestinal motility. Neither does it profoundly modify the gastro-intestinal movements. Furthermore there is a strong tendency on the part of the system to restore normal functional activity in a relatively short time following the disturbances which arise as the result of such operative interference." Bilateral section of the splanchnic nerves is followed in some instances by a hypotonic condition. In the cases just reported, it must remain an open question whether the disorder was of the extrinsic nervous mechanism, or whether the abnormality extended to the myenteric plexus.

Therapeutically it may be of significance that in case 2 the resection of the distended bowel, resorted to immediately in case 1, was necessary for complete relief.

Cases 3 and 4 emphasize the importance of the therapeutic procedure employed.

Case 3. A girl, aged seven years, had been operated on, about seven months before she was brought

to the clinic, for gangrenous appendicitis and free pus was found in the abdomen. At this time, a mass of gangrenous omentum was also removed. A few days later total obstruction developed, and at a second operation a portion of the ileum was excised. Recovery was slow. About a month and a half later, again, signs of obstruction necessitated a third operation, when a portion of the ileum bound down by adhesions was excised, and ileostomy was performed a few days later. The child did fairly well for about five months, when, at a fourth operation the fistula was closed and ileocolostomy was performed. About a week later complete obstruction occurred again, which had to be relieved by a fifth operation when a fecal fistula was established and the patient was sent to the clinic. During the illness several transfusions of blood had been given.

On admission the child was emaciated and the concentration of hemoglobin was 37 per cent. Under medical care her condition improved, so that about one month after admission she underwent her sixth abdominal operation. It was found that the distal portion of the ileum had become invaginated firmly in the cecum, causing complete obstruction of the intestinal passage. The ileocecal coil was excised, and side-to-side anastomosis was established between the distal part of the ileum and the transverse colon. At the same time, enterostomy was also performed, and a small catheter was inserted in the ileum proximal to the anastomosis. This enteric stoma closed in a few weeks, and the child made a rather rapid, uneventful recovery, which has extended more than six months.

Case 4. A boy, aged six years, was admitted to the hospital with a much distended abdomen. His illness had started one week before with acute abdominal pain, fever, nausea, persistent vomiting, and without passage of stools. He was emaciated, dehydrated, and his abdomen was large, tympanitic and tender, but no masses could be felt.

Enterostomy was performed immediately and much accumulated material was removed by aid of suction. He was given saline and glucose solution intravenously. A few days later, the lower lobe of the right lung became involved. His condition improved somewhat, but the lungs had not cleared, and he still was in a precarious condition when, two weeks after enterostomy, he passed bright red, bloody stools, and a large sausage shaped mass could be felt in the lower part of the abdomen. He started vomiting again. The diagnosis of intussusception was made immediately, and it soon was verified by palpating the tip of an advancing mass on rectal examination. The risk of surgical interference was thought to be too great. The obstruction, at first not complete, became complete in two days. On the fifth day, the invaginated bowel presented at the anus, and during a period of twelve days several pieces of gangrenous bowel were passed. Fecal matter came through again several days before the last piece of bowel sloughed off. From then on the boy improved considerably, so that less than two months after the intussusception the enteric stoma was closed. A month later he had an attack of partial obstruction, but recovered without surgical interference. But two months after this, in spite of very careful feeding, obstruction appeared again, and the enteric stoma had to be reëstablished. The boy is now in hospital, and it is hoped to have him soon in condition for further procedures. In this case, what one reads about, but rarely sees, occurred; namely, the automatic sloughing off of an intussuscepted portion of bowel.

Surely, in both of these cases conditions were unusual, but it seems to me one fact stands out prominently, that complete obstruction can be tolerated, provided that the content of the proximal part of the bowel is not permitted to accumulate. This observation is not new. The importance of such procedures has been emphasized by a number of writers. Whether this is to be accomplished by means of continuous siphonage, as recommended for instance, by Wangensteen and by Benjamin, or by enterostomy, will depend on circumstances. The bad prognosis of late operation in cases of acute intussusception is well recognized. But it seems that some patients might be saved if the content of the small bowel were removed. Indeed, Haskell, for instance, reported a successful operation in a case of four days' duration, after gas and fluid had been removed by suction through an enteric stoma. The entire mass was gangrenous. Such procedures may be of advantage, because they reduce the distention, remove toxic material, and minimize the danger of peritonitis.

The fifth case is one of intestinal hemorrhage which proved of an unusual and puzzling nature.

Case 5. A girl, aged twenty-one months, had been raised on a diet that was adequate in every way. Early in the month of admission she and the rest of the family had light attacks of influenza. About a week later she had measles, also of a rather mild nature until the eighth day, when the hands, and more so the feet, became swollen. From the knees down numerous purpuric spots appeared. On the remainder of the body also such spots appeared, but only few. On the eighth night of the illness a stool was passed, with some bloody streaks. The stools then became normal again, but three days later they contained about 15 c.c. of bright red blood, and the lips, gums, and the roof of the mouth, including hard and soft palates became in-

tensely purpuric, but the pharynx was free of this manifestation.

On admission, the value for hemoglobin was 28 per cent. Erythrocytes numbered 1,800,000, and platelets 128,000 in each cubic millimeter of blood, the bleeding time was seven minutes, and coagulation occurred rapidly. The child was immediately given a transfusion of blood, but she passed much blood by bowel, and in spite of repeated transfusions she died. The diagnosis was toxic purpura.

At postmortem examination, hemorrhages were found in the places mentioned, and on the heart, pleura and the mucosa of the stomach and colon. A Meckel's diverticulum with mucosal hemorrhage was also present.

The severe intestinal hemorrhage may have been due largely to this diverticulum, that was not recognized in life. Possibly, in spite of the purpura, exploration might have been justified, although it is questionable whether again faced with a similar set of conditions such a step could be urged.

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Roentgenology in the Diagnosis of Thoracic Lesions*

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IT IS generally agreed that the clinical history and physical examination are the most important factors in diagnosis, but I believe a study of the contents of the thorax without a roentgenological examination is incomplete. It will corroborate or rule out the findings of the physical examination, demonstrate the extent of lesions and sometimes reveal lesions entirely unsuspected by the attending physician or conditions that cannot be diagnosed in any other manner.

Roentgenograms also provide a most valuable means of following the progress of a lesion by examination from time to time.

It is not my purpose at this time to give in detail the diagnostic roentgenological findings in each lesion of the thorax, but wish to show by lantern slides some of the many intrathoracic lesions in which the x-ray examination is of essential value in diagnosis.

In *tuberculosis*, roentgenograms should be made when the condition is first suspected, not only to demonstrate early lesions but also for the purpose of comparison with later examinations.

Tuberculosis is usually found in the upper portion of the lungs at the periphery in adults and in the hilus regions in children. Early lesions are small and difficult to demonstrate, therefore, I will not attempt to show slides of minimal lesions. Later stages of the disease may show fibrosis, calcifications and cavitation.

A patient was referred for x-ray examination with a clinical diagnosis of bilateral pulmonary tuberculosis. The films reveal, in addition to pulmonary tuberculosis, an oblong dense shadow along the right side of the spine. Such a shadow is usually due to a tuberculous abscess of the spine. A lateral view of this patient shows evidence of a destructive tuberculous lesion of the body of the eleventh dorsal vertebra. There were no symptoms of the spinal lesion and it had not been suspected by the attending physician.

Another patient had a very evident kyphosis and it was noted that there was a shadow in the anterior posterior view very similar to that in the preceding patient. A lateral view, however, demonstrated that there are two lesions in the spine, neither of which was due to tuberculosis. The seventh dorsal vertebra was deformed due to osteochondritis

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deformans juvenilis and the eighth showed a destructive malignant process secondary to a malignant lesion on the heel. The shadow along the spine which we saw in the anterior posterior view was due to a secondary malignant lesion in the sternum, its shadow being superimposed on the spinal shadow.

The apparent well-being of a patient is not always a criterion as to the extent of the lesion in the lungs. An eighteen year old girl was up and about town and insisted that she was not ill. Her general appearance was good. On x-ray examination we found very extensive bilateral involvement with several cavities.

In *lobar pneumonia* there is a density confined to one or more lobes, not sharply delimited unless the entire lobe is involved and at a period when the disease is fully developed. Usually the infiltration begins near the hilus and extends outward. In children the infiltration is often found most marked near the periphery and that portion near the hilus is less infiltrated. Roentgenograms serve to show the location and extent of the lesion but its extent is not of prognostic value.

The roentgenogram in *bronchopneumonia* presents numerous small areas of soft infiltration. These areas are larger than those usually seen in tuberculous infiltration and not as large as the nodules of secondary malignancy; they are irregular in outline, never clean cut. They unite to form irregular areas of consolidation. The disease is usually bilateral and the lower lobes are most frequently involved.

In *bronchiectasis* weakening of the bronchial walls permits localized dilatation and sacculation. The condition usually follows some chronic cough such as, whooping cough, or acute infection of the lung, like pneumonia, but according to Osler and McCrae there may be an inherent defect or weakness in the structure of the bronchial wall which is a frequent antecedent for the production of this condition. The disease may be classified into saccular, tubular and cavity type but there is little necessity for classification as they are frequently all found in the same individual. Sometimes it is impossible to differentiate between a lung abscess and the cavity of bronchiectasis. Opaque oil intratracheally will best demonstrate the extent of the lesions. An examination without intratracheal oil does not always afford enough evidence to differentiate between chronic bronchitis and bronchiectasis.

Pneumoconiosis is a condition of fibrosis of the lungs resulting from continued inhalation of irritant dust particles over a long period of time. The lymph channels become clogged with dust cells, stagnation of the stream takes place and fibrosis follows. The roentgenographic findings are due to the fibrosis and not to the silica content itself. We first find hilus density, later small nodules, from pin-head to pea in size, followed by fibrosis but not by caseation of these tubercles. X-ray examination is the only method by which the extent of the involvement can be determined.

In *post-operative* massive collapse a single lobe or the entire lung may be collapsed. When the entire lung is involved the heart and trachea will be found retracted toward the side involved. The collapsed lung in massive collapse occupies considerable space, is not separated from the chest wall and has a density equal to that of a pneumonic consolidation because of engorgement of the blood vessels. In post-operative collapse reinflation is usually accompanied by the expectoration of a large amount of sputum. In massive collapse from tumor of a bronchus reinflation is not accompanied by this abundant sputum. The roentgenograms, however, will show similar findings.

In *pneumothorax* the lung is separated from the chest wall and the amount of pleural air may be very small or very large. The lung may recede to such an extent that it is not visible on a roentgenogram and in this particular case this lung remained completely collapsed for six years before any reexpansion took place. The lung is now partly reinflated.

Rarely absence of the diaphragm is encountered. This condition may be confused with diaphragmatic hernia. Eventration or high position of the diaphragm must also be differentiated from hernia of the diaphragm. In eventration the diaphragm is high but

has a normal excursion which may be visualized by roentgenoscopic examination; and by filling the stomach with barium the relation of the stomach and diaphragm is determined. Diaphragmatic hernia may be diagnosed either from a plain roentgenogram by demonstrating gas in a loop of bowel or stomach as you will see in this case in which a loop of transverse colon is plainly seen in the right side of the thorax, or by combining the examination with a barium meal or barium enema. Another method is by the use of pneumo-peritoneum.

It is a well known fact that occasionally a lesion of the chest may present symptoms chiefly referable to the abdomen or a lesion in the abdomen may be accompanied by pain and distress in the thorax. The physician frequently sees patients complaining of sudden precordial pain accompanied by more or less collapse and a diagnosis of coronary disease is made. Some of these patients are known to have cardiac disease. We had two patients who were at first thought to be suffering from coronary disease but on x-ray examination were found to have perforation of an ulcer of the stomach or duodenum. Air under the diaphragm may be demonstrated on a roentgenogram made with the patient in the erect or sitting position and is diagnostic evidence of such perforation.

I believe that all patients on whom a thyroidectomy is contemplated should be examined by x-ray. A considerable amount of thyroid may be intrathoracic and this fact should be known before operation. A persistent enlargement of the thymus may be present in children and an x-ray examination will demonstrate the extent of the enlargement. This baby one day old had both thyroid and thymus enlargement.

A roentgenological examination is the most accurate method of determining the extent of an aneurysm of the thoracic aorta and differentiate it from other mediastinal tumors.

This film shows a diseased condition of the first rib. This was a sarcoma of the first rib with extension of the tumor downward into the thorax. The lateral view aided in showing the location and extent of the tumor.

In another patient the entire left side was densely cloudy. The contents of the mediastinum were displaced to the right. The density was that of a large accumulation of pleural fluid. I stated that the clinical history and physical examination were of prime importance. On paracentesis a small amount of bloody fluid was obtained, the needle then entered a dense mass. Tumor was diagnosed and a very large fibro-sarcoma was removed. The patient is still living and well five years after operation. The diagnosis of tumor in this instance could not be made from the roentgenological examination alone.

Enlarged mediastinal glands may be present following inflammatory conditions such as, pneumonia, measles, influenza or whooping cough. They appear on the roentgenogram as an increase in density and extent of the hilus shadows.

In involvement from Hodgkin's disease the mediastinal glands are also enlarged and may extend out from the hilus into the lung fields. They may be small or of very large size. This slide shows quite extensive involvement to the left.

Secondary sarcoma may be very extensive in the lungs without being detected on physical examination, therefore, a roentgenological examination is the only way to determine the existence and extent of this condition. This slide is quite typical of metastatic sarcoma of the lungs.

Metastatic carcinoma of the lungs is also difficult of diagnosis without an x-ray examination. The areas of metastases may be small, nodular, rather clean cut or they may be irregularly shaped and of the peribronchial type.

Occasionally we find anomalies of the lungs. In this instance we have an azygos lobe. It is produced by indenture of the lung from pressure of the azygos vein during development. There is an accessory pleural septum, produced by pressure of the vein in its passage to the vena cava. It is of no pathological significance but should be recognized when found on x-ray examination. At necropsy generalized miliary tuberculosis was found.

Calcification may be present in the aorta and can only be demonstrated by roentgenological examination.

Pulmonary hemorrhage may result from a very small tuberculous lesion, one so small that its presence cannot be detected on physical examination. Hemorrhage may also occur as a result of lung abscess, cardiac incompetency, foreign body or passive pulmonary congestion. Another cause of pulmonary hemorrhage is broncholithiasis. The presence of this calcareous lymph node could not be detected without a roentgenological examination.

By x-ray examination of the esophagus, using a barium mixture, we can locate and determine the size of diverticuli, the location and extent of carcinoma, and the presence of cardiospasm.

The lesions discussed by the essayist were demonstrated by lantern slides during the presentation of the paper.

Bronchoscopic Examination;

An Aid in Obscure Pulmonary Conditions*

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THE pratice of introducing a radio opaque substance into the trachea or bronchus as an aid in diagnosing obscure lung conditions is well established. The use of radio opaque substance in the bronchial tree was first introduced by Sicord and Forestier in 1921. The material most frequently used now is a 40% iodine in a poppy seed oil which has been given the trade name of lipiodol. Lipiodol has a clear amber color, is neutral in reaction, has a specific gravity 1.350, is insoluble in water or alcohol. Its value as a diagnostic agent is due to its resistance to roentgen rays and that it is tolerated so well by the mucosa of the bronchial tree.

There are several methods of introducing the oil into the bronchial tree. First is the supraglottic which consists of cocainizing the pharyngeal ring. The patient, being seated, is given a mouthful of oil, is instructed to tilt his head backward causing the oil to run directly into the larynx and down the bronchial tree.

Second is the transglottic. This is accomplished in several ways. Iglauer uses a specially constructed intubation tube with a canula for injecting the oil. Then, there is the method in which a small catheter is passed through the larynx. Another has a special syringe which has been devised to inject the oil through the larynx.

The third is the subglottic method which is done with a special trocar which is forced through the cricothyroid membrane. The escape of air through the trocar assures one that the trocar is in the proper position. Some cocain or novocain is introduced through the canula and after a few minutes the oil can be injected directly into the trachea.

All of the above methods have some advantages, but in children and highly nervous patients they are almost impossible without general anesthesia which in such types of cases should be avoided.

Fourth there is the bronchoscopic method. To me this method has given far more satisfaction than any of the others for the following reasons:

1. It is applicable to all ages.
2. It is done without anesthesia.
3. It affords the opportunity for the removal of all pus and secretion in the bronchial tree.
4. It gives the opportunity for the direct inspection of the trachea and large bronchi.
5. It enables us to secure uncontaminated specimens for bacteriological study.
6. It permits the introduction of iodized oil in known amounts in either or both bronchi as indicated.

In this method a bronchoscope is introduced in the usual manner. All secretion is removed by suction. A small amount of anesthesia is applied to the tracheal bron-

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chial mucosa. This is followed by direct inspection of the trachea and both main bronchi. Then specimens for bacteriological study are taken. Next a small canula similar to the suction canula is passed through the bronchoscope and the oil is injected through this canula, first into the left bronchus, if both are to be injected, and then the right. In children the quantity of oil injected must be graduated in accordance with age. The position of the oil canula should be well above the division to the upper lobes and the oil should be about body temperature to make it flow more easily.

The position of the patient on the table is important. The head and shoulders should be about 10 degrees lower than the horizontal plane and turned to the side to be injected. This permits the upper lobes to receive a sufficient amount of oil to give a good shadow. When the full amount of oil has been injected the table is slowly raised to about 15 degrees above the horizontal plane. The patient is then turned so that he is flat on his back. The bronchoscope is then removed and the patient is cautioned not to cough violently. The roentgenograms are taken without removing the patient from the table. It has been my experience that our best results have been obtained by taking the pictures immediately following the injection as it is almost impossible to keep the patient from coughing for any great period of time and we know that the oil is expelled primarily from the bronchi by coughing. At the time the oil is being injected the operator must always keep in mind the position of the canula through which the oil is introduced. It has been my experience that the iodized oil has been injected into the air spaces of the lung and I have found that the x-ray plates in the anteroposterior position gave a shadow similar to a lung abscess, but the lateral picture, which should always be taken, revealed that the previous picture was wrong because the lateral view showed very clearly that the air spaces had been injected.

It will be well to keep in mind some of the conditions which must be differentiated, such as chronic bronchitis or bronchiectasis, tuberculosis, lung abscess, new growths within or without trachea or bronchi, and foreign bodies. There can be no argument against the advisability and need for the most careful inspection of the trachea and bronchus in these cases where a definite diagnosis has not been made. I want to present the history of a case to bring out this point.

A white female child, three and one-half years of age was admitted to the Children's Hospital November 18, 1931, because of a severe cough and the large quantities of foul-smelling expectoration. There was a history of pneumonia two years before, followed by measles. In May, 1929, a tonsillectomy was done and her recovery was uneventful. In October, 1930, she had her second attack of pneumonia and following that time the child persisted with a severe cough and with increasing quantities of foul expectoration. X-ray of the chest showed only some thickening in the right base. Bronchoscopic examination was done November 4, 1931, which was a little over thirteen months after the first history of persistent coughing. The right bronchus contained a considerable amount of purulent secretion which was removed by suction. A foreign body was visualized just below the division to the middle lobe. This foreign body was removed and was found to be the tip of a timothy blossom about ¾ of an inch long. The lower part of the bronchus was cleared of secretion and 5 c.c. of lipiodol injected into the right main bronchus. The bronchograph showed a sacculated bronchiectasis.

The early diagnosis of any of the conditions previously mentioned is of great importance if progress is to be made by treatment. For example: A foreign body in the bronchus may cause a lung abscess or bronchiectasis, but, if diagnosed early and removed, there is little possibility of serious after trouble. It is true that the bronchoscopic method of introducing iodized oil into the bronchi does require the services of one experienced in handling a bronchoscope, but I feel sure you will all agree with me that these patients who have coughed for months and months or years and years should have the method used which will give the attending physician the greatest amount of information.

NEW COMPENSATION DIRECTOR

Mr. Harry A. Nelson succeeded Mr. R. G. Knutson as director of compensation for Wisconsin under the Civil Work Administration Mr. Nelson will continue his position with the Industrial Commission as Director of Workmen's Compensation. He has been connected with the Industrial Commission since 1918.

Congenital Syphilis*

By R. P. SCHOWALTER, M. D.
Milwaukee

ACCORDING to Griffith & Mitchell, (Vol. 1, p. 658) more children are born with congenital syphilis than with any other infectious disease.

It has interested me to know just what percentage of supposedly well children have congenital syphilis. To determine this incidence, I have reviewed the statistics of the Milwaukee County Home for Dependent Children covering a period of 10 years.

It is often assumed that a home for dependent children would have a comparatively high percentage of cases of congenital syphilis. Of the 565 children now at the Milwaukee County Home for Dependent Children, 11, or approximately 2%, are syphilitic. This, however, does not give the true rate of occurrence of the disease. In order to arrive at the true incidence, blood Wassermann tests done routinely on all children who entered the institution during a period of 10 years were studied. From 1922 to 1931, inclusive, 6,193 children were admitted to the institution, and of this number only 35 had a positive Wassermann reaction. So the proportion of positive Wassermanns obtained on over 6,000 entrants was only .56%.

This is a lower incidence than is reported by most observers. Jenks and Donnelly in a study of 1,000 children under the care of the Associated Medical Clinics in Philadelphia, found that 2% had congenital syphilis. Stokes is quoted as placing the incidence between 3 and 5%. Royster, in a study of 1,000 children brought to a children's clinic for treatment, found a higher percentage of congenital syphilis. In that series only 34% of the children were white and of these over 7% had a positve Wassermann test. Among the colored children in the same series approximately 15% were positive. Jeans gives the incidence of syphilis among white infants of the poor class as 2% and among the older children of the same class as less than 1%. Jeans further claims that as the social scale is ascended the proportion decreases and that syphilis is not so prevalent as some would have us believe. Fischl, in a series of over 88,000 patients, found congenital early syphilis in but .25%. John Lovett Morse says that he has found congenital syphilis less frequently than have physicians in other parts of the country. He gives several explanations, as follows: first, that he does not recognize syphilis when he sees it; second that syphilis really is less common in eastern Massachusetts than in some other portions of the United States, and third, that some of the other observers have called things syphilis which were not. So we see that the figures given for the occurrence of syphilis vary greatly.

Congenital syphilis is always due to syphilis of the mother. Colles' and Profeta's laws date back to 1837 and 1852 respectively. In the light of present knowledge and with the aid of the Wassermann test we are able to say that these so-called laws are misleading and obsolete. Transmission of syphilis to the third generation has not been proven. In the few cases reported, the possibility of infection of the second generation cannot be excluded satisfactorily.

In the clinics and on the hospital services one does occasionally see cases of congenital syphilis that have been neglected, but their number is undoubtedly decreasing. In the majority of cases congenital syphilis cannot be detected by physical examination alone. One is astounded by the lack of stigmata in the cases discovered by routine Wassermann tests. To most of us the term "congenital syphilis" brings to mind such extreme mental pictures as those of rhagades, snuffles, interstitial keratitis, Hutchinson's teeth and saber tibias. But in the period between infancy and early adolescence the majority of cases do not present any such outstanding stigmata. In fact most of the cases that we have seen did not appear to be any dif-

* Presented before 91st Anniversary Meeting, State Medical Society, Milwaukee, September, 1932. Revised to publication date.

ferent than the general run of children with whom we came in contact.

Stokes reminds us that it is a great mistake to suppose that prenatally syphilitic individuals are necessarily marred and more or less seriously damaged by their infection, and that the so-called Hutchinsonian triad is rarely seen in its entirety.

In our series, the age group between infancy and 10 or 12 years of age was quite free from typical stigmata. In such latent cases congenital syphilis escapes unrecognized. General adenopathy and palpable epitrochlear lymph glands were of little or no assistance in making a diagnosis. Palpable lymph nodes were as common in malnourished children who were not syphilitic as in those who were. Veeder and Jeans made similar observations.

In anemic infants syphilis must be borne in mind as one of the possible causes, but if the anemia is due to syphilis it responds readily to treatment.

EARLY DIAGNOSIS

Early involvement of the nervous system can be detected only by a spinal fluid Wassermann. If it shows a positive reaction nervous system involvement must be admitted even if there are no symptoms or other signs. Stokes found neurosyphilis in 26% of his late cases of hereditary syphilis, and Jeans found central nervous system involvement in almost one-third of the cases. In 12 of our cases now under observation or treatment, one was found to have a positive spinal fluid Wassermann.

The teeth are of no significance whatsoever before six or seven years of age, when the permanent teeth first make their appearance. The presence of an added cusp on the median side of the first molar, known as Carabelli's tubercle, is found in nonsyphilitic children as well as in the syphilitic, and can therefore no longer be considered pathognomonic.

During the first year of life desquamation and snuffles may be present. Of our 10 syphilitic children who were less than a year old, two had snuffles and four showed some desquamation. One also had a cutaneous eruption about the head and body.

In the group ranging from one to 5 years of age there were 13 syphilitic children, none of which presented stigmata. In the group ranging from 5 to 16 years of age there were 12 syphilitic children. In this period of child life we find the permanent teeth erupting and two of our children were found to have characteristic teeth, though none had typical Hutchinsonian notching. The central incisors had a screw driver shape, that is, they were wider at the gum margin than at the biting edge, and in cross section they were comparatively thick. The laterals were so thickened that they were almost circular in cross section. Hutchinsonian notching of the upper central incisors of the permanent set of teeth is probably one of the *best known* lesions of late congenital syphilis, but Veeder and Jeans found this notching absent in 94% of their late cases. A number of children may be found to have saw teeth, i. e., incisors with serrated edges, but this condition, so often erroneously referred to as syphilitic, is often due to the effect of nutritional disturbances and childhood fevers on the tooth buds.

It is interesting to note what other observers say in regard to the presence of symptoms and stigmata in congenital syphilis. Morgan and Cox in a series of 100 cases, found that only one-fifth of these had specific symptoms of sufficient severity to bring them to the attention of a physician.

Morton C. Smith states that interstitial keratitis has its greatest incidence just before puberty. Cannon found that 34% of the cases were without symptoms and were discovered only because some other member of the family had syphilis. He further states that the average age at which symptoms developed for which relief was sought was between 10 and 15 years, though milder symptoms may have been present earlier. Interstitial keratitis is given as the most frequent symptom which caused persons with late congenital syphilis to seek medical advice. (34.7%) Arthritis was given as the second most frequent cause. Cannon found Hutchinson's teeth present in 21 out of 202 cases.

In our series 3 of the syphilitic children died — one at three months of age, one at

one year and one at two years. All died of a broncho-pneumonia.

Three of our luetic children were definitely feeble-minded.

Thirteen children stayed at the institution long enough to receive anti-syphilitic treatment for more than one year, and of this number 9 became Wassermann negative and remained so. Anti-syphilitic treatment yielded very satisfactory results during infancy and early childhood, but where treatment was instituted after 5 years of age it became difficult to procure a persistently negative Wassermann.

I believe one does not see so many extreme clinical pictures of congenital syphilis as formerly because Wassermann tests are done more generally on both the pregnant mother and the new-born child. Thus, by early diagnosis and treatment, the syphilitic signs, which would ordinarily appear, are forestalled.

Blood specimens collected at the Home for Children are sent to the County Laboratories for examination. There the Kline test is now done in addition to the Wassermann. After antiluetic treatment has been given it appears that the Wassermann test becomes negative more quickly than does the Kline.

A Wassermann test taken at birth is not reliable. Jeans found that nearly 40% of all syphilitic infants have a negative Wassermann reaction at birth and that by two months of age all syphilitic babies have developed a strongly positive reaction.

Baumm's figures corroborate those given above. In the syphilitic new-born he found that the umbilical blood showed a negative reaction in over 57% of the cases and that blood specimens taken from the heel showed a negative Wassermann reaction in over 68% of the cases. Hemsath, while speaking of the Wassermann reaction in early infancy, states that of 30 babies who gave a positive Wassermann at birth, 50% showed a negative test at one month of age though untreated.

Judging from statements such as these, one can conclude that a Wassermann test taken before the child is at least two months old is unreliable.

We have had no experience with the luetin skin test for the detection of congenital syphilis. The value of the procedure is still under dispute. Certainly there is a need for a test whereby an infant's fontanelle or jugular vein need not be pierced. The Kline test is such a procedure. Dr. Grill of the County Laboratories says that the Kline test checks very satisfactorily with the Wassermann, and that only ½ to 1 c.c. of blood is required. Such a small amount of blood can readily be obtained from an infant's heel.

TREATMENT

In speaking of treatment we first mention the importance of treating the syphilitic mother while pregnant. In this way transmission to the offspring can be prevented. Morgan claimed that in 93% of the cases of maternal syphilis prenatal treatment will render the offspring free from infection. As for the child, treatment should be instituted as soon after birth as the diagnosis is made.

In the treatment of congenital syphilis the same arsenicals and metals may be used as in the treatment of acquired syphilis. In infants and young children intravenous injection of the arsphenamines is difficult and often undesirable. If by chance some of the neoarsphenamine solution should penetrate beyond the depth of the longitudinal sinus, the ill effects of the local reaction would outweigh any benefits that might be derived from antiluetic treatment.

Sulpharsphenamine and bismuth enjoy considerable popularity in the treatment of syphilitic children, and according to Stokes bismarsen is also very satisfactory. These drugs can all be administered intramuscularly.

In our cases we used the dilute U. S. P. mercury ointment. A course of 8, and in some instances 12, weeks of rubs was alternated with 8 weekly injections of neoarsphenamine or sulpharsphenamine. Sulpharsphenamine was used in all cases in the past 5 years. The drug was injected into the gluteal muscles—the dosage used for infants being approximately 15 mgm. per kilogram of body weight, though the initial dose was considerably less. Sulpharsphenamine was tolerated exceptionally well. There was one instance in which an infant

developed a fine erythematous rash a few hours after the injection, but this disappeared within 24 hours. One of the large, 16 year old girls occasionally complained of nausea following .4 or even .3 gms. of the drug. It seems that while sulpharsphenamine is more toxic than neoarsphenamine in adults, infants and children tolerate this intramuscular preparation very well.

Rosenbaum used stovarsol or acetarsone, administered orally. He obtained good results, especially if treatment was instituted during the first year of life.

Yampolsky reports a series of cases in which he injected neoarsphenamine intraperitoneally. He obtained serological cures in 16 out of 20 babies. Grulee, too, reports the use of neoarsphenamine intraperitoneally. On the other hand, Dickey, Sutton and Leonard chose sulpharsphenamine in their treatment of congenital syphilis.

We liked sulpharsphenamine because of the ease of administration and the absence of ill after effects. In the cases where treatment was instituted early the greatest number of cures were obtained. Serological reverses were obtained in practically all children under 5 years who stayed for at least one year's treatment. Where treatment was inaugurated at a later age, the response became less satisfactory as the age of the patient advanced. In the older cases mercury and the arsenicals are needed over so much longer a period of time that one must consider the toxicity of the drugs as well as the disease itself. Slow arsenic and mercury poisoning must at least be kept in mind where the necessity of treatment continues for a long period of time.

SUMMARY

In over 6,000 consecutive admissions to the Milwaukee County Home for Dependent Children, only 35 children had a positive blood Wassermann reaction; the incidence therefore being .56%.

The syphilitic children did not appear to be any different than the other children of the institution: few stigmata were present.

Sulpharsphenamine, given intramuscularly, was well tolerated and easily administered.

Of the 35 syphilitic children discovered at the Home for Dependent Children, only 13 remained long enough to receive treatment for one year. Of these, 9 became Wassermann negative and remained so.

Treatment of Tuberculosis in General Practice

By ANDREW L. BANYAI, M. D.
Clinical Director, Muirdale Sanatorium, Wauwatosa

ALTHOUGH it is desirable that every tuberculous patient be removed from his home to an institution, 1, for the prevention of the spread of the disease, and 2, for adequate treatment, still there are, for a great many reasons, thousands of them who have to stay at home and must be taken care of by the general practitioner. With this fact in mind, I wish to present a concise summary of the treatment of tuberculosis.

There is no medicine or method of treatment that will compensate for the lack of rest in treating tuberculosis. When advising patients in this matter one must be as explicit and exacting as in prescribing medicine. The conception of the layman about rest is far from that of the physician who knows that as in the case of the tuberculous disease of the joints and bones, the more complete the immobilization of the affected lung the better the chances for recovery. Abstaining from work, staying at home, taking walks to get fresh air, and sitting around are not the rest necessary for healing. The only proper form of rest is bed-rest. Lying on a couch or comfortable "cure chair" is allowed during the convalescent stage. The prompt response of the body to rest is remarkable. Cough is decreased by rest. Chills, fever, and night sweats may shortly disappear or markedly diminish. Appetite and digestion improve. The patient gains in weight and his morale is improved and self-confidence strengthened. The least

excursions of the lungs were observed in semirecumbent position. Cough, expectoration, and feeding of the patient are easier in this position than when the patient is lying flat on his back. Postural rest, that is, having the patient lie on the affected side insures a relative immobilization of the dependent part of the lung. It aids healing if continued for an adequate length of time. In patients with considerable cough and expectoration postural rest must be done only after postural drainage to avoid stagnation and retention of muco-purulent material in the lungs. Every patient with active tuberculosis must be kept in bed until pulse and respirations become normal and the temperature is below 98.8 F. When toxic symptoms are absent and the temperature returns to normal the patient is allowed to spend gradually increasing time in a reclining chair in his room or on a porch. Febrile patients should have their meals in bed and should not be allowed bathroom privileges. The rest cure must be continued until physical and x-ray, as well as laboratory findings, are indicative of healing.

FRESH AIR TREATMENT

Continued exposure to and inhalation of fresh air is an indispensable factor in the cure of tuberculosis. Empirical observations reveal that cool, fresh air, kept in or being in circulation enough to prevent stagnation of air around the body, exerts manifold beneficial effects. Exposure to cold air is the mildest form of "exercise" which should be and can be practiced by every patient without over-exertion. It can be arranged in the form of "cure-taking" in the open air or as air bath. The slight increase in the metabolism by such exposure is just enough to stimulate bodily functions toward normal level and thus to aid reparative reactions necessary for cure. The great value of exposure to fresh air lies in the fact that the good results of physical exercise can be secured by it with the expenditure of much less energy than in any form of exercise. It has all the advantages of the latter with the benefit of rest. It is, figuratively speaking, a form of exercise by which the blood pressure is decreased and the reserve forces of defense against the disease are augmented. It occupies a similar position in the treatment of tuberculosis to massage and passive motion in the treatment of fractures. The pulse and respiratory rate diminishes, and the competency of the heart and peripheral blood vessels improves. The appetite is stimulated and consequently gain in weight can be expected. The muscle tone and the general subjective feeling and sleep of the patient become noticeably better. Fever and night sweats often disappear and the amount of cough and expectoration show definite decrease. Practical arrangements in this regard depend upon the season, outside temperature, the weather, and the condition of the patient. A well ventilated room with more than one window should be selected and the windows should be kept open day and night to obtain sufficient air exchange when the patient is forced to stay indoors. If a porch is available, where good ventilation is secured, it is advisable to keep the patient there all day long when weather conditions permit. The patient's bed must be placed in a way that the patient be protected from draught when the weather is cold, but still permitted plenty of fresh air. When the patient's general condition is weak sudden exposure to cold air is not advisable. Chilling of these patients may do more harm than good. Graded, slowly increased exposure compatible with the patient's strength is of value in such cases.

EXERCISE

Pulmonary tuberculosis often increases the respiratory rate, this being partly due to the loss of a portion of the specific tissues of the lung and partly to the increased metabolic rate caused by toxin absorption. The increased metabolism will increase the oxygen intake and the carbon dioxide production. These, in turn, will increase the respiratory function. Unduly augmented respiratory function acts as massage, expressing toxins, bacilli, and decomposed tissue particles, thus leading to spread of the disease, and to the development or persistence of constitutional symptoms. Increase in the respiratory excursions may provoke

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« « « EDITORIALS » » »

Amebic Dysentery

THE regulations of the State Board of Health have not up to the present date required the reporting of cases of amebic dysentery to the local health officer. The exact extent in which the disease has prevailed in Wisconsin is not known, but apparently clinical cases of dysentery have been very limited. Voluntary reports of its existence have occasionally reached the State Board of Health but there are no records of extended outbreaks in recent years.

The fact that amebic dysentery is supposed to be chiefly a sub-tropic or tropical disease may have placed physicians off guard in making the necessary tests for diagnosis. Also the difficulty of diagnosis in mild and atypical cases, as illustrated by recent clinical histories of cases originating in Chicago, may have been another factor in the scarcity of known cases in Wisconsin. If a high proportion of symptomless carriers exist in this state, as are claimed for some other states of the Union, it is difficult to understand why a greater number of clinical cases has not resulted.

Since the outbreak in Chicago became known in November, the State Board of Health has elicited information and details upon clinical cases contracted in Chicago and elsewhere. Up to the latter part of December reports were received of seven cases originating in Chicago and two chronic cases originating elsewhere. In all probability this is an under-statement of the true status but nevertheless would seem to indicate that amebic dysentery is not abundantly disseminated in the state. This relative scarcity, however, is no way lessens the seriousness of the disease when it does occur. The possibility of chronicity and of recurrence of acute attacks, and of involvement of other members of the family are to be borne in mind and all necessary, sanitary precautions should be required by the patient. This is especially necessary in the case of food handlers lest an outbreak like that involving Chicago is repeated in some Wisconsin community. C. A. H.

A Good Book to Read

IT IS characteristic of the young that they are impatient with mature age. They are apt to look upon the relative conservatism of the man of experience with some contempt. Youth wants to try its wings and resents the "Go slowly" of experience.

We have been passing through an era in Medicine where youth has had considerable to say. Youth has stuck around in laboratories, has become expert in the use of experimental methods, and proficient in the inter-

pretation of many new instruments. The medical literature bears witness to this attitude in the reports of clinical cases where every conceivable laboratory examination is set down in great detail. It seems that, unless a case is reported with all the frills, it does not carry great weight with editors of medical journals.

One has only to read the reports of cases presented by the Masters of Medicine to note the contrast and to be surprised at how much padding there is in present case reports.

The enthusiasms of youth gradually give place to controlled curiosity tempered by experience. The enthusiasm does not die but maturity modifies and directs it so that work is more purposeful and conclusions are tempered by wider knowledge.

These and other similar thoughts have been running through my head recently since I have read the latest book by one of the world's best-known cardiologists.

To one who has long been a champion of simplicity in Medicine, who has for years inveighed against the undue prominence given to the laboratory side of Medicine, who has preached in and out of season the value of the body senses in making diagnoses and evaluating prognoses, it is like a refreshing glass of cool water to the thirsty traveller to read the new book on "Diseases of the Heart", by Sir Thomas Lewis.

In almost every chapter I find something stated with the weight of authority, which, I am sure, many of my former students would recognize as something they have heard me say. This is not written to pat myself on the back, but to illustrate the changing attitude of one of the great minds in experimental cardiology as he has turned more and more from instruments to the study of the human body. Just a few examples will suffice to show this change of viewpoint. Sir Thomas emphasizes by reiteration the value of the symptom of breathlessness as the most important of all the symptoms of early heart failure. No instrumental records however made can take the place of this symptom as an early sign of heart failure. He questions the value of elaborate tests for cardiac function, stating his belief that what the man is able to do without symptoms is the best test of the function of the heart. He describes simple tests which he feels are quite adequate to give him all the information he wishes, after he has taken a careful history from the patient. He relegates to the background the information gained by the electro-cardiogram for 95 per cent of heart cases. He stresses the value of the fluoroscope with the orthodiagram in determining heart size, and criticizes those who feel that by percussion they can limit the heart area with any degree of accuracy except in certain types of thorax. He punctures the superstition that anesthesia is harmful to a fully compensated heart whatever be the lesion. This statement is of particular interest to me because I am often asked to listen to a heart where there is a murmur and to advise whether or not the person can take an anesthetic. There is, for some reason I have never been able to fathom, a fixed idea in the minds of most medical men that heart murmurs are contraindications to anesthesia and operative procedures. I do not recall for how many years I have cast that idea into the limbo of crass superstitions. It has been many years. I know I have urged operative procedures upon people whose gall bladders should certainly be removed, whose uterine fibroids should undoubtedly be taken out, and whose thyroid glands should be reduced in size, in the face of auricular fibrillation with and without heart valvular lesions. I have had the great satisfaction of seeing such people recover their health and live useful lives for years.

This comparatively small book by Sir Thomas Lewis, it contains less than 300 pages and not more than 25 figures, has in it more common sense, more real help to the doctor who wants to read about heart disease, than any book which has come to my notice to date. If anyone wants to clear his head of the cobwebs of superstition which have hampered the care of heart disease patients by the average graduate of Medicine, I urgently recommend this book. He will find some of his cherished ideas knocked about but he will come through the study of the book with a clearer conception of what heart disease is and how to handle it.

L. M. W.

Chronic Arthritis

CHRONIC arthritis is the constant challenge of the practitioner and internist and the continuous scourge of those so afflicted. For this reason such patients are among the most grateful for any degree of relief which we may bring them.

For many years the physician has been harrassed by the complexity of terms assigned to the various phases of this condition as they impressed pathologist, roentgenologist, bacteriologist, or clinician. From this labyrinth of terminology a practical way out is suggested by the classification recently advanced by the American Committee of the Control of Rheumatism. This classification recognizes, of course, two chief varieties which from clinical, roentgenologic, pathologic, and therapeutic standpoints are to a marked degree the antithesis of each other; this would be all very well were it not that many cases present evidence in each direction and therefore must be regarded as "mixed" types and to that extent force our therapy into more general and less specific channels.

From a practical standpoint the two types most frequently encountered are best styled the "infectious" and the "degenerative" (Cecil). The characteristics of the first type include: (a) Synonyms—rheumatoid, atrophic, proliferative arthritis deformans; (b) Pathology—primarily of synovial membranes and soft parts of joints, lymphoid reactions, rarefaction of bone, possible fusion from joint destruction; (c) Etiology—growing evidence of a specific micro-organism, probably a hemolytic streptococcus, as evidenced by the work of Cecil et al, Rawls et al, Clawson, Wetherby, Margolis and others, opposed by Nye, Dawson, Ghormley and others. (d) Laboratory tests—positive agglutination tests, increased sedimentation time, increase in immature leukocytes; (e) Clinical—acute onset, swelling, heat, focal infection. (f) Therapeutic—comparatively better results with removal of foci and use of vaccines (Rawls, Guskin, Ressa).

In contrast the characteristics of the second type include: (a) Synonyms—osteohypertrophic senescent arthritis; (b) Pathology—primarily of cartilage and adjacent bone, condensation of bone with early bony spiculation and hypertrophy of joint margins, no tendency to fusion, more common in weight bearing joints; (c) Etiology—tendency to develop in older tissues along with arteriosclerosis and graying hair; (d) Negative cultures, agglutination tests, sedimentation time no increase, no "shift to left" in Schilling count; (e) Clinical—course not that of an infection; endocrine and metabolic features more prominent; (f) Therapeutic—little response to vaccines; more likely to respond to adjustment of weight, proper diet, endocrine products.

Aside from the infections and degenerative types of arthritis the committee recognizes allergic and traumatic types; a metabolic type including gout, scurvy, rickets; a neurogenic type including syringomyelitis, Charcot, and posthemiplegic types.

In determining the acuteness of a given case of arthritis the sedimentation test and modified Schilling hemogram impress the writer as being of distinct value and are sufficiently simple for any physician or his technician to perform.

In the matter of therapeusis all possible foci must be found and eradicated, more especially where the course and type suggest a process of infectious nature; with the osteo-arthritic this is undertaken more advisedly for the protection of his general health. In a number of our cases treated by rest, diet, removal of foci, physiotherapy and the like, a definite further improvement has followed the use of commercial vaccine prepared in accordance with the direction of Clawson and Wetherby; in this connection the results of Rawls, Guskin, and Ressa giving phenolized unheated autogenous strains of streptococci intravenously are of special interest. Careful examination and attention to all pathology found are the role of the physician; early consultation, courage, optimism, prolonged cooperation on the part of the patient are the basis of success with this group of sufferers. When these exist the measures of rest, physiotherapy, elimination of foci, diet, biological products, and drugs will fall into their proper places and appreciated results will follow. A. W. B.

. . . . THE PRESIDENT'S PAGE . . . .

The State Medical Journal

AS PART of a program for the development of the JOURNAL, it takes on with this issue a new appearance. The various problems connected with its publication have been the object of study and consideration for some months, these activities culminating recently in a meeting of the Editorial Board.

At this time certain changes in policy were decided upon, the principal change being the adoption of a positive attitude in relation to the material for publication. Up to the present time, whatever material was available has been published. This material has consisted principally of papers presented at the Annual Meeting of the Society. The Editorial Board has ruled that authors appearing on the annual program must turn in their completed manuscripts at the time of the Annual Meeting. The Board, however, does not agree to publish papers merely because they have been presented in this manner. The decision as to publication will be based on the character of the papers and their suitability for the general program of clinical and scientific presentations which the medical editor desires to work out. Papers which are not accepted will be returned to the authors with the understanding that they may be published elsewhere. This will enable the medical editor to allocate a definite amount of space to the accepted articles and it will permit the solicitation of papers on various subjects which it may be desired to present. Additional space will thus be available for certain valuable features such as, for instance, the medical history of the state. In order that it may be possible to work out a coordinated and sustained program, authority was recently secured making the medical editor ex-officio a member of the committee on scientific work. A liaison was thus established between these two important groups having to do with the scientific activities of our organization.

While the JOURNAL is primarily the official publication of the organized profession of the state, the purposes of the society make its scientific program a most important feature—one which should play a major part in the advancement of Wisconsin medicine. Within the last decade we have witnessed in our state a great stimulation of interest in medical society meetings and in the writing of scientific papers and case reports. In addition, there have developed in Wisconsin numerous important clinical centers which should make regular contributions to medical literature. For this reason, and despite the fact that there is a profusion of medical journals, the JOURNAL of a state society such as ours has a very distinct and a very fortunate position as well as an unusual opportunity. I feel certain that your Editorial Board realizes these opportunities and is striving to fulfill them. Dr. Greeley as chairman of the Editorial Board in general charge of the policies of the JOURNAL, Dr. Huston as the Medical Editor, and Mr. Crownhart, the Managing Editor, will be pleased to receive your suggestions regarding future changes and possible improvements.

Society Proceedings

ASHLAND-BAYFIELD-IRON

Election of officers took place at the November meeting of the Ashland-Bayfield-Iron County Medical Society. Dr. A. X. Kamm, Ashland, was elected President; Dr. R. O. Grigsby, Ashland, Secretary and Treasurer, and Dr. J. K. Shumate, Bayfield, Vice-President.

BROWN-KEWAUNEE-DOOR

The annual meeting of the Brown-Kewaunee-Door County Medical Society was held December 19th at the Northland Hotel. The following officers were elected for 1934:

President—Dr. O. A. Stiennon, Green Bay.

Pice-President—Dr. J. G. Hirschboeck, Forestville.

Secretary-Treasurer—Dr. Walter Tippet, Green Bay.

Delegate—Dr. P. R. Minahan, Green Bay.

Alternate-Delegate—Dr. Wenzel Wochos, Kewaunee.

CALUMET

The Calumet County Medical Society held its annual meeting in the city of Chilton, December 14, at the Great Northern Hotel, where a dinner was served to a large number of physicians.

The scientific program of the evening proved of unusual value. Much business of a general nature was brought to the attention of the members present.

The new officers for the coming year are as follows:

President, Dr. A. C. Engel, New Holstein; Vice-President, Dr. A. J. Wagner, Brillion; Sec.-Treas., Dr. J. W. Goggins, Chilton; Censor for three years, Dr. F. J. Knauf, Kiel; Delegate, Dr. N. J. Knauf, Chilton; Alternate, Dr. H. C. Krohn, New Holstein.

J. W. G.

COLUMBIA

The Columbia County Medical Society held its regular meeting at St. Savior Hospital, Portage, on Dec. 12th.

Dr. C. A. Harper, State Health Officer, discussed the restoration of the historic log hospital, near Portage. Mayor Wm. Moore and Mr. Flanders, City Engineer, of Portage, explained the possibilities of rebuilding the old site with the combined help of the medical society, the city of Portage, and the Civil Works Administration. A committee was formed to work with the city officials on the proposition.

Dr. W. S. Middleton, Madison, guest speaker, gave a very interesting address on "Oxygen Therapy", stressing particularly the better methods of administering oxygen and the various diseases for which it is used.

Dr. H. H. F. Fredrick, Westfield, was elected President; Dr. James W. MacGregor, Portage, Vice President; Dr. H. Y. Fredrick, Westfield, Secretary; Delegate, Dr. James W. MacGregor; Alternate, Dr. H. M. Caldwell, Columbus, and Dr. L. V. McNamara, Montello, Censor, for the coming year.

A Public Relations Committee was elected to procure a satisfactory fee schedule for caring for county indigent cases.

An excellent dinner was served by the Sisters of the Hospital. H. Y. F.

DANE

Dr. Albert Tormey of Madison was re-elected President of the Dane County Medical Society at its December meeting in Turner Hall, Madison. Dr. L. V. Sprague, Madison, was again named Secretary and Treasurer, and Dr. H. A. Keenan of Stoughton was re-named Vice-President.

Mr. George Crownhart, Secretary, spoke on "The Present Economic Status of Medicine."

DOUGLAS

A dinner meeting of the Douglas County Medical Society was held at the Androy Hotel, Superior, December 13th.

Dr. M. H. Wall of Superior was elected President of the Society; Dr. F. J. Broghammer, Superior, Vice-President, and Dr. E. A. Myers of Superior, Secretary.

Other officers elected were Dr. W. H. Zwickey, Superior, who was renamed to the board of directors for another three year term. Dr. C. W. Giesen, Superior, was named delegate to the annual meeting with Dr. C. H. Christiansen as his alternate.

EAU CLAIRE AND ASSOCIATED

At a meeting of the Eau Claire & Associated Counties Medical Society on December 18, the following officers were elected to serve during the year 1934:

President—Dr. E. E. Tupper, Eau Claire; Vice-Pres.—Dr. Geo. Beebe, Eau Claire; Sec.—Dr. C. H. Falstad, Eau Claire; Delegate—Dr. R. E. Mitchell, Eau Claire; Alternate—Dr. Frank Butler, Menomonie; Censor—Dr. A. L. Payne, Eau Claire. P. G. S.

FOND DU LAC

A meeting of the Fond du Lac County Medical Society was held at Campbellsport on December 13th. To the delight of the physicians, a duck dinner was enjoyed and the following papers were read:

"Tularemia" by Dr. M. O. Boudry, Fond du Lac.

"Amoebic Dysentery" by Dr. A. M. Hutter, Fond du Lac.

"Undulant Fever" by Dr. W. C. Wojta, Fond du Lac.

Discussions of the papers then took place.

J. C. D.

GREEN

Twenty-three physicians were present at a meeting of the Green County Medical Society held on December 12th at the Eugene Hotel, Monroe. Addresses were given by Dr. Louis M. Warfield, Milwaukee, and Dr. Carl Henry Davis, also of Milwaukee.

JEFFERSON

The annual meeting of the Jefferson County Medical Society was held at the Jefferson House, Jefferson, on December 7th. Dr. G. E. Eck of Lake Mills was elected President; Dr. O. F. Dierker of Watertown, vice-president; Dr. A. A. Busse of Jefferson, secretary and treasurer. Dr. W. S. Waite of Watertown was elected a member of the Public Health Commission for a term of three years and Dr. H. P. Bowen of Watertown was elected delegate to the annual meeting with Dr. Waite as alternate. Dr. A. C. Hahn of Watertown was elected censor for a term of three years.

JUNEAU

The annual meeting of the Juneau County Medical Society was held at the Hustler Hotel, Hustler, at six-thirty o'clock Wednesday, December 6th. Those present were Drs. C. C. and C. A. Vogel of Elroy; C. H. Golden, Wonewoc; F. H. Ferguson, Elroy; J. S. Hansberry, Wonewoc; A. T. Gregory, Mauston; Brand Starnes, New Lisbon, and W. T. O'Brien of Mauston.

Dr. A. T. Gregory announced that he was now completing his 30th year as secretary of the Society and desired to be relieved of further responsibility. It was moved and seconded that the Society extend to Dr. Gregory its congratulations upon his splendid record of long and faithful service to the medical profession of Juneau County and that the Society further express to Dr. Gregory the greetings and best wishes of the profession of the County.

Election of officers resulted as follows: President, Dr. Clarence Vogel of Elroy; Vice-President, Dr. C. H. Golden; Secretary-Treasurer, Dr. J. S. Hansberry, Wonewoc; Delegate, Dr. Brand Starnes and Alternate Delegate Dr. Carl Vogel. Dr. W. T. O'Brien was elected to the Board of Censors for the three year term; Dr. Starnes for the two year term and Dr. Golden for the one year term expiring October, 1934.

Dr. Spencer D. Beebe, Councilor of the District, and Mr. J. G. Crownhart, Secretary of the State Society, were guests of the Society at this meeting and led a discussion of present economic conditions in which all members participated. Adjournment was taken at nine-thirty P. M.

KENOSHA

Dr. W. C. Stewart, Kenosha, was re-elected President of the Kenosha County Medical Society at a meeting of the Society held on December 5th. Other officers elected are Dr. Charles F. Ulrich, Kenosha, Vice-President; Dr. Edgar F. Andre, Kenosha, Secretary and Treasurer. Dr. George F. Adams of Kenosha was again chosen delegate to the annual state meeting.

MANITOWOC

At the annual election of officers, the following were chosen for the Manitowoc County Medical Society:

President—Dr. A. F. Stueck, Manitowoc.
Vice-President—Dr. J. E. Meany, Manitowoc.
Secretary-Treasurer—Dr. T. H. Rees, Manitowoc.
Censor—Dr. J. M. Kelley, Cato.
Delegate—Dr. Reginald Hammond, Manitowoc.
Alternate—Dr. Lawrence Gregory, Manitowoc.

Dr. Charles Barnstein of Newton was chosen a member of the Public Relations Committee in place of Dr. William Rauch who has moved to West Allis. Dr. Alfred Zlatnik, Two Rivers, was named a member on the county chest clinic committee in place of Dr. A. M. Farrell who is abroad.

MARATHON

Officers of Marathon County Medical Society were elected for the year 1934 as follows:

President—Dr. Verne E. Eastman, Wausau; Vice-President—Dr. F. A. Birnbaum, Marathon; Secretary-Treasurer—Dr. James K. Trumbo, Wausau; Delegate—Dr. S. M. B. Smith, Wausau; Alternate Delegate—Dr. E. E. Flemming, Wausau; Board of Censors—Dr. Harold R. Fehland, Wausau.

Legislative Committee—Dr. Joseph F. Smith, Chr., Wausau; Drs. J. M. Freeman, Wausau; W. C. Frenzel, Wausau.

Health Committee—Dr. R. M. Frawley, Chr., Wausau; Drs. Forrest H. Frey, Wausau; J. N. Doyle, Wausau.

Program Committee—Dr. Harold R. Fehland, Chr., Drs. Merritt L. Jones, Wausau; R. F. Fisher, Wausau.

Resolutions Committee—Dr. H. H. Christensen, Chr., Wausau; Drs. W. A. Green, Wausau; A. W. Boslough, Wausau.

Board of Censors—Dr. H. H. Christensen, Chr., one year; Drs. Paul Z. Reist, two years; Harold R. Fehland, three years.

MILWAUKEE

About four hundred members of The Medical Society of Milwaukee County were in attendance at the annual meeting of the Society, held at the Milwaukee Athletic Club on December 14th. Over two hundred were present at the dinner given prior to the meeting.

The speaker of the evening was Dr. John A. Lapp, Chairman of the Coal Labor Board, of Chicago, who spoke on "Medical Service in the Program of Social Welfare." Dr. Lapp was formerly a member of the staff of the Marquette University, and more recently Director of the National Rehabilitation Association, Washington, D. C.

Following Dr. Lapp's address, officers for 1934 were elected. Dr. Charles Fidler, nominated by the

Nominating Committee of 1932, as President-elect, was made President of the Society.

Other officers elected were: President-elect, Dr. Dexter H. Witte; Secretary, Dr. U. A. Schlueter; Treasurer, Dr. Harvey E. Webb; Member, Board of Directors, Dr. James C. Sargent; Censors (two-year terms), Dr. Millard Tufts and Dr. F. A. Stratton.

Delegates (1933–1934): Drs. Millard Tufts, N. E. McBeath, L. W. Hipke, S. H. Lippitt, R. A. Toepfer, U. A. Schlueter, William M. Jermain.

Alternates (1933–1934): Drs. William A. Ryan, S. M. Markson, T. S. O'Malley, E. H. Gramling, E. O. Gertenbach, W. F. Grotjan, P. E. Oberbreckling.

OUTAGAMIE–WAUPACA

Dr. Charles Schott, Chicago, discussed "The Care of the Newborn" at a joint meeting of the Outagamie–Waupaca county societies at Hotel Northern, Appleton, on November 28th.

ROCK

Members of the Rock County Medical Society were guests of the county board of trustees and Supt. and Mrs. A. H. Cullen at the County Farm, Janesville, on November 28th. Following the duck dinner, papers were read by Dr. S. A. Freitag of Janesville, and Dr. A. I. Rosenberger, Milwaukee.

RUSK

Members of the Rusk County Medical Society met at St. Mary's Convent at Ladysmith in December for the annual election of officers. Dr. L. M. Lundmark of Ladysmith was re-elected President and Dr. M. L. Whalen of Bruce was again chosen Secretary. Lunch was served at the conclusion of the meeting.

SAUK

The Sauk County Medical Society held a dinner meeting at the Warren Hotel in Baraboo on November 21st. Dr. Joseph Dean of Madison presented a paper on "The Mortality Rate in Appendicitis" at this meeting.

SHEBOYGAN

The Sheboygan County Medical Society held its November meeting at the Rocky Knoll Sanatorium. After a delicious dinner, the following program was enjoyed by the fifty-six members and guests present:

"The Treatment of Lobar Pneumonia" by Dr. Wm. S. Middleton, Madison.

"The Treatment of Empyema" by Dr. J. W. Gale, Madison.

At this meeting three new members were admitted to the Society. A. C. R.

TREMPEALEAU–JACKSON–BUFFALO

The Trempealeau–Jackson–Buffalo County Medical Society held its annual meeting at Taylor, Wisconsin, December 7, 1933, in the living rooms of Dr. M. C. Crane of Taylor. Dr. E. A. Petzke of Hixton joined with Dr. Crane in furnishing an elaborate Dutch lunch. This form of banquet proved very enjoyable as well as original.

The following officers were elected for 1934: President, Dr. J. P. Reinhardt, Fountain City; vice-president, Dr. E. A. Petzke, Hixton; secretary-treasurer, Dr. R. L. MacCornack Whitehall; delegate, Dr. C. F. Peterson, Independence; alternate, Dr. H. A. Jegi, Galesville; and censor, Dr. G. F. Stack, Independence.

It was the largest gathering of Society members in many years. R. L. M.

WALWORTH

Dr. Theodora Wheeler Finney of Lake Geneva entertained the Walworth County Medical Society with a dinner at her home on November 14th. After the dinner, Dr. George F. Munns of Winnetka addressed the group on the subject of "Diseases of the New-Born."

The annual meeting of the Society was held at the Walworth County Hospital on December 12th. Dr. Chester C. Schneider of Milwaukee was speaker of the evening, the subject of his address being "The Diagnosis and Treatment of Painful Backs." Methods of investigating and analyzing the important points in the history as well as the routine method of back examination were stressed. The most common causes of back pain were considered and special attention was directed to some of the newer concepts of back pathology. The address was augmented with a demonstration by Dr. A. M. Dorr of radiograms showing the more common pathological conditions of the back.

WINNEBAGO

The Winnebago County Medical Society held its December meeting at the residence of Dr. Donald G. Hugo, Oshkosh, on December 15, at 8:15 P. M. The following officers were elected for the ensuing year:

Dr. M. N. Pitz, Neenah, President.

Dr. J. M. Conley, Oshkosh, Vice-President.

Dr. M. C. Haines, Oshkosh, Secretary and Treasurer.

Dr. J. W. Lockhart, Oshkosh, Delegate.

Dr. R. B. Rogers, Menasha, Alternate Delegate.

Dr. J. F. Stein, Oshkosh, Censor.

Dr. Burton Clark, Jr. of Oshkosh, presented a paper entitled "Carcinoma of the Colon and Rectum." Drs. C. J. Combs, F. G. Connell, Frank Brennan, Lorin Dickelman, and Leonard Smith entered into the discussion. M. C. H.

GREEN BAY ACADEMY OF MEDICINE

A meeting of the Green Bay Academy of Medicine was held on December 5th in the Beaumont Hotel, Green Bay. Papers were presented on the following subjects:

"Clinical Significance of Refractive Errors" by Dr. E. G. Nadeau.

"Pharyngeal Sinus Associated with Cervical Potts' Disease" by Dr. W. J. Decker.

"Sinusitis With Special Reference to the Maxillary Sinus" by Dr. W. C. Comee.

The discussion was opened by Dr. W. P. Tippet.

A buffet luncheon followed the meeting.

MILWAUKEE ACADEMY OF MEDICINE

The December meeting of the Academy was held on the 19th. Speakers and their subjects were as follows:

"New Method of Marking X-ray Film" by Dr. Wayne Townsend.

"Logical Reasons for the Use of Calcium in the Treatment of Tuberculosis" by Dr. Thomas Willett.

"The Lumbosacral Joint and Its Relation to Sciatica" by Dr. Carl E. Badgley, professor of surgery, University of Michigan, Ann Arbor.

MILWAUKEE OTO-OPHTHALMIC

The November meeting of the Milwaukee Oto-Ophthalmic Society was held at the University Club on November 28th. The following program was presented:

"Roentgenological Study of the Hypopharynx, Larynx, and Trachea" by J. E. Mulsow, M. D.

"Fracture of the Mastoid"—a case report by H. G. Schmidt, M. D.

Dr. Mulsow's paper was discussed by Dr. H. C. Dallwig.

THE WOMAN'S AUXILIARY

MRS. EBEN J. CAREY, Milwaukee, *President*
MRS. ROCK SLEYSTER, Wauwatosa, *President-elect*
MRS. GEORGE H. EWELL, Madison, *Secretary*
MRS. R. G. ARVESON, Frederic, *Treasurer*
MRS. WALTER A. FORD, Sheboygan, *Press and Publicity Chairman*
MRS. JAMES BLAKE, Hopkins, Minn., *National President*

NATIONAL NEWS LETTER

A Message From Our National President

Greetings to one and all.

I wonder—have you ever heard the slogan, "Undertake less; accomplish more"?

Well, Mrs. Alice Ames Winter some years ago wrote a book, "The Business of Being a Club Woman", and I have borrowed her slogan. I do want you all to study this slogan, and try in our work to know what we do know as well as we can, and not merely skim the surface. The "Program" of "Health Education" work under Mrs. Arthur B. McGlothlan, St. Joseph, Mo., is the basis of all our Auxiliary activities, and wise is the state president who will follow the lead, "Undertake less, accomplish more". In every state the program committee is the most important. For the character of an Auxiliary depends upon its working program, and the program depends upon the characters of those who build it; how sincere of purpose they are; how well they understand the needs of their Auxiliary, and the community it serves, and how able they are to meet those needs. Every Auxiliary represents a cross section of community life. Through its membership it contacts one or more of the other groups that perhaps direct the activities of that cross section. It may be a home group, a church group, the social group or even a political group. To each of these groups our doctors' wives are contributing largely from the experiences that have come to them as community leaders, and if their program work in the Auxiliary has been in good hands, they have a wide range of material to offer. Every state and county in our nation is facing problems right now. Please, as Auxiliary members, study *your* side of every question before you move on with the masses. When the dredging crew arrives let us not be the ones who have rocked the boat. The Auxiliary woman of the future must be a woman strong in every sense of the word, not only physically and mentally but morally and spiritually as well.

It is a long time since we said "Goodby" to our many friends and Auxiliary people in Milwaukee, and many of us have had plenty of ups and downs since that day in June. But I am sure the inspiration of an Annual meeting such as we have placed in our book of memories for Milwaukee will and has been helping many of us. Our state presidents, I trust, are all at work on their own specific plans for the year. Our National Chairmen are all at work helping in every way possible the state and county groups.

I am sure you will all be pleased to know that Dr. Rock Sleyster, Wauwatosa, Wisconsin, has been chosen by the American Medical Association a member of our Advisory Council, and Dr. Austin A. Hayden of Chicago has been selected to take the place of Dr. Walsh for the next few years. We are delighted to have these men planning our work with us, and keeping fatherly eyes on us at all times. From experience, I know, in these rapidly changing times, advice is good for the soul and keeps us out of mischief.

One of the points of especial interest to the Auxiliary member visiting the Hall of Science at the Century of Progress was the booth of the Woman's Auxiliary to the Chicago Medical Society. Mrs. A. H. Brumback, Mrs. Lucius Cole, and the presidents of

the branches have had this work in charge. The enthusiasm of the members of the Chicago groups was evidenced by the fact that all during the exposition two volunteers were at the booth looking after the registering of the doctors' wives from all over the world, and acting generally in the capacity of hostesses. Enough credit cannot be given to Mrs. Brumback and Mrs. Cole for their work on this project; their graciousness and tireless effort made this booth an outstanding one in the hundreds that filled the Hall of Science.

The week of October 20th found Mrs. James Blake, Minnesota, national president, and Mrs. Robert W. Tomlinson, Delaware, national president-elect, visiting in Cleveland, Ohio, making the first arrangements for the annual meeting in that city, next June 11 to 15. The Cleveland Auxiliary Chairman has not been named.

Let us meet 1934 with strength and courage; let us put forth every effort to make this new year better than the one just ended; let us through work, love, and service help where help is needed so that we may be true to the great ideal that lies behind this Auxiliary of ours.

Mrs. James Blake,
President.

Mrs. Robert E. Fitzgerald,
Press and Publicity Chairman.

Increase in Membership

Since the close of the fiscal year, Dec. 31, 1932, the membership of the Wisconsin Auxiliary has shown an increase of two hundred and two members. The records show that at the close of the fiscal year, Dec. 30, 1933, the membership of the thirteen county auxiliaries (paying state and national dues) was 569,—compared to eight county auxiliaries with a membership of 367 in 1932.

The membership of the county auxiliaries is as follows:

Columbia	8
Brown–Kewaunee–Door	Newly organized
Dane	Newly organized
Douglas	Newly organized
Green Lake–Waushara–Adams	7
Kenosha	29
Manitowoc	22
Marinette–Florence	11
Milwaukee	314
Polk	13
Portage	15
Racine	42
Rock	30
Sheboygan	24
Waukesha	29
Winnebago	24
Member-at-large	1
	569

Douglas County Auxiliary Organized

With the assistance of our State President, Mrs. Eben J. Carey, Milwaukee, an Auxiliary to the Douglas County Medical Society was organized on Monday afternoon, December 18th. Fifteen ladies were present and the following officers were elected: Mrs. Victor E. Ekblad, president; Mrs. James W. McGill, vice-president; Mrs. George J. Hathaway, secretary-treasurer, all of Superior. Douglas County Auxiliary is the sixteenth auxiliary to be organized.

Dane County

An address by Mr. J. G. Crownhart, Secretary, State Medical Society and Wisconsin Hospital Association, on "Public Health Tomorrow" was presented at the December meeting of the Woman's Auxiliary to the Dane County Medical Society on Wednesday, Dec. 13th, at the College Club, Madison. Following a short business meeting bridge was played.

Kenosha County

The December meeting of the Kenosha County Auxiliary was held at the home of Mrs. Curtis H. Gephart, Kenosha. Election of officers was held. The organization made plans to help the Red Cross with some of its Christmas giving, and a committee was appointed to take charge of this phase of the work. Dr. George Adams, Kenosha, addressed the group on "Queer People I Have Known".

Manitowoc County

Officers who served the Manitowoc Auxiliary during the first year of the organization were reelected to their positions at the annual meeting on Dec. 20th. Mrs. Malcom P. Andrews was reelected president. The auxiliary was entertained at luncheon at the home of Mrs. Francis Turgasen, Manitowoc. Members were delighted with a group of piano solos presented by Mrs. Arthur F. Stueck, Manitowoc. Mrs. Leo Moriarty was in charge of the January meeting held at Two Rivers on Jan. 9th.

Milwaukee County

Mrs. J. Gurney Taylor, Milwaukee, succeeded Mrs. Rock Sleyster as president of the Woman's Auxiliary to the Medical Society of Milwaukee County at its second annual meeting in the Y. W. C. A. on Dec. 7th.

About two hundred members and guests attended the luncheon and approximately thirty more came in for the program. Dr. Arthur J. Cramp, Director of the Bureau of Investigation of the A. M. A., gave a most interesting illustrated talk on "Mrs. Gullible's Travels in Cosmetic Land". During the business meeting which followed it was reported that the present membership totals 314. The Hygeia committee reported placing ten one-year subscriptions in rest rooms, clubs, etc., and 18 six-month subscriptions in the rural schools. The committee also sent the names of 1800 school teachers in Milwaukee County to the A. M. A. that sample copies of Hygeia might be sent to each one. The Public Relations Committee reported having placed 61 speakers from the Speakers' Bureau of the Medical Society of Milwaukee County before lay organizations. Auxiliary members helped the County Medical Society, in co-

operation with the city public health department, with a program for the immunization of the indigent by transporting children to and from the clinics and by helping with clerical work at the hospitals during the clinics.

Chicago, Racine and Sheboygan auxiliaries were represented at the meeting. Heading the Chicago delegation were Mrs. Lucius Cole and Mrs. A. M. Brumback.

Racine County

The annual business meeting of the Auxiliary to the Racine County Medical Society was held December 13th at Hotel Racine. Following the luncheon, a delightful pre-hearing of the new WRJN Mother Goose series for children was given by Mrs. Robert Gardiner. Election of officers followed, resulting in the choice of Mrs. Frank W. Pope as president-elect. Mrs. E. C. Pfeifer, retiring president, turned over the gavel to Mrs. Louis E. Fazen, Racine, president, with an expression of congratulations and good wishes to which Mrs. Fazen responded graciously.

Rock County

Twenty members of the Rock County Auxiliary attended the dinner meeting at the Woman's Club on Wednesday evening, November 28th. A review of "Ida Elizabeth" by Sigrid Unset was presented.

Sheboygan County

Mrs. Wesley Van Zanten, Sheboygan, was elected president of the Woman's Auxiliary to the Sheboygan County Medical Society at the regular meeting which was held at the Dresden tea room at Plymouth, on Dec. 6th. Following the luncheon, Dr. R. C. Meyer, Rocky Knoll sanatorium, gave an interesting and instructive talk on pulmonary tuberculosis.

Waukesha County

The Woman's Auxiliary to the Waukesha County Medical Society was entertained at the home of the retiring president, Mrs. H. G. B. Nixon, Hartland, on December 6th. Mrs. Eben J. Carey, Milwaukee, President, State Auxiliary, and Mrs. A. L. Blackstone, Waukesha, were the guest speakers and the meeting was followed by a dinner for twenty-four. The Auxiliary has doubled its membership since its organization last April. The newly elected president is Mrs. James Hassall, Oconomowoc.

Winnebago County

The Woman's Auxiliary to the Winnebago County Medical Society held an open meeting at the Oshkosh Museum on the afternoon of November 27th. There were 48 women present. Dr. A. J. Cramp of the A. M. A. gave a very entertaining and educational talk on "Patent Medicine and the Public".

A Message from the State Program Chairman

Greetings:

We are starting on a new year's work for our Auxiliary, with new leaders and new enthusiasm. Are we going to keep the high standards set by our predecessors? We hope to. We feel that at this time our program for the coming year should be one of our most vital issues; it is the reason for our existence and should be very definite in purpose. It is our duty as doctors' wives to be well informed on the problems that confront our husbands, and our Auxiliary meetings are the medium through which this should be accomplished.

An outline of subjects as approved by the advisory council of the Auxiliary has been sent to your county president and from this she will plan your programs for the year. Individually, therefore, let us put forth our best efforts to co-operate with the officers of our county societies and help to make the year 1934 an outstanding one for constructive work, keeping in mind the fact that it is up to us to uphold the reputation the Auxiliary of the State of Wisconsin holds,—as being one of the most progressive units of the National Organization.

Mrs. Oscar W. Friske,
Program Chairman.

News Items and Personals

At the 43rd annual meeting of the Western Surgical Association at Cincinnati on December 8th and 9th, the following papers were presented by Wisconsin members:

"Resection of a Sarcoma of the Duodenum with Recovery; Report of Case" by Dr. Carl S. Williamson, Green Bay.

"An Analysis of Appendicitis Mortality" by Dr. E. R. Schmidt and Dr. A. C. Taylor of Madison.

"Radical Operation for Arteriovenous Fistula of the Femoral Vessels; With Case Report" by Dr. Reginald H. Jackson, Madison.

The following physicians attended the meeting: Dr. A. S. Jackson, Madison; Dr. Joseph F. Smith, Wausau; Dr. Ralph M. Carter, Green Bay and Dr. W. J. Carson of Milwaukee.

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Dr. F. E. Darling, Jr., who has been doing postgraduate work in Medicine in Philadelphia for the past two years, joined his family in Milwaukee to spend the Christmas holidays.

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Dr. and Mrs. Herbert G. Brehm of Racine have returned from New York City, where Dr. Brehm attended clinics.

Dr. John C. Zuercher left Milwaukee on December 13th for a trip to Europe. He expects to do postgraduate work in Vienna, Germany, and Italy for the next six months.

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Dr. H. C. Ladewig has returned to Milwaukee after having served as a member of President Roosevelt's Special Veterans Review Board in Minneapolis for four weeks.

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The Board of Directors of the Medical Society of Milwaukee County at their meeting on November 21st confirmed the appointments of the following members to advisory groups to the health commissioners of the suburbs in which they live:

Shorewood: Dr. R. W. Benton, Health Commissioner; Drs. J. J. Pink, T. L. Squier and Millard Tufts.

Whitefish Bay: Dr. Edwin B. Gute, Health Commissioner; Drs. J. R. Dundon, John Huston, and J. Gurney Taylor.

West Allis: Dr. Charles Stern, Health Commissioner; Drs. R. H. Frederick, W. L. Stranberg, Thomas Willett.

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Dr. M. Fernan-Nunez, Milwaukee, addressed the International Students Club of Milwaukee on November 10th. His subject was "Medical Education and the University System in the Spanish Countries."

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A number of Wisconsin physicians were injured in automobile accidents during December. Dr. C. U. Senn of Ripon was confined to his home for a time recovering from cuts and bruises when his car left the road as result of icy roads. Dr. C. H. Christiansen of Superior suffered cuts about the face in an automobile collision, and Dr. John D. Wilkinson of Oconomowoc received minor injuries near Waukesha.

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Dr. Louis M. Warfield, Milwaukee, addressed the members of the Hennepin County Medical Society, Minneapolis, on December 4th on the subject of "So-Called Heart Failure in Acute Infection."

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Dr. Arthur G. Sullivan, Madison, gave an address on "Medico–Legal Problems" at the Columbia College of Physicians and Surgeons, New York City, on December 15th.

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An agreement has been perfected between the Manitowoc outdoor relief department and the Manitowoc County Medical Society, recommended by the federal government, and designed to maintain family physician relationship in medical care for the indigent.

Under this agreement, a panel of consultants was appointed by the Manitowoc County Medical Society, consisting of Dr. J. W. Steckbauer, Dr. T. H. Rees, Dr. J. E. Meany, Dr. A. J. Shimek, all of Manitowoc, and Dr. H. J. Belson of St. Nazianz. An advisory committee will also be appointed.

The consultants will confer with the relief department on the determination of medical needs, and the advisory committee will meet monthly with the relief department on the determination of costs and other matters.

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The engagement of Miss Betty Shimek, daughter of Dr. and Mrs. A. J. Shimek of Manitowoc, to Mr. John C. Mayer, also of Manitowoc, was announced in December.

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Mrs. Theresa Fitzgerald, 80, mother of Dr. Robert E. Fitzgerald, Milwaukee, died on December 7th after a long illness.

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Dr. Owen C. Clark of Madison has joined the staff of the Oconomowoc Health Resort as assistant physician. Dr. Clark is a graduate of the University of Wisconsin Medical School in 1931. He interned at Milwaukee Hospital and during the past year and a half has been in general practice at Neillsville.

BIRTHS

A son to Dr. and Mrs. W. A. Rauch, Milwaukee, on November 28th.

A daughter, Dorothy Lou, to Dr. and Mrs. C. F. Dull of Richland Center on December 4th at the Richland Hospital.

A daughter to Dr. and Mrs. J. B. Wilets, Milwaukee, on November 15th.

A son to Dr. and Mrs. L. A. Eisenberg, Milwaukee, on November 22nd.

A daughter to Dr. and Mrs. W. E. Kiley, Milwaukee, on December 1st.

A daughter, Alice Claire, to Dr. and Mrs. G. R. Stauff of Birnamwood on November 25th.

A daughter to Dr. and Mrs. A. H. Thorstensen, Milwaukee, on December 9th.

ENGAGEMENTS

On December 17th, announcement was made of the engagement of Dr. Abram Levine to Miss Sylvia Chutkow, daughter of Mr. and Mrs. S. L. Chutkow, Milwaukee.

DEATHS

Dr. E. G. Appleton, Beaver Dam, died in a Madison hospital on December 16th. He had been ill a week.

Dr. Appleton was born in the year 1876 and was a graduate of The Hahnemann Medical College and Hospital, Chicago, in 1902. He received his Wisconsin license in 1906. He had practiced in Beaver Dam for many years.

Dr. H. F. Jermain, Milwaukee, died on December 22nd at his home, 2605 N. Twelfth St.

He was born near Meeme, Manitowoc County, in 1872. He attended the rural schools and later taught school for four years. In 1897 he entered the Wis

consin College of Physicians and Surgeons, graduating in 1901.

Dr. Jermain was a member of the Medical Society of Milwaukee County, the State Medical Society, and the American Medical Association.

He is survived by his widow, one son, John of Milwaukee, and two brothers, Dr. Louis F. Jermain, Milwaukee, dean emeritus of Marquette University School of Medicine; William of Escanaba, Mich., and a sister, Mrs. Ida Sell of Milwaukee.

SOCIETY RECORDS

New Members

John Henry Houghton, Wisconsin Dells.
Harry Mannis, Black River Falls.
Marshall O. Boudry, Fond du Lac.
Adolph M. Hutter, Fond du Lac.
Frank J. Naylen, North Fond du Lac.
Robert L. Waffle, Fond du Lac.
Gamber F. Tegtmeyer, 425 E. Wisconsin Ave., Milwaukee.
Clifford R. Schneider, 2557 So. Kinnickinnic, Milwaukee.
Martin C. Malensek, 6227 W. Greenfield Ave., West Allis.
Armond J. Ruppenthal, 709 N. 11th St., Milwaukee.
Albert J. Baumann, 1974 So. 31st St., Milwaukee.
Lawrence L. Grossmann, 238 W. Wis. Ave., Milwaukee.
Irving Shulak, Normandale, Madison.
Theodore D. Watry, 2200 No. 3rd St., Milwaukee.
J. J. Colgan, 953 W. Wis. Ave., Milwaukee.
Ewald H. Pawsat, 39 S. Main St., Fond du Lac.
Paul E. Campbell, 831 N. Grand Ave., Waukesha.
Earl H. Klabunde, McDowell Block, Waukesha.
M. J. J. Coluccy, 829 University Ave., Madison.
Robert Burns, Green Bay.
R. S. Ingersoll, Montello.
Louis V. McNamara, Columbus.
Anthony J. Frederick, Columbus.

Changes in Address

H. H. Hull, North Fond du Lac to Brandon.

Through error in the office of the State Society the following name was omitted from the list of members as published in the December issue:

Leonard M. Smith, Oshkosh.

Vaccination and Immunization Program

Professional Participation at Fond du Lac

By M. O. BOUDRY, M. D.
Health Officer, Fond du Lac

THE need for an extensive program for vaccination in the city of Fond du Lac was very urgent. There were more than forty cases of smallpox within a few miles of the city. The number of school children vaccinated was alarmingly small. Of the three hundred and sixteen students of the high school graduating class in June, 1933, not more than two per cent had vaccination scars. The number of vaccinated children in the graded schools was not accurately determined, but an estimate revealed that there were not more than two or three per cent.

Immunization against diphtheria was incorporated with the vaccination program, as it had been three and one-half years since any of this work had been carried out in the schools.

With the aid of the two school nurses, the superintendent of schools, and the teachers and principals of the schools, a blank explaining the program was given to every school child to take home to his parents. The parents were to sign the blank for or against the authorization to administer the vaccine and toxoid at the school. Public anannouncements were made at the same time in the newspaper, telling the parents to take their children to their family doctor, if they so desired, to have the work done before the program was to be carried out in the schools.

Eight days after these announcements appeared in the newspaper, the school program was carried out. This was done as follows:

Through the County Medical Society, various physicians in the city were assigned to the schools. The number of doctors at a school depended upon the number of children to be cared for. This number had been previously determined. Twenty-two doctors did the work. They were apportioned as equally as possible.

A charge was made for every child cared for in the schools, and the doctor received fifty cents per child for his services. A fee of one dollar was charged if the student re-

ceived both the toxoid and the vaccine, or seventy-five cents if the toxoid or vaccine were given singly. The remaining fifty cents or twenty-five cents was retained by the city. This money was used to provide vaccine and toxoid for the indigent.

The children from families on city relief were given this service free of charge by the city physician.

METHOD OF ADMINISTRATION

The one-injection alum precipitated toxoid was used. The vaccine and toxoid were administered at the same time on the same arm. The site of the vaccination was in the upper portion of the arm near the insertion of the deltoid muscle. The toxoid was given hypodermically in the lower posterior aspect of the arm just above the elbow. No severe or alarming reactions were seen from this procedure. A small local reaction was present in a few cases from the administration of toxoid, but this had practically disappeared when the vaccination pox began to form. The number of children who stayed away from school because of any reaction they had from the administration of toxoid was negligible. A small nodule appears under the skin after the toxoid is administered. This remains from ten to twenty days. It is wondered if the formation of the small subcutaneous lump would be absent if the toxoid was administered intramuscularly.

The administration of the one-injection toxoid at the same time as the vaccine does not appear to affect the number of "takes" from the vaccination nor the extent of the reaction.

PROFESSION USED

Fond du Lac has fifteen schools and about seven thousand school children. The approximate number of children cared for by the family physicians in their own offices was one thousand six hundred and twenty-three. The number cared for by the members of the County Medical Society in the schools was eight hundred and forty-one. The number of city charges cared for by the city physician was nine hundred and forty-one.

The program in the schools, as conducted by the members of the County Medical Society was accomplished in one day. The children who received the service from the city physician were taken care of at their schools on successive afternoons. After that work was completed by the Health Department, a second program was conducted for the children whose parents were county charges, mother pension cases, and those who absolutely could not afford to pay for such services. This work was likewise carried out by the city physician in the various schools on successive afternoons. At the present time, forty-five per cent of the Fond du Lac school children are vaccinated, and thirty-five per cent are immunized against diphtheria. The number of children treated was three thousand four hundred and five. Three thousand one hundred and fifty-seven received vaccine and two thousand two hundred and thirty-three were immunized.* The total enrollment, at present, is six thousand nine hundred and forty children.

The total amount of money received was nine hundred and six dollars. Four hundred and forty-three dollars was paid to the respective twenty-two members of the County Medical Society for their services. Five hundred and sixty-seven dollars was paid to the drug stores for the vaccine and toxoid. The deficit of one hundred and eighty-one dollars was taken from the city treasury to meet the cost of the material.

* This percentage of school children immunized against diphtheria is inclusive of the number cared for three and one-half years ago. No Shick tests have been made in the schools.

BE WATCHFUL

Offices of the State Medical Society report that physicians throughout the state are being solicited to assign accounts to out-of-state collection agencies. Members are reminded that interpretations of the contract by the solicitor are not binding upon the agency and that only the legal interpretation of the contract as presented should be considered.

Information on collection agencies and proffered contracts may be obtained by writing the Secretary of the State Medical Society, 119 E. Washington Ave., Madison. In addressing inquiries, members are asked to give the exact name and address of the company and forward, if possible, any printed material bearing upon the contract. Replies will be made within twelve to twenty-four hours and by wire if requested.

Camp American Legion

Lake Tomahawk, Wisconsin

By G. H. STORDOCK

Department Adjutant, The American Legion, Department of Wisconsin

WE, OF The American Legion in Wisconsin, appreciate the opportunity of telling members of The State Medical Society of Wisconsin something about Camp American Legion through the medium of the State Medical Journal.

Camp American Legion is owned, operated and maintained by the American Legion, Department of Wisconsin, for those World War veterans who are residents of the state of Wisconsin, and, who are suffering from a disability which needs outdoor life and rest for treatment. It is also available to those veterans who are recuperating from an operation, or illness of some kind, or who need building up to prepare them for an operation, or who are suffering from any condition where fresh air, rest and good food will restore them to health.

Camp American Legion nestles in the heart of the great lake section of northern Wisconsin, midway between highways 51 and 47, three and one-half miles west of the village of Lake Tomahawk. It is situated on a beautiful wooded tract of land, between Little Tomahawk and Big Carr Lakes, and numerous other lakes are within a radius of a few miles. It is a beautiful spot and ideally situated for those veterans who desire to avail themselves of its advantages. Several cabins are used to house patients and all meals are served in a large, comfortable dining room, which is part of the main lodge recently completed with the assistance of the state of Wisconsin, at a cost of $25,000.00. There is also a large recreation room and library in the main lodge, with sleeping quarters on the second floor which can accommodate from eight to twelve persons during the winter time.

The disability, for which the veteran is admitted, need not be due to service during the World War, and it is not necessary that the man be a member of The American Legion. As no facilities are available at the camp for medical treatment, we are not equipped to take care of hospital cases of any kind, as the camp is merely for convalescents and not for actual treatment. While at the camp, the veteran will have no call for cares or any other thought, but to gain strength to face every day life in the world and restore him to his place in the community.

The cost for care at the camp is nominal in all cases and the charge to be made depends upon the circumstances surrounding each individual case. Veterans not in receipt of compensation, and who have dependents, will not be charged unless their financial circumstances would warrant a charge being made, and then only, if they felt they could afford to pay a small sum. Veterans in receipt of considerable compensation from the Government, will be charged on a sliding scale and in certain cases where the disability is service connected, some aid is received from the State through the Soldier's Rehabilitation Board. I want to make it plain that each case is considered separately, as to the number of dependents, amount of compensation received, etc., and a large percentage of men pay nothing at all during their stay at camp.

Application for admission must be made through some post of The American Legion in Wisconsin, except in a case where the veteran is now being hospitalized. All applications must be accompanied by a physician's medical report and no application will be acted on favorably unless the physician recommends the form of treatment which is available at Camp American Legion. Inquiries and applications should be addressed to J. F. Burns, Department Service Officer, The American Legion, Veterans Administration, Wisconsin.

The medical certificate required with the application can be executed by any licensed M. D. In the past we have received splendid cooperation from the physicians in Wiscon-

sin by assisting veterans to go to this camp and hope they will continue to recommend the camp. We want to take this opportunity of thanking them for their cooperation and informing them that it is our desire at all times to cooperate with them to the fullest extent on all matters in which they and The American Legion may be interested.

Wisconsin's Care of the Veteran*

Legislative Enactments Summarized

By MAJOR JOHN F. MULLEN

Director, Pension, Bonus and Rehabilitation Division, The Adjutant General's Office, Madison

WHILE we all agree that the Spanish American and World War veteran was dealt a severe blow by the so-called Economy Act of March 20, 1933, we must all admit that Wisconsin has been and still is exceedingly generous in the treatment of her veterans, and as proof of this statement allow me to mention some of the major benefits made available by the state since the close of the World War alone.

During the 1919 legislature which was still in session while the boys were returning home, Chapters 452 and 667 were enacted into law. Chapter 452 created the Service Recognition Board and appropriated to it $500,000.00 for the purpose of providing financial relief of $30.00 per month to indigent disabled veterans and their families. Some $100,000.00 of this amount was later transferred to the Wisconsin State Board of Control for the purpose of erecting some of the cottages now a part of the Wisconsin Memorial Hospital at Mendota. An additional $330,000.00 was spent in aid and the balance, or $70,000.00, was transferred to the Soldiers' Rehabilitation Fund on July 1, 1924, when chapter 452 was repealed.

Chapter 667 provided a cash bonus of $10.00 a month for each month of active Federal service with a minimum payment of $50.00 and a maximum payment of $469.33. When these benefits expired on July 1, 1933, approximately $16,000,000.00 had been paid out to 116,000 claimants.

During the Special Session of 1919 the educational bonus law was passed providing for a bonus of $30.00 per month with a maximum payment of $1,080.00 to those who elected to attend an approved school in Wisconsin full time and regularly. To date approximately $4,500,000.00 has been spent. Those who enrolled in an approved school in Wisconsin prior to September 1, 1931, and who by July 1, 1933, have completed two years of college work are eligible to continue with their schooling until July 1, 1935, unless the maximum payment has been made prior to that date.

Other major and early benefits and privileges are in the form of financial relief to indigent veterans and their families administered by the Soldiers' Relief Commissions of the various counties, care of soldiers' graves, registration by The Adjutant General of the burial places of all Wisconsin veterans, free registration of discharge certificates, civil service preference, the establishment and maintenance of the Grand Army Home for Veterans at Waupaca, the membership of which includes Spanish American and World War veterans as well, the Wisconsin Memorial Hospital at Mendota for the care of those mentally deranged, a preference of admission and hospitalization at a reduced cost at the Wisconsin General Hospital at Madison, and numerous other benefits of less importance but nevertheless vital to the veteran.

The Wisconsin statutes charge the Adjutant General with assisting all veterans having claims against the Federal government for pension, insurance, bonus and hospitalization and through the efforts of Adjutant General Immell, Wisconsin is the first state in the Union to establish other than at the seat of State government an agency at the Veterans Administration Regional Office, and at the Central Office at Washington,

* Presented before a meeting of the Madison Chapter, Disabled American Veterans, Dec. 9, 1933.

D. C. The local office maintains a trained staff of six persons, the branch Regional Office at Milwaukee is conducted by two persons, the one of whom has had 13 years' experience in veterans affairs. Appreciating the need for representation in Washington so that we might have access to confidential records and have personal representation before the Review Boards now in operation as a result of the Economy Act, the Adjutant General secured the services of a representative who has had 15 years' experience as a field investigator and claims adjudicator for the Pension Bureau and Veterans Administration. His services being especially necessary for the prosecution of the claim of the Spanish American War veteran who was severely dealt with by the Economy Act through the necessity of proving service connection of his disability to a War fought some 36 years ago, and since his records could not be decentralized or reviewed except by an accredited representative in person.

On July 1, 1924, our State legislature created the Soldiers' Rehabilitation Board and charged it with the responsibility of providing hospital care or medical treatment to World War veterans who are shown to have resided within this State the 5 years next preceding application and who are shown to be ineligible to adequate hospitalization or treatment by the United States. Approximately $200,000.00 has been spent in this form of benefit to date.

HOSPITALIZATION

The 1933 legislature, appreciating the difficulty which the veteran was to experience in obtaining adequate hospitalization as a result of the Economy Act, appropriated $50,000.00 to the Soldiers' Rehabilitation Board for the purpose of providing hospitalization to veterans of all wars who are shown to be in indigent circumstances, residents of the state of Wisconsin the 5 years next preceding application, who are no longer eligible to hospitalization by the United States government, and whose disabilities are not the result of misconduct. This appropriation is to be raised through emergency taxes on incomes and from inheritance taxes, and while but $10,000.00 has been available, many indigent veterans have taken advantage of it and as a result have secured hospitalization not otherwise available to them.

The hospitalization which we are most concerned with at present is care of Wisconsin's mentally deranged veterans at the Wisconsin Memorial Hospital, Mendota. In March and April of this year, also the result of the Economy Act, 267 of our Wisconsin veterans suffering with mental disabilities resultant of the World War were transferred from the Wisconsin Memorial Hospital to government hospitals at St. Cloud, Minnesota, Camp Custer, Michigan, North Chicago, Illinois, or to county asylums, leaving the Wisconsin Memorial Hospital, a mental institution admitted to be the best of its kind in America, vacant, with the exception of some 36 veterans retained and hospitalized by the Soldiers' Rehabilitation Board because their disabilities could not be shown directly traceable to war service.

The present Federal law provides for a maximum payment of pension of $90.00 per month to those whose disabilities are directly traceable to service and shown to be permanently and totally disabling. When such veteran is institutionalized by the United States or by a political subdivision thereof the maximum payable is $15.00 per month except in those cases in which the veteran has a wife, child, mother or father directly dependent upon him for support, when the difference between $15.00 and $90.00 can be paid to the dependent upon establishment of his dependency. The relatives and the legal guardians of those veterans had no alternative but to permit of transfer to government hospitals because they lacked the money with which to pay costs of hospitalization elsewhere and because the Soldiers' Rehabilitation Board is precluded by law from authorizing hospitalization of a veteran shown to be eligible to hospitalization by the Federal government. Those veterans who were transferred but who have no one dependent upon them for support, whose service connection has been continued since the passage of the Economy Act and whose guardians receive but $15.00 per month can be withdrawn from government

hospitals and hospitalized at the Wisconsin Memorial Hospital, Mendota, provided the costs of hospitalization at the rate of $2.00 per day are paid by the guardian from the pension of $90.00 per month which will commence with the veteran's discharge from the government hospital. The veteran's estate in this case will benefit to the approximate extent of $30.00 per month because but $15.00 is now being paid, all or the majority of which is used for clothing and other necessary expense, whereas with his discharge, pension in the amount of $90.00 per month becomes payable. The guardian is permitted to pay the $2.00 per day costs at Mendota, leaving him with a balance of $30.00, and hospitalization in a Wisconsin mental institution second to none, and where relatives and friends can visit the patient more conveniently.

With the splendid cooperation of the Wisconsin State Board of Control and the Interim Committee appointed by the 1933 legislature to study this problem, we have already determined that 92 of these transferred veterans are eligible to return provided the guardian and the court consents, but we expect little or no objection on their part, and have practically completed arrangements for their transfer. We realize that it is still more important to return the veteran with dependents, but the present law will not permit and we must await a change in it which the Interim Committee members have assured us, with the cooperation of our representatives at Washington, will be brought about.

Treatment of Tuberculosis in General Practice

(Continued from page 43)

unnecessary cough, induce respiratory and cardiac fatigue, cause physical exhaustion, mental irritability, and prevent the collapse of cavities and normal healing. We do not allow febrile patients to take any exercise, not even reading in bed. When the temperature is below 100 F. they may take up light reading and gradually extended time for light handicraft work. When toxic symptoms are absent and temperature, pulse, and respiratory rate have returned to normal, patients may be allowed to have their meals out of bed and also from half an hour to one hour in A. M. and P. M. of manual work while up and around. The length of time for walks should vary from 15 minutes to one hour. Patients on exercise must be kept under close observation. The tuberculous individual is suffering with respiratory insufficiency; physical and nervous fatigue may cause a flare-up and lead to metastatic foci in the lungs or elsewhere in the body. The amount of exercise should never overstep the patient's tolerance. This should be followed as strictly as in patients with cardiac insufficiency. There are no standard measures in this regard; however, it should be kept in mind that exercise must not cause fatigue, cyanosis, dyspnea, palpitation, thoracic distress, or loss of appetite. The patient's subjective feeling as to fatigue, exhaustion, and shortness of breath cannot always be taken as a true expression of his tolerance. Many of them accustom themselves to their respiratory difficulties so well that they do not consider it as a handicap; they may be able to stand — without actual consciousness of it — a great deal of strain.

Furthermore, they are often inclined to believe that they are not sick enough to carry on continued rest and that their future fitness to work is aided by early and vigorous exercise. For these reasons tuberculous patients may not complain when the exercise oversteps their margin of safety. The type of exercise when the physical condition permits depends upon the occupation, personality, and environment of the patient. Walking and being up and around are most easily regulated. Handicrafts promote manual and mental dexterity and prevent monotony. Light housework is permitted at the stage when toxic symptoms are not present and the lesion approaches quiescence. We do not allow professional work, social activities, or competitive games while the disease is active. Sports should be prohibited during the active phase. Exercise is a part of cure-taking and must be adapted to the individual case. It should be always graduated and no exercise should be performed without prolonged rest before and after.

This is the first of a series of articles on practical therapy in pulmonary tuberculosis.

ing the three text books, I grade them according to the value to the neurologist.

1. Hassin. 2. Freeman. 3. Weil.

The price of Dr. Weil's book is rather high.

H. H. R.

Nervous Breakdown: Its Cause and Cure. By W. Beran Wolfe, M. D., director, the Community Church Mental Hygiene Clinic, New York. Price $2.50 net. Farrar and Rinehart, Inc., On Murray Hill, New York, New York.

"Nervous Breakdown" is an excellent book for the intelligent layman. The language is simple and clear and the ideas well expressed. The main theme, that a nervous breakdown is a "face" saving device is stressed sufficiently often to "sink in". It is viewed as a "personality knock out", and regarded as a "merciful provision of nature"—against breaking "the basic laws of human conduct". The basic laws which deal with man's relationship to self and others are discussed briefly. There is a section on "the face saving device" which is valuable. The author concludes that a nervous breakdown fails as a face saving measure because it aggravates the fear of meeting the responsibilities of life and because its "cost in symptoms, strategies, and self sabotage are discussed and followed by a group of case reports illustrating such conditions as student and social readjustments, sexual ignorance, homosexuality, masturbation, sex appeal, and the Oedipus complex. The latter part of the, "Plain Words to Patients" is a review of some of the more salient points.

I. "Life without face is intolerable", but face must not be built on "an impossible set of conditions".

II. The steps toward re-adjustment consist of (a) an ordered day; (b) attention to physical appearance; (c) cultivation of outside interests; (d) the development of awareness.

The time honored objects "I can't concentrate", and "I have no interest" are met with and answered convincingly. The book closes with the somewhat dramatic but effective command to "Throw off the shackles of the past and don't worry about the future. Live today! Live now—" This book could be read with profit by physicians who have among their patients the "nervous-breakdown" type.

A. C. W.

Urine and Urinalysis. By Louis Gershenfeld, Ph. M., B. Sc., P. D., professor of bacteriology and hygiene and director of the bacteriological and clinical chemistry laboratories at the Philadelphia College of Pharmacy and Science. Illustrated. Lea & Febiger, Philadelphia, 1933. Price $2.75.

This concise small volume is an appropriate one for the clinical laboratory worker. It is very orderly arranged and incorporates the essential general factors that center around any procedure of urinalysis. The author maintains a flexible attitude regarding dogmatic interpretations of urinary findings. He states, "Data secured by physical, chemical, and microscopic examination of urine which have come into increasing vogue, have aided and have formed the basis for many clinical judgments by medical practitioners, but frequently only after the history obtained from the patient and the physical examination of the case were all considered together."

The volume is introduced with a brief historical summary in which the mystic, quack, and scientific uroscopists are exposed. The book is divided into three parts and a very valuable appendix. The first part deals with normal and abnormal constituents of urine; the second part with the qualitative, quantitative and microscopic examinations; and the third part includes special tests such as tests for metallic poisons, ferments, pregnancy tests, etc.

The text should earn a space on the desk of every clinical laboratory worker. S.B.P.

Minor Maladies and Their Treatment. By Leonard Williams, M. D. Sixth Edition. William Wood and Company. Price $3.75.

This small book appears in its sixth edition considerably modified from its former form. As the author explains in the preface to the fourth edition, the work is especially intended for the use of the younger medical generation.

Whereas, the medical student on graduation has an intimate knowledge of the symptoms, course and treatment of such diseases as typhoid fever, pneumonia and tuberculosis, he is entirely unfitted to prescribe for the common minor ailments which form the bulk of his early practice.

The book deals with such subjects as colds, coughs and sore throats, indigestion, constipation, diarrhea, vomiting, the rheumatic and neuralgic group of complaints, general health and insanity. Two new chapters have been added in the present, sixth edition, one on Minor Glandular Insufficiencies and one on the Ailments of Advancing Years. The final chapter, written by Dr. Ivo Geikie Cobb, is entitled Some Drugs and their Uses. The indications and contraindications to the use of some of the commoner drugs is briefly discussed.

One of the outstanding points of merit in the book is that the author gives concrete advice as to treatment and a list of prescriptions which he has found useful in the treatment of the conditions under discussion. R. V. V.

Fetal, Newborn, and Maternal Morbidity and Mortality. Report of the sub-committee on factors and causes of fetal, newborn, and maternal morbidity and mortality. Hugo Ehrenfest, M. D., Chairman. White House Conference on Child Health and Protection. D. Appleton–Century Company, New York. Price $3.00.

This volume contains twenty-two individual reports which analyze and discuss a large number of factors in the causation of fetal, newborn, and maternal morbidity and mortality. Each report is the work of a member or members of Committee B of the White House Conference on Child Health and

Protection and represents in condensed form an evaluation of the literature, as well as the author's personal experiences with the topic considered. These reports are of unusual value because they are largely based upon the statistical data collected by the White House Conference; certainly the largest and most reliable figures on obstetric complications ever compiled in this country.

This book can be recommended highly to every medical man interested in maternal and infant welfare. To the teacher it is a mine of facts and readily available statistics; to the practitioner it presents many of the problems met with in obstetric practice in a most useful, as well as convincing, manner. J. W. H.

General Index to Volumes I to III of Curtis' Obstetrics and Gynecology. By W. B. Saunders Company, Philadelphia, 1933.

This small volume provides a means of ready reference to the desired subject and is complete in every detail.

In closing this series of reviews of the volumes of Curtis' work as they have appeared, the reviewer wishes to express again to the editor and to the publishers his appreciation for making this work available to students and practitioners. One has only to inspect the volumes to appreciate the literally enormous labor that Dr. Curtis has expended. The arrangement of subjects, choice of authors, coordination of material, as well as the chapters which he himself has contributed, all attest to the unusual ability of the editor for his task. The publishers have been most generous in permitting elaborate and expensive illustrations that add so much to the value of the text and have produced a work that is a credit to the bookmaking art.

The reviewer feels confident that Obstetrics and Gynecology edited by Arthur Hale Curtis cannot fail to reflect credit upon American obstetrics and gynecology and at the same time improve the practice of that ageless branch of the healing art. J. W. H.

Histology. By Ramon-Cajal, M. D. (Madrid). Director, Royal Cajal Institute for Medical Research; emeritus professor of pathology, University of Madrid Faculty of Medicine; Nobel premiate in medicine; Life Senator of Spain.

Authorized translation from the tenth Spanish edition by M. Fernan-Nunez, M. D., (Madrid) Professor of Pathology, Marquette University School of Medicine. William Wood & Company, Baltimore, 1933.

This histology was written by Dr. Cajal especially for the Spanish medical student. In Spain, instead of giving the first year medical student a complete course in histology and organology as we do in America, only cytology and histology are taught the first year. Normal organology is taught the second year in connection with pathology. Accordingly this book is devoted primarily to cytology and histology and are thoroughly covered. The organs are passed over very lightly. The first 483 pages deal with the cell, blood and lymph, epithelium, muscle, connective tissue and nerve tissue. About 200 of the 483 pages are devoted to nerve tissue which was Cajal's specialty. The next 147 pages deal superficially with the organs. The last 62 pages of fine print are devoted to histological methods. The text is well illustrated by clear cut drawings most of which are Cajal's own. The literature referred to is almost exclusively European. T. H. B.

Obstetrics and Gynecology. Edited by Arthur Hale Curtis, M. D., professor and head of the Department of Obstetrics and Gynecology, Northwestern University Medical School; Chief of the Gynecologic Service, Passavant Memorial Hospital, Chicago. With 1664 illustrations, Volume III. Price per set, cloth $35.00 net. W. B. Saunders Company, Philadelphia, 1933.

The highest praise that the reviewer can bestow upon Volume III of Curtis' work is to say that it in every way maintains the high standard set by Volumes I and II that preceded it.

Almost every chapter in Volume III could be singled out for praise, but the reviewer wishes to call particular attention to the section on Disturbances of Menstrual Function by Miller, Novak, Rubin and Reis and that on The Endocrines in Gynecology and Obstetrics by Allen, Corner, Smith and Engle, and Novak. These problems are among the most baffling to the practitioner and student, and the literature is so enormous and, at times, confusing that it is difficult to evaluate it. These undoubted masters have presented their subjects clearly, concisely, convincingly and in a most usable form. J. W. H.

Textbook of Physical Therapy. By Heinrich F. Wolf, M. D., chief of the Department of Physical Therapy, Mt. Sinai Hospital and Dispensary, New York; President, New York Physical Therapy Society. D. Appleton-Century Company, New York.

In recent years a number of textbooks on physical therapy have appeared. Immediately after the World War some of these carried exaggerated claims and unproven statements. With a more intensive and scientific study of physical therapy measures, authors have been more conservative, but none the less positive, in their statements as to the values of the physiotherapeutic agencies, and their part in the therapeutic team work.

Dr. Wolf's textbook seems quite rational and well presented. Only about one-third of the book is devoted to the physics of heat and light, electricity, hydrotherapy, massage, etc., while the remainder is concerned with the practice of physical therapeutics. Quite extended discussions are undertaken regarding the treatment of fractures, arthritis, infections of the respiratory tract and diseases of the nervous system. He discusses many other pathological conditions, and gives a chapter on the therapeutic uses of hyperthermia. Dermatological conditions amenable to physical measures are discussed, and con-

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sideration given to electro-surgery, gynecology, and otolaryngology.

The book should have a useful place in the library of physicians practicing physical therapy. It is abundantly illustrated and of attractive typographical construction. J. C. E.

The Treatment of Rheumatoid Arthritis and Sciatica. By A. H. Douthwaite, M. D., F. R. C. P. (Lond.) Assistant Physician, Guy's Hospital, All Saints' Hospital. Second edition. H. K. Lewis & Co., Ltd., 136 Gower St., London, W. C. 1.

In this second edition the author has brought up-to-date his first edition published in 1929 and he has added a chapter on the diagnosis and treatment of sciatica because of the close relationship which he feels exists between sciatica, the abnormal features of myositis and rheumatoid arthritis. A changed viewpoint of arthritis which he describes as a middle course between the theories of focal sepsis and endocrine derangements recommends this work rather than anything new about the arthritides. Until more is known of the etiology of the arthritides the accuracy of this changed viewpoint can not be known. The author's classification of the arthritides is more complex than that commonly used in America today. Rheumatoid arthritis he considers as a disease limited almost entirely to women of child-bearing age. The role of focal infection is minimized with more emphasis thrown upon allergic and endocrine factors as a cause of the arthritides. As in the previous edition the book is largely directed to treatment. The chief addition here is reference to the possible role of urine proteoses. The presentation is not technical, the print is large and easily read, there are few illustrations, a short list of references, and an index. K. L. P.

Pediatrics. By Henry D. Chapin, M. A., M. D., professor emeritus of pediatrics, New York Post Graduate Medical School, Columbia University; founder and medical director of the Speedwell Society; Ex-president of the American Pediatric Society and Lawrence T. Royster, M. D., professor of pediatrics and head of the Department of Pediatrics, University of Virginia. Wm. Wood & Company, Baltimore, 1933. Price $7.00.

In this, the seventh edition of Chapin and Royster, very extensive alterations have been made. Many sections have been completely rewritten and the text as a whole considerably changed in bringing it up to date. In addition, a great deal of entirely new material has been added. New articles consist of the appraisal of the child, various diseases of the new-born, undulant fever, acute glandular fever, acute carditis, fulminant carditis, acute and subacute bacterial endocarditis, erythroblastic anemia, agranulocytosis, sicklemia, Niemann–Pick disease, xanthomatosis, malnutrition in infancy, nephrosis, undesirable habits and lead poisoning. Subjects which have been completely rewritten and greatly enlarged are growth and development, digestion and metabolism, disturbances of acid-base equilibrium, treatment of empyema, Hodgkin's disease, exophthalmic goitre, acute nephritis, and acute otitis media.

A characteristic feature of this edition as of the previous ones, is brevity. In fact, in many instances completeness, such as may reasonably be expected of a text-book, is sacrificed for the sake of brevity —not that the most important observations on the general run of pediatric subjects are not mentioned, but that many are not discussed with as much attention to detail as the reviewer would deem desirable. J. E. G.

Rectal Diseases in Office Practice. By Lawrence Goldbacher, M. D., Philadelphia. Chief of the Department of Proctology, Women's Homeopathic Hospital, Phila., proctologist to the National Stomach Hospital, Philadelphia; Lieutenant–Commander, U. S. N. R. Illustrated. L. Aubrock & Co., Philadelphia, 1933. Cloth $9.75.

The author covers the field of rectal diseases quite thoroughly. The material is well organized, and presented clearly. The illustrations and drawings are appropriate.

The basis for his clinical deductions are presented in the chapters on anatomy, physiology, and pathology, together with two chapters on the instruments for diagnosis, and method of making a rectal diagnosis.

The various diseases of the rectum are then taken up and discussed with regard to etiology, diagnosis, and treatment; and the treatment is usually that which can be carried out in the office. The injection treatment of anal fissure and hemorrhoids is described. Pruritus ani is discussed and will be of help to anyone who has to deal with these unfortunates. The subject of proctitis is clearly presented —something which is not emphasized usually.

The book can be recommended not only to general practitioners, but to all medical men who are treating patients. E. R. S.

Life-Giving Light. By Charles Sheard, Ph. D., Sc. D., professor and director of biophysical research, The Mayo Foundation, University of Minnesota, and The Mayo Clinic. The Williams & Wilkins Company in cooperation with the Century of Progress Exposition.

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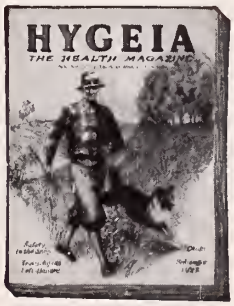

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of this kind the popular style of writing is often detrimental to scientific accuracy; however, it must be emphasized that this has been avoided in Sheard's book: a very commendable feature indeed. E. A. P.

The New Dentistry. Six Lowell Lectures. By Leroy Matthew Simpson Miner, D.M.D., M.D., F.A.C.S. Dean of The Dental School and Professor of Clinical Oral Surgery in Harvard University. Harvard University Press, Cambridge, Mass. 1933.

Dr. Leroy M. Miner, Dean of Harvard Dental School, bases his volume "The New Dentistry" upon a series of Lowell Institute lectures delivered in Boston in 1932. This series of six lectures was prepared for the general public in story form. Dr. Miner traces dentistry from its earliest period, when crude gold leaf fillings were placed in teeth for adornment, through the later periods when mechanical dentistry developed sufficiently to replace teeth that were lost or parts of teeth destroyed by decay.

With the World War dentistry progressed rapidly and became closely associated with, or perhaps a specialty of medicine. Research proved that foci of infection at root ends or in the gums or alveolar process were responsible for symptoms appearing in other parts of the body, mainly joints, heart, eyes, sinuses, etc. Many times upon removal of the primary foci the secondary symptoms disappeared.

One lecture is devoted to the discussion of diet and vitamins necessary for the growth and development of teeth and the investing tissues. In his closing chapter Dr. Miner stresses the point that the future of dentistry lies in prevention and not in cure.

The book should prove interesting to medical men, dentists, and the general public. The success of Dr. Miner as an oral surgeon is widely known, and he is considered an authority in the field of dentistry. E. F. W.

Chronic Indigestion. By Thomas C. Hunt, B. A., D. M. (onon), M. R. C. P. (Lond.) Physician to out-patients and junior medical tutor, St. Mary's Hospital, London; assistant physician. Queen Charlotte's Hospital, London. Price $4.25. William Wood & Co., Baltimore, 1933.

This book contains a clear and concise exposition of the causes, diagnosis and treatment of some of the commoner pathological conditions associated with predominance of gastrointestinal symptoms.

The author has omitted or touched but lightly on a mass of material that is of controversial character and has laid stress on the essentials and on those facts which are fairly universally accepted.

Of the organic diseases of the gastrointestinal tract discussed in this work, peptic ulcer, carcinoma of the stomach, chronic gastritis, gall bladder disease and chronic appendicitis occupy a prominent part. Stress is also laid on functional disorders of the colon, nervous indigestion and gastrointestinal symptoms secondary to such common conditions as diseases of the cardiovascular system, pulmonary tuberculosis and senility.

A number of excellent radiograms illustrate the text and enhance the value of the book as a work of reference for the student or practitioner.

The final chapters are devoted to a brief summary of some of the commoner and more valuable laboratory methods employed in the diagnosis and treatment of gastrointestinal disorders, to a brief outline for case taking and to a list of prescriptions useful in treating chronic indigestion.

This book is one of distinct value to either the medical student or general practitioner. R. V. V.

Infections of the Hand. By Allen B. Kanavel, M. D., Sc. D., professor of surgery, Northwestern University Medical School, Chicago; attending surgeon, Wesley Memorial and Passavant Memorial Hospitals, Chicago. Sixth edition, revised. Price $6.00 net. Lea & Febiger, Philadelphia, 1933.

This book is one of the standard works that ought to be in the library of every medical man who has anything to do with infections of the hand. This is the sixth edition and presents the anatomy, pathology, and treatment of infections of the hand. There has been a complete revision of the book; and new material has been added on the course of infections from bites and injuries of the teeth, of the pathology and treatment of metacarpo-phalangeal joint infections, of gangrenous infections, of ininjuries from indelible pencils, of cattle hair and other peculiar infections. Chapters have been added upon the function of the hand, the use of splints, and the prophylactic treatment of injuries.

The subject matter is presented simply and logically, and many new illustrations have been added.

For an appreciation and understanding of the anatomy, pathology, and treatment of hand infections, this book is unexcelled. E. R. S.

American Red Cross Text-Book on Home Hygiene and Care of the Sick. By Jane A. Delano, R. N., Chairman of the National Committee, Red Cross Nursing Service 1909–19. Fourth edition, revised. P. Blakiston's Son & Co., Inc., 1012 Walnut St., Philadelphia, Paper $.75. Cloth $1.40. Forty-five illustrations.

This fourth edition of the *American Red Cross Text Book on Home Hygiene and Care of the Sick*, revised under the direction of Miss I. Malinde Havey, differs from the preceding editions in that it stresses particularly the prevention and control of communicable diseases, and introduces new material on the relation of mental health to physical health.

As stated by Miss Clara D. Noyes in the preface, the aim of the book is not to train practical nurses or to take the place of any nursing course, but to "give women and girls an appreciation and elementary knowledge of home and personal hygiene and the principles of sanitation and simple nursing." The aim is accomplished and the material meets well the need of present day lay women in assuming responsibilities for family and community health. The material is arranged in logical sequence beginning with the subjects of the health of the individ-

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ual, of the home and community, the care of children, and following with the symptoms and simple treatments of illness, the care of the aged and chronic patient and with the treatment of emergencies occurring in the home. In addition to the main body of subject matter there are valuable appendices, a glossary, and an index contributing substantially to the value of the book. The review questions and suggested references for further reading at the end of each chapter are valuable for either group or individual study.

Notwithstanding the fact that the subject itself is usually one of universal appeal, the book holds the attention well because of its clear, concise, readable style. The illustrations are good, but an increased number would assist materially in presenting the subject matter.

Because of its completeness, its clarity, its explicitness, this book is well suited to the task of acquainting lay women with the needs and the means of maintaining a healthy body and mind and, indirectly, a well community. H. L. B.

Mayo Foundation Lectures on the History of Medicine: A series of lectures at the Mayo Foundation and at the Universities of Minnesota, Wisconsin, Iowa, Northwestern, and the Des Moines Academy of Medicine. Given between 1926 and 1932. Octavo of 516 pages with 26 ilustrations. Price $5.00. W. B. Saunders Company, Philadelphia.

This volume does not purport to be a consecutive history of medicine, but is a collection of lectures upon various historical topics delivered by various men under the auspices of the Mayo Foundation. Under such circumstances it is not to be expected that all the lectures will be of equal value as historical documents. A number and perhaps too many are of the type of the hurried resume of the development of medical art and science from Imhotep to Osler, with consequent overlapping and repetition. A goodly number, however, are the product of real historical scholarship upon specific topics and are thus definite contributions. Others which incorporate personal reminiscences of notable physicians are equally interesting and valuable.

It is to be regretted that the book has not had that careful editing which is demanded in a historical work, as numerous slight inaccuracies in names and places appear. To mention but two of several such inaccuracies which caught the eye of the reviewer, Garrison's pen slips in assigning the origin of the cell-doctrine to the "lawyer-botanist, Schwann" and in designating Wisconsin's pioneer surgeon, Wolcott of Milwaukee, as "Walcott of Madison". It is further a little difficult to follow Garrison's logic in attributing the historical interest shown by W. S. Miller, C. R. Bardeen and H. M. Brown to the German and Scandinavian immigration into Wisconsin, though one must recognize its fundamental importance in that of L. Hektoen, T. H. Shastid and Edward Kremers.

In spite of such irregularities the book is valuable to the student of medical history because of such scholarly articles as those of Corner upon the discovery of the mammalian ovum, and upon the Rise of Salerno; those of Jos. L. Miller upon Renaissance Midwifery and upon the Early American Herbal of Nicholas Monardes; that of Armstrong upon Early American Medical Journals; the personal sketch of John S. Billings by Garrison; the delightful sketch of Virchow by Bartlett and Packard's succinct condensation of his larger work upon Paré. C. H. B.

Natural Childbirth. By Grantly Dick Read, M. A., M. D. (Cambridge). William Heinemann, Ltd., London, 1933.

The author shows that the psychical state is a real factor in the proper treatment of an obstetrical patient.

Too often, the obstetrician acts as a mechanical man, determines presentation, and position; follows the progress of the labor by rectal and vaginal examination with one aim in view to deliver his patient. Then, too, at the expense of the psychic and physical state is his ambition often fulfilled.

During the labor, the obstetrician has failed many times to reassure his patient; his face is expressionless and shows no hope of encouragement for the patient, nor does he give his patient any consolation when suffering. She does not know what indicates progress; indeed her doctor does not indicate progress to her or encourage her as a result of it.

The obstetrician does not realize that the psychical state of the patient is pathological because it is opposed to a normal physiological state and may change a normal state of labor into one which turns distinctly abnormal ending hazardous for both baby and mother.

The doctor often fails to adopt an attitude of reassurance which will be of great help in controlling her pain and placing mental and physical faculties at ease.

Pain is enhanced by psychic stimulus; misconceptions aggravate it and produce fear. Patients read magazine articles, hear of the horrors of childbirth from other women, and read newspaper reports of infant and maternal mortality, stating perhaps the United States has the highest infant mortality in the world. What has the patient's physician accomplished in studying and easing the patient's psychic state produced by misconception? The answer may be nothing at all. What does he do during labor to displace despair for hope? Does he give his patient the quiet, calm, and competent explanation which has instilled confidence toward a happy termination of her labor and dispelled fear to an intensified imagination? Probably not.

It all means that the physician must practice obstetrics with not only an understanding of the pure obstetric principles but he must understand the inter-relation of the psychic state as applied to obstetrics. The physician must have the "milk of human kindness" which he can carry to the bedside, as well as a knowledge and skill; and lastly he must treat the often neglected psychic state of the pati-

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The reviewer recommends that this book be read by every practitioner of obstetrics. R. E. C.

The Clinical Study and Treatment of Sick Children. By John Thomson M. D., LL. D., F. R. C. P., (Lond. & Ed.). Fifth edition, re-written and enlarged by Leonard Findley, M. D., D. Sc., M. R. C. P., Physician, Princess Elizabeth of York Hospital for Children, London; Hon. Member of American Pediatric Society, and the Canadian Society for the Study of Diseases of Children; Hon. Fellow Medical Society Budapest; Hon. Member, Interstate Medical Assoc., North America. With 344 illustrations. Oliver and Boyd, Tweeddale Court, Edinburgh; 33 Paternoster Row, E. C., London. Price thirty shillings, (approximately $7.50).

This fifth edition is not intended to present a complete text on pediatrics. Only those clinical entities peculiar to pediatrics are discussed at any length while diseases common to adults and children are mentioned only to point out peculiarities of diagnosis and treatment. The preliminary chapter on general examination and growth and development contain only necessary facts that are not lost in a mass of confusing detail. For the most part the discussions of diseases are grouped under anatomical systems with the physiology of the part outlined. Brief but practical differential diagnostic points are found throughout the book.

The importance of nutritional diseases is lost by too brief a presentation and is further confused by the European classification which is not commonly used in this country. Deficiency diseases are discussed at more length but, as in any textbook, can not attempt being complete while the subject is so unsettled from the experimental standpoint. Considerable space is given to congenital defects.

Conservation is the keynote of the entire text, especially in therapeutics, as shown by the majority of references which, while they include the outstanding sources of the early part of this century, contain surprisingly few from the past decade. C. E. R.

Industrial Health Service. By Leverett Dale Bristol, M. D., Health Director, American Telephone and Telegraph Company, New York, N. Y. Lea & Febiger, Philadelphia, 1933.

In the preface the author has outlined his purpose "to present simply, briefly and in condensed and somewhat sketchy form some of the more important facts and problems with reference to the health of the worker in industry". Within these limitations the work is well done, although one wishes for a less sketchy presentation. The author speaks authoritatively and from personal experience.

There are three divisions. This involves a certain amount of repetition but serves to emphasize viewpoints which are often overlooked by health departments. The first, from the standpoint of management, outlines an organization which is ideal and can be studied profitably by executives concerned with health problems. The second, from the standpoint of the supervisor and the third from the standpoint of the worker, consists of simple discussions of the common diseases and serves as a model for industrial health propaganda. W. D. S.

The Elements of Medical Treatment. By Robert Hutchison, M. D., F. R. C. P., physician to the London Hospital and to the Hospital for Sick Children, Great Ormond Street. Second edition. Price $2.00. William Wood & Company, Baltimore.

This is a book the medical student and interne have been looking for. As the author explains in the preface, the book is elementary and introductory in character and does not assume to be a complete treatise on medical therapeutics. Rare judgment has been shown in the selection of drugs and remediable agents described and of particular value to the beginner—a proper and pleasing way in which drugs can be used.

After an introductory chapter on some of the general principles of medical treatment, the author selects a list of diseases or symptoms complex, such as fever, pain, insomnia, constipation and diarrhea, heart failure, bronchitis, anemia, gout, dyspepsia, nephritis, hemorrhage, etc., and gives the general principles as well as specific suggestions for the treatment of each condition. The great advantage of the book from the student or interne's standpoint is that he is not confused by a multiplicity of suggestions and only those measures of universal, proven clinical value are mentioned.

The chapters on anemia and diabetes have been revised, in this second edition, to bring them up to date and new chapters have been added treating of sedatives, anthelmintics and physiotherapy.

The final chapter is devoted to minor medical operations, such as blood transfusions, subcutaneous injections, paracentesis, venepuncture, venesection and several other such means, together with their indications and technique. R. V. V.

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by George Crile, M. D.

The University Hospitals; Purpose and Policy
by Glenn Frank

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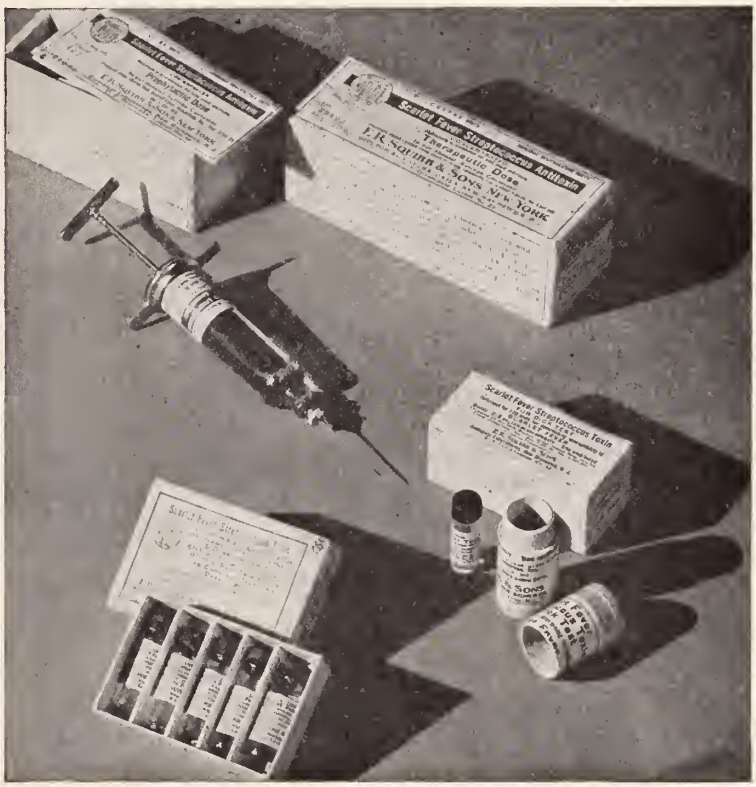

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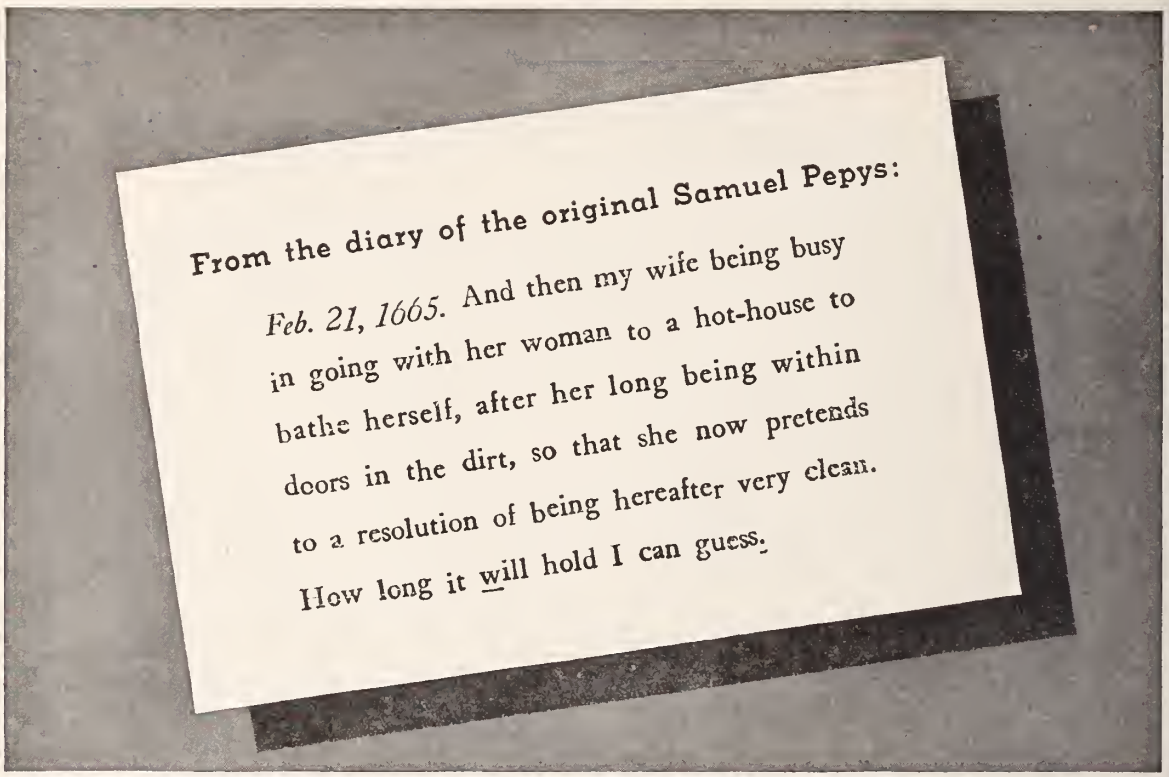

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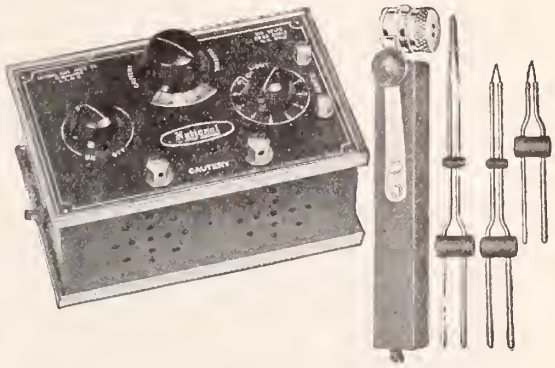

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THE WISCONSIN MEDICAL JOURNAL

Volume XXXIII FEBRUARY, 1934 Number 2

Denervation of the Adrenal Glands*

By GEORGE CRILE, M. D.
Cleveland Clinic, Cleveland, Ohio

I WISH first to express my appreciation for the honor you have bestowed upon me in asking me to deliver the "Oration in Surgery".

I have chosen as my subject "Denervation of the Adrenal Glands" because this is a matter with which we have been concerned for a long time, both in the clinic and the laboratory. This is essentially a preliminary report of what I think may become a promising procedure.

It would appear that the thyroid and the adrenal glands, very different from each other from a superficial point of view, but very like each other in many respects, belong to one and the same system. The extent to which the sympathetic nervous system is distributed to all the essential chemical organs of the body is obvious at a glance. If the masses of cells (illustrating) forming ganglia were brought together, together with the medullas of the adrenal glands which are essentially parts of the nervous system, and made into one, there would be formed a little brain in the sympathetic system. I propose to offer evidence that that is just about what the adrenal gland is. It is a local brain in the sympathetic system, forming a power station very similar to the brain.

Although the sympathetic system is similar to the brain there is no good reason why it should be in one mass. There is every reason why the driving energies that govern the locomotor system should be in one mass, because that system must be coördinated so definitely. There is no such necessity here (illustrating) as the work of the sympathetic system can be done by local relays, instead of by a single mass.

In other words, I wish to call attention to what is very well known to all of us—that if there were subtracted from me everything excepting the sympathetic nervous system, I should still stand before you as a ghost-like outline of myself, because this system supplies all the blood vessels, all the viscera. The sympathetic nervous system is not a small system, not an inconsequential system. It is an older system than the brain.

It is very interesting to think that the peculiarly human organs or parts of man—the frontal lobe of the brain, and the hands—are the great differential characteristics of man. That is very clear from the standpoint of evolution.

In our arboreal experience, we were driven up a tree by enemies more powerful than we were. While up there we developed the hands. In that period the frontal lobe of the brain—the organ of memory, reason, imagination—which is a tool for the advancement of man, developed, this development being coupled with the development of his hands, or the means of manipulation. So the brain and the hands together have formed the great differential characteristics of man.

THYROID AND ADRENAL GLANDS

But there is still another circumstance that has changed the course of evolution, a study of which has been made by Robert Crile during this past year. He studied the relative size, or mass, of the thyroid gland, the adrenal glands and the brain of various orders of animals—those that are negative in their characteristics, those that are positive, those that fight for their existence, those that have to escape from their enemies, those that are powerful muscular animals, and those that are weak muscular ani-

* Presented before 91st Anniversary Meeting, State Medical Society of Wisconsin, Milwaukee, September, 1932. Revised to date of publication.

mals. And in this study we found a very interesting indication (this is a tentative statement I am now making) which is, that man is distinguished not only by the peculiar development of the frontal lobe of the brain and of the hand, but also by the development of the thyroid gland in its relation to the adrenal gland.

For example, in the ordinary wild animals, like the deer or the lion, the weight of the adrenal glands is two or three times as much as that of the thyroid gland, whereas in man the weight of the thyroid gland is about twice that of the adrenal glands.

The thyroid gland has the power of governing the rate of oxidation of every cell of the body. It has that power by virtue of the fact that it can metabolize iodine, and iodine changes the metabolism of every cell of the body. On the other hand, the adrenal glands have the power of increasing with great suddenness the activity of all the organs of the body.

The adrenal gland enables the animal to reach a peak load of activity with great speed. The thyroid gland elevates the continuous day and night level of activity of an animal. Therefore, an animal in which there is a high ratio of adrenal tissue to thyroid tissue, will have a greater power of outbursts of speed, of energy, as compared with an animal in which there is a high level of thyroid activity and a relatively lower level of adrenal activity.

Notice the difference between the behavior of man, and, for example, the dog, or the deer, or the lion. These animals either loaf and sleep and do nothing, or they search for food, or for mates. Unless they are impelled by some necessity, they do nothing.

What do we do? We work all day long, and worry throughout the evening. We are ceaseless in our activity. If too much of the thyroid gland is removed, what happens? We doze or sleep all day long and never are active. We have lost our power.

We owe our power of ceaseless activity to the evolution in size of the thyroid gland.

This investigation to which I have referred will be published later. Fortunately, the data are anatomical and therefore very easily demonstrable. The hides and skeletons of all the animals used in this investigation are collected in the Cleveland Museum of Natural History. The thyroids and the adrenal glands, the records of their weights and measurements and photographs of them, are in our possession, together with comparisons with the sizes of the brains.

As for the main point, that is, the application of this to the problem before us, it means, as I see it, that the great activity of man brings into play an interference with other organs. What happens when man is worried and excited and overworked? What happens to the digestive organs? They are inhibited, interfered with. The same effects can be seen in the lower animals, in which whenever there is an overwhelming stimulus of fear, all of those organs of the body that cannot contribute to the speed of the get-away are inhibited.

The body can have only so much metabolism. It can eliminate only so much CO_2, only so much waste. Thus through evolution, a mechanism has been established in times of stress whereby all those organs are inhibited that cannot contribute to the get-away, or to the attack. And so it comes about that we still have that mechanism in our organism.

If we were to take 10,000 people and give to each of them a life span of 100 years, the last of the 10,000 would be an old progenitor covered with hair—a great big, burly, husky individual, sitting at the foot of a tree all night long, guarding the young and the females, who were up in the tree, from the leopard and the snake.

Our progenitor had real canine teeth, a heavy jaw, and great power. He defended himself by his muscles, by his own vigor. He had no weapons, no defense except the defense within himself. And we still have the mimicry of that sturdy ancestor in our make-up even though instead of defending ourselves with our own strength, with our own power, we defend ourselves by strategy, by the use of the forces of nature.

"TIED TO THE PAST"

Our old progenitor discovered the use of fire and that unloosed the forces of nature for our own purposes. Then there was the

discovery of machinery, the rise of knowledge and of science, of government, of philosophy, of religion—all through the action of the brain of man. But I wish to point out the fact that in spite of these products of our brain we are tied to the past and we cannot cut ourselves loose from it, while moveover, our activity has been enormously accelerated by our present complicated way of living. The result is that we are continually stimulating the frontal lobe to interference with the action of the adrenal sympathetic system. Therefore, there is constantly an interference with normal digestion, with blood pressure, with the pancreas and its functions.

When any one of us experiences an increased pounding of the heart as the result of some excitement, that is the result of activity of the adrenal-sympathetic system. When excited, we have increased sugar in the blood and glycosuria, that is the result of activity of the adrenal-sympathetic system. When through some excitement we observe a momentary high blood pressure, that is the result of activity of the adrenal-sympathetic system. When we have a blanched skin or a flushed skin that changes the circulation, that is the result of activity of the adrenal-sympathetic system. When there is sweating and tremor and weakness, that is the result of activity of the adrenal-sympathetic system.

In other words, when we have an emotional strain from any cause whatsoever, it is the result of the stimulation of the adrenal-sympathetic system, because the phenomena of an emotion are expressed and realized only by the activity of that system.

In emotion all animals show similar symptoms to those shown by man, but there is one great difference. As the result of the rise of the thyroid gland, man is endowed with continuous activity which exercises the adrenal-sympathetic system far more than that system is exercised in any of the lower animals. It is necessary, therefore, to show, if we can, that excessive exercise of that system will cause a change in that system itself, so that in the absence of the actual excitant it will still be too active.

I am going to propose that hyperthyroidism is an expression of an increased activity of the adrenal-sympathetic system. I am going to propose that in many cases of diabetes and in certain cases of hypertension the same is true; namely, that what was started by repetitions has finally become fixed as a type of pathologic physiology. I am going to propose that that is true of peptic ulcer in many cases—that the interference with the stimulation of the adrenal-sympathetic system repeatedly, intensively, has gone on until a type of pathologic education has occurred, as a result of which the stimulation remains fixed and does not disappear in a night's sleep, or in a short period of forgetfulness.

PATHOLOGIC PHYSIOLOGY

What evidence can I offer that that is a fact? Concrete evidence is supplied by that extraordinary disease — Raynaud's disease. Raynaud's disease is due to nothing more mysterious than a long-continued, sustained pathologic activity of the sympathetic ganglia in the lumbar dorsal region. When these ganglia are removed by surgical operation, the disease disappears, and when the pathologists examine these sympathetic ganglia to see what is the matter with them, they find nothing. It is a case of pathologic physiology—not pathologic anatomy. In other words, through some cause which now I do not understand, there is an education, so to speak, to an increasing activity of these ganglia, and the resultant disease may cause the death of the individual.

Another example of such pathologic physiology is the disease, megacolon. Here again, as Hunter pronounced, an increased, sustained activity finally produces hyperplasia of the colon.

Still another very interesting commonplace example of pathologic physiology is our old friend exophthalmic goiter. Many years ago, the resection of the sympathetic ganglia was proposed as a treatment for that disease. I have done that operation in times past in several instances, and it is quite true that the resection of the sympathetic ganglia will ameliorate and cure exophthalmic goiter. If you cut off the sympathetic impulses from the thyroid gland, the

hyperplasia disappears. When you cut it off from the megacolon, the megacolon disappears. When you cut off the affected ganglia in Raynaud's disease, the disease disappears.

I propose to apply this principle of pathologic physiology to a group of diseases which civilized man alone is subject to—a group of diseases which are bred particularly in the stress and strain of civilized life.

I do not mean by that that only the highest types of people can get these diseases. I mean that the people who are carrying on the work of their ancestors in creating and maintaining what we call our civilized life, are the victims.

There are not very many lower animals that can have a peptic ulcer. There are none that get the conventional diabetes. None that have hyperthyroidism. You rarely see people of inferior civilization with any of these diseases. I believe that their genesis is due to the excessive activity of man in which his complicated environment has placed him.

The brain itself drives the muscles in particular. The sympathetic nervous system drives the great living part of us as it governs the chemical activities of nearly all the important organs of the body. Then, if what I have said has any merit as a background, we ought to be able to relieve definitely, and for the most part to cure, those peculiarly human diseases, peptic ulcer, exophthalmic goiter, diabetes, and neurocirculatory asthenia. We have applied this principle by performing 286 operations on the adrenal sympathetic system, the operation being suggested by the line of reasoning I have given.

NEUROCIRCULATORY ASTHENIA

Those of you who were in the war will remember that group of soldiers with what was called "soldier's heart". They were under great excitement, had trembling hands, their feet cold with sweat, and eyes dilated. Often the face was flushed. These soldiers were sleepless, nervous, had indigestion, and all the symptoms we see occasionally right now in the condition called neurocirculatory asthenia or "effort syndrome". There was no means of cure that we could offer to those patients.

The history of a patient with this disease will give a typical picture of this disease.

Case Report: The patient was a man, 22 years of age, who complained of a high blood pressure, a fast pulse, flushing of the face, and such a degree of weakness that he had been unable to work for the preceding four months. Ever since the patient was a child he had known something was wrong with him, as he had never been able to exercise without experiencing extreme weakness and tachycardia. Since he was sixteen years of age he had had attacks of flushing of the face and neck, which had become progessively worse until during the preceding two years there had been almost continuous flushing of this region. He had been told he had a high blood pressure, and for that reason had been excluded from athletics, and had been on a salt-free and meat-free diet since he was sixteen years of age.

A few months before we saw him he had a mild attack of influenza when he had been in bed for only one week, with no symptoms other than cold and fever. After this illness all his symptoms became more pronounced and he was obliged to go to bed again for one month. He had not been able to work at all since that time. During the two years before we saw him, he had lost fourteen and one-half pounds in weight.

Physical examination revealed a well developed and well nourished young man with cold wet hands, fine digital tremor and an expression of tenseness. He was conscious of each heart beat and seemed somewhat obsessed by the fact that he had hypertension. His physician had observed him from time to time and had often reported his systolic blood pressure to be from 150 to 160, but it was very variable.

No foci of infection were demonstrable. The heart rate was rapid and regular except for marked sinus arhythmia, and there were forceful apical impulses. There was a blowing, systolic murmur but percussion revealed no enlargement of the heart. Examination of the lungs showed the breath sounds to be somewhat harsh in the left posterior region; and there was slight bilateral and apical fullness. There was no evidence of tuberculosis. Erben's reflex, the oculocardiac reflex and stippling of the macula were present.

There were no other abnormal findings. The basal metabolic rate was normal; blood chemistry, urine and renal findings were normal.

This patient presented a typical picture of neurocirculatory asthenia. You will find that tachycardia is present in practically all of these cases. In one case the pulse rate was 80 when the patient was lying down, but when he stood up it would increase to 180, and even the effort of raising his hand to

turn out the light above his bed would sometimes cause his heart rate to run up to from 120 to 140. We have had two cases of marked paroxysmal tachycardia, and in 63 of these cases perhaps the most outstanding feature has been a terrific tachycardia that could not be dealt with successfully by any other method than adrenal denervation. If the diagnosis is correct, then just as soon as the patient has passed through the first denervation there will be an immediate fall in the pulse rate, and after the second denervation nearly always the pulse rate drops back to normal. Denervation is just as definite in its effect upon tachycardia as is the effect of removal of the gasserian ganglion for trifacial neuralgia.

Many of these patients are not able to lie on the left side for they are kept awake by the pounding of the heart. That symptom will pass away immediately after denervation provided the diagnosis is correct.

As for the reason for the digestive disturbances that accompany neurocirculatory asthenia, what happens when an individual is under excitement, as far as the digestion is concerned? We all know from personal experience that one may sit down to a meal with a good appetite but if interrupted by a disturbing telephone conversation all desire for food passes. Everybody has had that experience. Under stress there is a complete interference with digestion.

It does not make any difference whether there is a continuous pathologic stimulation or whether the stimulation has been induced by some event. Digestion is interfered with. Therefore, with these patients in whom a pathologic stimulation passes over the adrenal sympathetic system continually, as in neurocirculatory asthenia, gas and distention and constipation will result, and occasionally there may be diarrhea. This interference with digestion, like all the other symptoms of the pathologic stimulation of the adrenal sympathetic system, is eliminated by denervation.

PEPTIC ULCER

Let us now consider peptic ulcer. How often it happens that a patient who goes away on a holiday loses his peptic ulcer, but when he returns the peptic ulcer is waiting for him and joins him again. It doesn't make any difference whether the ulcer is due to an activation of the sympathetic system by acute worry and anxiety, or to changes in the acidity of the stomach, or to changes in the motility of the stomach. It does not make any difference whether it is due to something that is temporary or whether, as in the case of Raynaud's disease, there is a continuous pathologic stimulation going on all the time.

It should be borne in mind that among the mechanisms that produce peptic ulcer, perhaps the most important is an interference with the emptying of the stomach. That interference is due to stimulation of the sympathetic nervous system at the pylorus. So as the result of an emotion or excitement, of work, anxiety, or injections of adrenalin, the neuromuscular mechanism of the pylorus and the proper emptying of the stomach is interfered with, and that interference prevents the mixture of the very highly acid gastric juice with the alkaline content of the duodenum.

What happens to the peptic ulcer when we perform a denervation? The abnormal activation is cut down and in consequence the acidity of the stomach, when it has been excessively high as in peptic ulcer, is lowered as the interference at the pylorus is overcome.

Thus far we have operated upon only very advanced cases of peptic ulcer. That is, we have taken patients who have had one, two, three or four previous operations. In one case the patient had had six operations and three perforations. One patient was a personal friend of a surgical friend of mine. He had had three resections of his stomach and within a year after each operation another ulcer developed.

I recall the experience of one patient in particular who himself was a professor of surgery and had performed many operations for peptic ulcer. Operation, recurrence, operation, was the sequence from which he had suffered. Not feeling certain about what the effect of denervation might be, he asked me if I would be willing to operate on only one side. I did so and it sufficed for it

is now the third year since the operation and the results have become progressively better. The patient is now entirely free from any ulcer symptoms. He intended to come back if he thought it was worth while to do so to have the other adrenal denervated, but as it has turned out he is entirely satisfied with what has already been accomplished.

Another surgeon had an exactly similar experience.

In nearly all the cases of peptic ulcer in which denervation has been performed, the good results have been progressive. I nearly gave up performing denervation for peptic ulcer at first because the patients still had some recurrent attacks of ulcer symptoms. But finding that the results became progressively better, I began to do it again.

HYPERTHYROIDISM

For many years we have been thinking of hyperthyroidism as a disease originating in the thyroid gland, but I am now perfectly convinced that hyperthyroidism does not originate in the thyroid gland at all, but that the thyroid gland has hyperthyroidism imposed upon it from the outside. Hyperthyroidism occurs because the gland is very responsive to the requirements of metabolism. For instance, during the mating season, or in the winter, the thyroid gland increases its activity as it does in the presence of infection or under great emotion, and therefore it must be a very adaptive gland. As a consequence, it very easily responds to excessive stimulation of the adrenal sympathetic system, with no relation to these biologic needs.

Moreover, hyperthyroidism occurs in a certain type of people—a type which is readily recognized.

By denervation of the adrenal glands the excessive drive of the same sympathetic system which created the hyperthyroidism can be cut down. Thus, denervation of the adrenal glands should cause the disappearance of the hyperplasia of the thyroid gland, and so it does.

You can cure hyperthyroidism by denervating the adrenal glands as certainly as you can by thyroidectomy. I am not proposing, however, that this operation be substituted for thyroidectomy, but sometimes recurren hyperthyroidism cannot be cured by thyroid ectomy. I have seen cases in which as many as six thyroidectomies have been performed and the thyroid has rebuilt itself after each In such cases, just as soon as denervation is performed and the driving force of the adrenal-sympathetic system is cut down—the driving force which was capable of producing the hyperplasia, the patients have become quiescent and now remain well.

DIABETES

Since diabetes, like hyperthyroidism, peptic ulcer, and neurocirculatory asthenia, is essentially a disease of man, since the highest incidence of diabetes in man is in the more highly civilized races, and since the high development of the brain, the thyroid and the adrenal-sympathetic system is characteristic of man, it would appear that diabetes is fabricated in the intensive operation of this highly developed energy system of man.

In hyperthyroidism there is a sustained continuous stimulation of the adrenal sympathetic system and among the units of the sympathetic system so stimulated is the sympathetic supply of the pancreas. This sympathetic supply is stimulated by any emotion and, as Cannon has shown, glycosuria occurs in emotion.

If the pathologically high stimulation of the pancreas by the highly charged sympathetic system in hyperthyroidism contributes to or causes diabetes then the disturbed carbohydrate metabolism should be abated or cured by thyroidectomy. Dr. Henry J. John found cure or abatement of the diabetes after thyroidectomy in 55 per cent of our cases in which diabetes was associated with the hyperthyroidism. This fact strengthens the conception although it does not prove that diabetes is the result of a continuous pathologic stimulation.

If this conception is correct, then adrenal denervation, since it cuts the lines of communication that supply the excessive stimulation to the whole thyroid-adrenal-sympathetic system, should cure diabetes as it cures hyperthyroidism, peptic ulcer and neurocirculatory asthenia.

We have performed adrenal denervation in certain cases in which diabetes was associated with hyperthyroidism, and have found that the diabetes disappeared with the accompanying disease.

These results prove our conception that, in certain cases at least, diabetes is due to pathologic stimulation of the human energy system. Whether there are other forms of diabetes such as are seen in obese or overfed individuals in which the dekineticizing operation would not apply, we have not yet determined.

It is very interesting that we get a very good result in cases of *essential hypertension* in young adults. The operation does not bring the blood pressure down to the normal level but it does bring the blood pressure down to a lower level and it stabilizes at that level and the rush-up of the systolic pressure in excitement does not occur so that the accident of hemorrhage is avoided. In this group, the blood pressure is more or less stablized, but denervation does nothing at all in advanced cases of hypertension, does nothing for sclerosis of the arteries, nothing at all when glomerular nephritis is present.

A warning should be added. Adrenal denervation does nothing at all for patients with hysteria, psycho-neurosis, or for spoiled people, coddled people, foolish people. But a patient who has an uncontrolled asthenia can be immediately helped. The personality of these patients is interestingly changed. They become more stable, less nervous, less extreme, sweating is diminished; tremors and tension are diminished, and the most interesting thing is that temporarily they are much improved. These people are extremely cross and irritable when in this state of hyperestheticism, and the operation will temporarily improve them very much. I usually get that information from the husband or wife of the patient.

THE OPERATION

The operation, obviously enough, must be undertaken with a great deal of care and preparation because the adrenal glands lie right on the vena cava. The pancreas lies on either side. On the right side, the duodenum is right in the field, and the liver; and then great care must be exercised to avoid injuring the blood supply of the adrenal glands. By practicing on that field on a cadaver, and performing the operation upon animals, one can become familiar with the field.

It should be borne in mind that the abdominal organs have other sources of innervation than from the adrenal glands. We must look upon these glands as constituting an accessory energy center for there is also an innervation from the brain. After denervation there still is a normal metabolic rate. The division of these nerves serves only to cut off that part of the energy system which produces disease.

In our series of adrenal denervations there have been no deaths from shock or hemorrhage or infection. We have had two physiological deaths. Aside from these there have been no surgical deaths in the usual sense of the word. The point I wish to make is that the operation *per se* is a very safe one but the technique must be carried out with the most meticulous care.

SUMMARY OF RESULTS

Our experience in the groups of cases described above may be summarized as follows:

We have operated on 67 cases of uncomplicated neurocirculatory asthenia with improvement or cure in 93 per cent; on 36 cases of peptic ulcer with improvement or cure in 93 per cent; on 71 cases of hyperthyroidism with cure in 95.6 per cent.

Our series of cases of diabetes is still too small for final conclusions regarding the efficacy of denervation to be drawn. In general, we can say that in this small group, diabetes has been cured by denervation and thyroidectomy.

The results of denervation in the treatment of hypertension are negative except in cases of early hypertension, especially when it is associated with hyperthyroidism.

In the presence of psychoses, neurasthenia or any condition in which the seat of disturbance is in the brain, adrenal denervation is contraindicated.

Nervous Indigestion; A Roentgenological Evaluation*

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SO DIVERSE are the opinions of regular medical practitioners concerning the significance of the symptom-complex commonly designated "nervous indigestion" that a review of the subject from a roentgenologist's viewpoint perhaps may stimulate thought and wholesome discussion.

Concisely defined, "nervous indigestion" is a derangement of the digestive functions provoked by irritative emotional stimuli. The disease is characterized by remissions and exacerbations corresponding to fluctuations in the emotional stresses which precipitate the reactions that distinguish the syndrome. The demonstration of the existence of a neuropathic constitution is essential to the diagnosis of the disease. In fact a diagnosis of nervous indigestion is never justifiable in the absence of a temperamental nervous system which is the chief predisposing factor in the evolution of the affection.

An unstable nervous system may be either inherited or acquired by environmental conditions conducive to its development. No accurate statistics can be quoted concerning the relative frequency of heredity and environment in the production of functional nervous diseases. However, it is the opinion of the essayist based upon observation that the high pressure methods of living which characterize modern life are largely responsible for the rapidly increasing frequency of emotional disturbances. McLester estimates that fully one-third of the patients with disorders of the alimentary tract are suffering because of emotional unbalance; hence, nervous indigestion is the most common disease which the roentgenologist must differentiate from other affections of the digestive organs.

Notwithstanding this fact, a specific diagnosis of nervous indigestion is seldom made by roentgenologists. Perhaps this is because roentgenologists are no more immune to making errors in diagnosis than are other medical practitioners; perhaps it is because the majority of them have learned by unhappy experiences that it pays to be discreet in the face of dogmatic opposition. The essayist has a vivid recollection of the reaction of one colleague to a diagnosis of nervous indigestion reported to him verbally. With no inconsiderable asperity, he bluntly retorted: "The symptoms present in this case are not illusory. There certainly is something the matter with this patient."

This was, of course, tantamount to saying that no such disease as nervous indigestion exists. Inasmuch as so many physicians question the reality of nervous indigestion as a definite disease, the query arises: Why is this true? The essayist's answer to this question may not be the correct one; nevertheless, he believes that the reason why such a large percentage of regular medical practitioners have a distorted conception of functional nervous disorders is because they have an inadequate knowledge of the tremendously important subject of psychology. Accordingly, it is not strange that some of these physicians misinterpret the significance of perversions of the feelings while others think that neurotic patients are shamming.

Psychology, says William MacDougall, is the science of behavior. That a proper evaluation of the strange and sometimes baffling conduct of the sick and the injured is essential to the intelligent and successful treatment of these patients should be obvious to every experienced practitioner of medicine. Moreover, the essayist believes that if physicians had a more comprehensive knowledge of psychology, we would not, on the one hand, be witnessing the sorry spectacle of the treatment of some patients suffering from purely functional disturbances with surgical operations which do them positive harm, and, on the contrary, the equally sorry

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spectacle of the refusal of other medical practitioners to treat persons suffering from emotional stresses on the ground that nothing ails them. The pathetic incongruity of the situation lies in the fact that some of the unhappy victims of nervous unbalance are misunderstood and mistreated by regular medical practitioners while others are exploited to the extent of millions of dollars annually by patent medicine venders, cultists and quacks.

There are, however, some hopeful signs upon the horizon that a few outstanding surgeons are beginning to realize that an interdependent relationship exists between the mind and the body both in health and in disease. Evidently these surgeons are well grounded in psychology and hence know that the feelings and the thoughts, which are responsible for all human conduct, can affect the activities of the internal organs profoundly. Crile in one of his books likens the brain to the master dynamo in a metropolitan power and light plant, and calls attention to the fact that deviations in the reactivity of this living dynamo are accompanied by corresponding reactions in remote tissues and organs of the body. Bevan and Frank Lahey have emphasized the need for discriminating judgment in the diagnosis and treatment of peptic ulcer. In no uncertain language, they have placed themselves on record as opposed to operative interference, except in those cases of ulcer complicated by persistent hyperemesis, uncontrollable hemorrhage and perforation, until every other known method of treatment has failed to restore a relatively normal degree of health. The Mayo brothers have delivered addresses in recent years warning the profession that the nervous system cannot be ignored as a factor in the production of debilitating bodily affections.

The experimental physiologists are doing much to dispel irrational dogmas and to fix the attention of the regular medical profession upon the necessity of sweeping away the dead ideas of the past. Walter Cannon and Walter Alvarez are rendering a very distinct service to medical progress for the fine work which they are doing in this direction. Their books on gastro-intestinal dynamics should be carefully studied by every roentgenologist, while Cannon's book entitled, "Bodily Changes in Pain, Hunger, Fear and Rage", and Alvarez's book entitled "Nervous Indigestion" merit intensive study by every practitioner of medicine.

The essayist has taken the liberty of culling a collection of concisely stated facts from these books and has consolidated these into a summary which serves as an admirable basis for the further elaboration of the subject under discussion. This summary is as follows: "Elaborate and ingenious experiments by Pavlov on animals clearly demonstrate that the normal flow of the first digestive juices, the saliva and the gastric juice, is favored by the pleasurable feelings which accompany the taste and smell of food during mastication or which are roused in anticipation of eating when choice morsels are seen or smelled. These conditions favorable to proper digestion are wholly abolished when unpleasant feelings such as vexation and worry and anxiety, or great emotions such as anger and fear are allowed to prevail; first, by inhibiting the salivary flow and the secretion of gastric juice which, when ejected into the duodenum, stimulates the flow of pancreatic juice and bile; second, by the inhibition of the movements of the stomach and almost the entire alimentary canal. The influences unfavorable to digestion, however, are stronger than those which promote it; hence, if the digestive process, because of emotional disturbance, is for some time inhibited, the swallowing of food which must lie stagnant in the stomach is a most irrational procedure. There is no doubt that just as the secretory activity of the stomach is affected in a similar fashion in man and in lower animals, so likewise gastric and intestinal peristaltic waves are stopped in man as they are stopped in lower animals by worry and anxiety and the stronger affective states."

EMOTIONAL STRESS

Observation during many years of practice limited to roentgenology and psychiatry has convinced the essayist that relatively few general practitioners and equally as few specialists adequately realize the importance

of the foregoing facts. Hence when these practitioners are consulted by a patient who is complaining of some one or more of the following symptoms: epigastric pain and tenderness, hunger pains from one to three hours after eating, occasional attacks of vertigo and nausea, flatulence, belching, loss of appetite, loss of energy, constipation with or without a tender point overlying the ileocaecal valve or the gall-bladder, and refer the patient to a roentgenologist for a complete gastrointestinal examination, they expect to receive a report which will justify them in recommending the hospitalization of the patient for the treatment of peptic ulcer, gall-bladder disease, appendicitis, or some other intra-abdominal organic affection. The essayist, moreover, is well aware of the fact that many roentgenologists overestimate the value of and often misinterpret the meaning of such roentgenological evidences of functional disturbance as the six-hour gastric residue, gastrospasm, reversed peristalsis, cardiospasm, pylorospasm, appendiceal and caecal stasis, and, in case one or more of these signs are present are prone to draw the hasty and unwarranted conclusion that an intra-abdominal organic lesion is present. Evidently these roentgenologists forget that fully one-half of the patients who consult a physician are suffering from functional derangements precipitated either by emotional stresses incident to the struggle for existence or by infractions of the natural laws which govern good health and good morals.

To be sure, roentgenologists are not infallible; hence, it must frankly be admitted that the accurate evaluation of radiological findings is beset with many difficulties. The following case history reported by Cannon will exemplify how difficult it sometimes is to differentiate nervous indigestion from other digestive disorders due to the presence of pathological lesions. "A refined and sensitive woman who had had gastric difficulties came with her husband to Boston to be examined. They went to a hotel for the night. The next morning the woman appeared at the consultant's office an hour after having eaten a test breakfast. An examination of the gastric contents revealed no free acid, no digestion of the test breakfast, and the presence of a considerable amount of the supper of the previous evening. The explanation of this stagnation of food in the stomach came from the family doctor who reported that the husband had made the visit to the city an occasion for becoming uncontrollably drunk and that he had by his escapades given his wife a night of turbulent anxiety. The second morning after the woman had a good rest, the gastric contents were again examined; the proper acidity was found, and the test breakfast was normally digested and discharged." This is a typical case in which the gastric stasis indubitably was due to emotional stress. However, had not a wise and conscientious family physician been available to explain the cause of the patient's gastric retention, it is quite conceivable that a diagnosis of pyloric obstruction due to malignancy might have been made.

Unfortunately, there are no pathognomonic roentgenological findings which positively differentiate nervous indigestion from other diseases of the alimentary tract. Accordingly, it should be remembered that a careful history of each case in which a gastro-intestinal x-ray examination is indicated is of paramount importance in distinguishing functional from organic disturbances. This necessitates the closest cooperation between the physician who refers a case for an x-ray survey and the roentgenologist, if efficient service is to be rendered. Moreover, too much emphasis cannot be placed upon the importance of the roentgenologist summarizing the x-ray findings into a brief report in which he clearly states the significance of what has been found. This is essential because most physicians who refer cases for roentgenological examinations lack the technical knowledge required to evaluate the findings properly. If for no other reason, the roentgenologist should do this in order to safeguard his reputation as a diagnostician and his right to be regarded a medical consultant. Alvarez deplores the fact that many roentgenologists fail to do this and instead are prone to expatiate on slight congenital abnormalities, slight stasis here and there, normal kinks, and suggestions of adhesions,

appendicitis, and colitis, and states that the tragedy of such report in the hands of an inexperienced, over-optimistic, lazy, or unscrupulous physician lies in the fact that it can be used as a powerful instrument in driving the patient into a useless operation.

That ineffectual surgical treatment is harmful to the future well-being of patients suffering from functional nervous disorders is a conviction which was entertained by some medical psychologists and psychiatrists prior to the World War. This catastrophe brought to light a tremendous amount of new knowledge concerning fear and rage and other violent emotional disturbances in the production of irrational conduct. The horrors of the war and the emotional conflicts which it produced made a profound impression upon psychologists. It has strengthened them in the conviction that the acts of many people depend more upon outbursts of latent ego-centric desires and phobias which were firmly implanted in the subconscious mind during the impressionable years of early childhood than upon reasoned self-control acquired by experience and enlightened education in later life. Accordingly, wise medical psychologists are more than ever convinced that unnecessary operative procedures on patients suffering from functional nervous disorders are positively contraindicated because such operations delay their rehabilitation and do them positive harm.

SUPERVISION REQUIRED

Such individuals, instead of futile operations, need enlightened medical treatment and supervision which seeks to arouse the active cooperation of the patient in rebuilding a personality characterized by wholesome self-restraint and a cheerful attitude towards life. Unfortunately, it is just these so-called "neuros" that the average medical practitioner either mistreats or disdains to treat at all. Those physicians who mistreat these unhappy individuals evidently have an erroneous conception of the nature of the bodily changes which occur as the result of emotional stresses, while those who neglect to treat them neither understand emotional disturbances nor realize that nervous patients commonly suffer more intensely and more continuously than do persons with organic diseases. Cannon attempts to explain why it is that so many otherwise excellent physicians underestimate the importance of emotional instability in the production of incapacitating disabilities. In Chapter XIV of his book, "Bodily Changes in Pain, Hunger, Fear and Rage", he offers the following trenchant explanation: "In the foregoing discussion, I have purposely emphasized the physiological mechanisms of emotional disturbances and for two main reasons. First, I wished to show that these interesting phenomena need not be set aside as mystical events occurring in the realm of the 'psyche.' It seemed possible that by emphasis on physiological features attention could be drawn to two important reasons for the slighting of emotional troubles, especially by physicians.

"Although physicians have not infrequent occasion to observe instances of functional disturbance due to emotional causes, there is an inclination to minimize or slight that influence, or even to deny that it is part of a physician's service to his patient to concern himself with such troubles. (Accordingly, it is not strange that some physicians seek to excuse their inattentiveness and negligence with the declaration:) Let the patient go to the clergyman for comfort and consolation and for the resolution of his deep anxieties.

"A too common unwillingness among physicians to regard seriously the emotional elements in disease is due perhaps to the subtile influence of two extreme attitudes and disciplines. On the one hand is the powerful impress of morphological pathology, the study of diseased organs as seen after death. So triumphantly and so generally have the structural alterations which accompany altered functions been demonstrated under the microscope that any state which has no distinct 'pathology' appears to be unreal or of minor significance. Fears, worries, and states of rage and resentment leave no clear traces in the brain. What, then, have physicians to do with them?

"On the other hand, these mysterious and

dominant feelings which surge up within us from unknown sources, are they not pure perturbations of the 'psyche?' In that case, what, again, have physicians to do with them? If physicians show this indifference, however, is it surprising that men and women beset with emotional stresses turn from them and go for help to faith healers and to others who recognize the reality of these disturbing states?"

In conclusion, the essayist wishes to state that the verifiable facts as presented in this thesis appear to justify the opinion that the irrational and hazardous methods of treating nervous indigestion now so commonly in use will not be abandoned until the rank and file of practicing physicians and surgeons become thoroughly conversant with the subject of psychology and fully appreciate the significance of the physiological reactions which occur as the result of irritative psycho-neurotic disturbances.

Anemia of the Newborn; Case Report*

By A. B. SCHWARTZ, M. D.
Milwaukee

THE appearance of anemia of the newborn has been the subject of infrequent report in pediatric journals. The outstanding characteristic has been the absence of subjective symptoms in the presence of a fairly profound degree of anemia. The anemia develops rapidly within the first two weeks of life. The prognosis of reported instances has been generally good. Among 15 instances reviewed by Arthur Abt there were two deaths.

The following case report is recorded because of the rapid therapeutic response in a patient with anemia of the newborn to liver therapy.* *

W. V. N., a newborn infant was delivered by Dr. Carl Henry Davis at Columbia Hospital, Milwaukee, on April 25, 1933. The birth was an easy one, R. O. A. position. The infant received the usual newborn care and exhibited no abnormalities. The birth weight was 7 pounds, 10 ounces. The first unusual event occurred on the seventh day, when the infant took its feedings poorly and the interne noted an unusual skin pallor. The next day the pallor seemed more pronounced, the spleen was enlarged, the face showed petechial hemorrhages. There was no general adenopathy. The stools were normal. The slide precipitation test for lues was negative. A complete blood examination revealed:

% Hemoglobin (Dare)	30
Erythrocytes	1,090,000
Leucocytes	46,550
Polymorphonuclears %	51.5
Small Lymphocytes %	41.
Large Lymphocytes %	
Monocytes %	5.
Eosinophiles %	
Basophiles %	
Unclassified %	
Myelocytes	1.5
Turck's	1.
Nucleated reds	26.

Marked anisocytosis and polychromatophilia. Many microcytes. Platelets slightly decreased. Some stippled red blood cells.

The mother of the infant was apparently well. On May 3rd, the day after the infant's symptoms were first noticed, a blood examination on the mother showed the following:

% Hemoglobin (Dare)	65
Erythrocytes	3,770,000
Leucocytes	11,800
Polymorphonuclears %	71.5
Small Lymphocytes % / Large Lymphocytes %	22.5
Monocytes %	4.5
Eosinophiles %	1.
Basophiles %	0.5
Unclassified %	
Wassermann negative	

Clinical Notes:

April 25, 1933—Date of birth. Weight 7 pounds 10 ounces.

May 2, 1933—Took feedings poorly. Skin pallor noted.

May 5, 1933—Pallor aggravated. Spleen somewhat enlarged. Petechial hemorrhages in skin of face. No adenopathy. Stools normal. 100 cc. father's blood by transfusion (Dr. Arthur A. Schaefer). Lextron, ½ capsule twice daily.

May 5, 1933—General appearance improved. Took feedings better.

May 9, 1933—Pallor again more pronounced. Lextron increased to 1 capsule twice daily.

May 16, 1933—Lextron increased to 1 capsule three times daily.

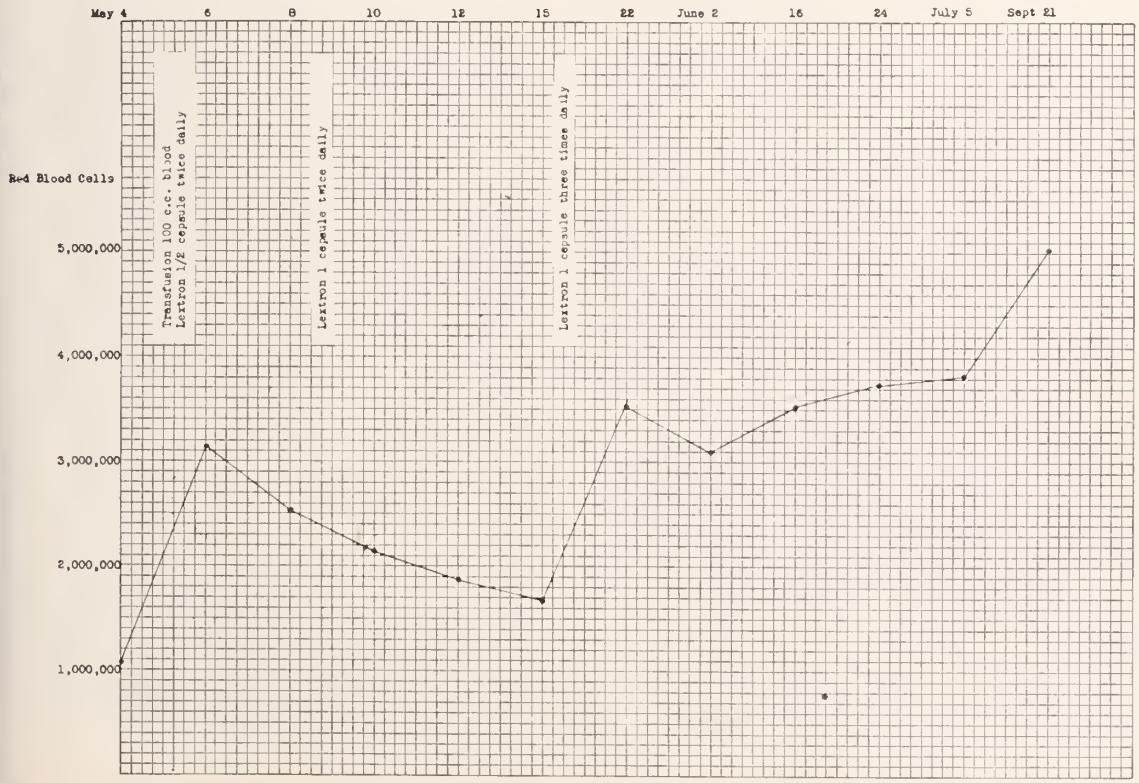
* From Columbia Hospital, Milwaukee.

* * Liver was administered in the form of Lextron (Eli Lilly and Company).

TABLE I

	5- 4-33	5- 6-33	5- 8-33	5-10-33	5-12-33	5-15-33	5-22-33	6- 2-33	6-16-33	6-24-33	7- 5-33	9-21-33
% Hemoglobin(Dare)	30%	70%	40%	40%	42%	42%	62%	55%(T)	58%(T)	62%(T)	60%+(T)	70%(T)
Erythrocytes	1,090,000	3,150,000	2,540,000	2,140,000	1,880,000	1,680,000	3,530,000	3,010,000	3,430,000	3,730,000	3,820,000	5,020,000
Leucocytes	46,550	37,500	34,900	22,850	17,950	11,750	12,700	10,600	8,200	8,050		8,150
Polymorphonuclears %	51.5	67.5	58.0	47.0	32.0	26.0	37.0	32.0	22.0	25.0	29.0	24.0
Small lymphocytes % Large lymphocytes %	41.0	20.0	26.0	44.0	48.0	65.0	55.0	55.0	58.5	59.5	63.5	68.5
Monocytes %	5.0	11.0	11.0	4.0	13.0	5.0	4.0	8.0	13.5	10.0	5.5	4.5
Eosinophiles %			4.0	1.0	2.0	2.0	2.0	3.5	5.0	4.0	1.5	2.5
Basophiles %		1.5		2.0		2.0	1.0	1.5	1.0	1.5	0.5	0.5
Unclassified		11			2		1.0					
Myelocytes	1.5											
Turck's	1											
Lymphoblasts			1									
Nucleated Reds	26	some	8	11	28	25		4 in 200 cells				
	Marked anisocytosis and polychromatophilia. Many microcytes. Platelets slightly decreased. Some stippled red blood cells.	Platelets normal. Marked polychromatophilia.	1 Mitotic red blood cell.			Marked achromic and polychromatophilia. Few stippled red blood cells.	Marked anisocytosis and poiscikicytosis, polychromatophilia and achromic. Few stippled red blood cells.		Red blood cells vary in shape and size. Poikilocytosis.	Red blood cells seem improved in shape and size.	Red blood cells improving in shape. Not as many poikilocytes.	Red blood cells appear normal.

CHART I



The infant was fed on breast milk complemented by a modified lactic acid milk.

Table 1 is a summary of the blood examinations in this patient.

Chart 1 is a graphic representation of the response to therapy.

It is interesting to note that, following blood transfusion, the infant showed a rapid rise in hemoglobin and red cells which quickly spent itself. The response to liver, though not as spectacular, was continuous. The infant is now in excellent condition.

Rattle Snake Bite; Case Report

By J. A. JACKSON, M. D.
Madison

MOST of us who live in Wisconsin and the immediate adjoining states have a dim recollection that there are such things as poisonous snakes in our neighborhood, but we so seldom, if ever, come in contact with the victim of a poisonous snake that we pay little or no attention to the rationale of modern treatment. I say modern, for the old method of filling the patient with whiskey, making a large incision at the point of entrance of the fangs and flooding the incision with strong antiseptic solutions is passé.

Of the poisonous snakes in our territory we have the Solenoglypha or pit viper,—subdivided into those without a rattle, Moccasin, and Copper head—and the crotalus or true rattler. I shall dismiss the Moccasin and Copper head, as they are rather rare, but the rattler frequently abounds in the hilly sections of our central states. In Wisconsin they are especially prevalent in Sauk, Richland, and Grant counties.

Venom (rattle snake) has a chemical formula of C34H54 021. It is similar in chemical construction and action to cholesterin and is a toxalbumin. Its action primarily is hemolytic and neurotoxic; secondarily, proteolytic, hemorrhagic, antibactericidal and causes delayed healing.[2]

The symptoms produced are pain, swelling of the affected part, nausea, vomiting, hemorrhage, ecchymosis, blebs, shock, moderate temperature, and a rapidly developing and marked anemia. Sloughing may occur in the region of the incisions if any have been made.

The amount of venom injected varies, depending upon the size of the snake—small and very large or old rattlers do not produce as much venom—whether or not the snake has recently eaten, and whether or not the bite was on the bare skin or through some protective covering such as a puttee, leather, or stocking.[3]

The appearance of an extremity a few hours after it has been bitten by a rattler is so typical that once seen it is never forgotten; the limb is swollen and brawny and has a yellowish tinge. Here and there are ecchymotic areas and near the point of entrance of the fangs are numerous large blebs. The patient is apt to be in shock and looks sick.

TREATMENT

A tourniquet should be applied at once above the knee in the lower limb and above the elbow in the upper. This prevents oozing of blood through the vessels between the two bones in the distal part of either extremity. The tourniquet should be released for three minutes every twenty minutes and removed permanently after eight hours. Longer than this it is of no benefit.[1] Wash the point of entrance of the fangs and paint the surface with an antiseptic if one is available, make a moderate incision through the fang points and apply suction by cupping or sucking. For cupping, a piece of paper or alcohol ignited in a glass will form a vacuum.

Since antivenom is usually not available in the immediate territory, the Board of Health should be wired immediately; if they do not have it on hand they will give you the name of a reliable pharmaceutical house where it is prepared. The antivenom should be given

intravenously as soon as available and repeated every four hours until the symptoms abate. The dosage will be given on the original package. In my own case three days had elapsed since the patient had been bitten, but even then it did seem to be of some benefit.

The limb should be packed in voluminous magnesium sulphate compresses to reverse the lymph flow. The blood pressure should be taken every two hours, the shock should be combated with intravenous glucose solution, and the rapidly developing anemia with transfusions. The red blood count should be taken every six hours. Later, there is a tendency for the joint of the affected limb to contract; this should be treated by proper physiotherapy methods. The blebs should be left as they are for the first few days. Later the serum can be withdrawn with a hypodermic needle. With satisfactory progress, the patient may be discharged about the seventh or tenth day.

The mortality varies from 10 to 40 per cent.

CASE REPORT

J. A., No. 77477, M., age 11 years, was admitted to the Methodist Hospital July 22, 1933, with the following history:

On July 19, 1933, about 9 A. M., while picking berries in a blackberry thicket, he felt a sudden sharp pain just above the right ankle and heard the rattle of a snake. He did not see the snake, but realizing what had happened he ran about one-half mile to his home. His father immediately applied a tourniquet just above the fang marks on the right ankle, slightly above the external malleolus. The child was taken to a local physician, brandy was given, and a small incision was made through the puncture wound of the snake bite. An aseptic dressing was applied, the child allowed to go home and put to bed. During the first day there was considerable pain in the leg, swelling developed and there was nausea but no vomiting. On the two following days all symptoms became aggravated, there was intense swelling of the limb from the toes to the groin, elevation of temperature, vomiting, and a rather alarming general condition. Seventy-two hours after he was bitten he was referred to my care.

The child looked sick, he was extremely pale and crying with pain. His temperature was 104, accompanied by a chill, a pulse of 160, and respirations of 30. The whole lower right limb was intensely swollen from the toes to the groin. It had a yellowish tinge which contrasted markedly with the paleness of the rest of his body. There were

numerous blue ecchymotic areas over the foot, calf, and thigh. Over the dorsum of the foot and calf were several large blebs filled with serum. The limb felt brawny and hot. It was a sight which, as I have previously said, once seen is never forgotten. Just above the external malleolus at the site of the fang puncture a small, clean incision was seen.

The patient's blood picture at 6 A. M., July 22, three days after he was bitten, showed a hemoglobin of 55 per cent, red blood cells 3,500,000, white blood count 12,000, neutrophiles 73, lymphocytes 22, and transitionals, 5. The urine showed a specific gravity of 1023, was acid in reaction, and negative for sugar, albumin, bile, acetone and blood. A transfusion of 400 cc. of whole blood was given. At 6 P. M., July 22, the hemoglobin was 50 per cent and red blood cells 2,240,000; the urine showed chemical blood.

On July 23, in the morning, the hemoglobin was 50 per cent and red blood cells 2,240,000; the urine showed chemical blood. In the afternoon, the hemoglobin was 60 per cent and the red blood cells, 2,900,000; the urine showed chemical blood.

On July 24 the hemoglobin was 58 per cent and red blood count 3,120,000. The urine showed a specific gravity of 1030, was acid in reaction, contained albumin 1, and an occasional red and white blood cell. A transfusion of 500 cc. of whole blood was given.

On July 25 the hemoglobin was 60 per cent and the red blood cells were 3,820,000; urine showed a specific gravity of 1012, was acid in reaction, contained albumin 1 and an occasional white blood cell.

On July 26, the hemoglobin was 62 per cent and the red blood cells were 3,870,000.

On July 27, the hemoglobin was 65 per cent and the red blood cells were 4,050,000.

On July 28, the hemoglobin was 68 per cent and the red blood cells were 4,320,000.

On July 29, the hemoglobin was 70 per cent and the red blood cells were 4,330,000.

TREATMENT

On the morning of admission to the hospital I was able to obtain some antivenom at once through the cooperation and assistance of Drs. Harper and Guilford of the State Board of Health, whom I had called in to see the boy. An ampule of antivenom was given, although in my opinion it was rather late, but it did seem to help. I understand it has been given as late as the seventh or eighth day with good results. Codein was used for relief of the pain and restlessness. As the blood picture showed a marked anemia, 400 cc. of whole blood was given by direct transfusion. Hot magnesium sulphate compresses were applied to the limb.

On July 23 the patient appeared very ill; the swelling had increased and was now present in the lower right half of the abdomen.

On July 24, the patient looked brighter, the edema was receding and the general condition improved.

On July 25 the patient looked better, was more comfortable, and there was definite improvement. The swelling of the limb was considerably less. The appetite was fair.

On July 26 the patient was much improved; the respiration and pulse were slower and the temperature was lower. The red blood count and hemoglobin were improving. The swelling in the groin was gone and the swelling in the thigh and leg was less. The blebs on the foot were drained. The general condition was good.

There was steady improvement in the next few days, during which time physiotherapy treatment was applied to the limb. The patient was discharged on the eleventh day, in good condition.

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Trichomonas Vaginalis Vaginitis; Treatment with Sodium Perborate

By WOODRUFF SMITH, M. D.
Ladysmith

THE medical profession at large is becoming aware of the marked frequency of vaginal infestation with the protozoan *Trichomonas vaginalis*. In this country we are indebted to the pioneer work of De Lee, Carl Henry Davis, Greenhill, Bland, Goldstein and Wenrich, and a number of other gynecologists. The so-called Trichomonas vaginitis is marked by irritation of the introitus and the vagina, and the occurrence of a copious abnormal genital discharge. In the past, the condition has often been mistaken for a Neisser infection, or the symptoms held to be due to lacerations and inflammatory disease of the cervix uteri. Of particular importance to the obstetrician and the general practitioner is its occurrence during pregnancy and in the puerperium. Once a correct diagnosis is made, most authorities agree that, while relief of symptoms is easy, recurrence takes place in the majority of patients after varying periods of time, no matter what therapeutic measures are employed.

The classical treatment for this vaginitis has been a rather harsh scrubbing of the vagina with tincture of green soap, followed by douches of a mercurial salt or the use of some other chemical agent. Of the latter, the number of agents that have been used is large, varying with the preference of the individual clinician. Recently, there has been a tendency toward simplifying the treatment. The purpose of this report is to outline a simple routine for the relief of these patients, that has been found suitable and effective in private practice. Its chief merit, in my opinion, is its safety and ease of application during pregnancy and in the early weeks after obstetrical delivery.

The clinical picture of Trichomonas vaginitis is well described by Greenhill[1] and by many other authors. The patient is usually past adolescence. She may be parous or nulliparous. She complains of itching and burning of the vulva, and of an abundant discharge in most instances. Often the history of these symptoms is of long standing, and has resisted treatment with ordinary douches or various kinds of office treatments. During pregnancy, the patient is quite miserable, but may have been told that the discharge is a normal accompaniment of her condition. After obstetrical delivery, Trichomonas vaginitis may be suspected among other things if the lochia is copious, smelly, and irritating in the third and fourth weeks. On examination, the picture in a florid case is fairly characteristic. There are mild excoriations of the inner surfaces of the labia. With the speculum one finds the vault of the vagina full of a liquid bubbly pus of grayish color and musty odor. The rugae of the vaginal wall have small points of erosion upon them which appear to be bleeding. The cervix may show the ordinary lacerations and erosions that result from other causes, but in the nulliparous patient superficial patches of cervical erosion, often at some distance from the external os, are part of the picture of the vaginitis. Smears of the pus stained by bacterial stains are inconclusive. The diagnosis is made by diluting a droplet of the fresh pus with saline. Under a cover slip, one sees certain ovoid cells bumping and swimming about between clumps of pus. Under the high power of the microscope these appear about twice as large as the average pus cell, and one may distinguish several whipping flagella at the rounded head as well as occasionally identify a single flagellum at the more oval tail. It may be added that if one examines in fresh preparation the vaginal discharge of gynecological patients without symptoms of vaginitis, it is surprising how often the trichomas can be found. The presence of red blood cells and serous exudate during the menses permits more rapid multiplication, and the trichomonads are more numerous just after the flow, especially in cases under treatment.

METHOD OF TREATMENT

The method of treatment to be described here has as its purpose the liberation of gaseous oxygen within the vagina, by the introduction of a compound that is not irritating, as well as in such a way as to prolong the effect. The patient obtains a 3 ounce infant bulb syringe or an ear syringe. She makes a suspension of one-half teaspoonful of sodium perborate powder in half a cup of lukewarm water. This is approximately 30 to 40 grains in 3 to 4 ounces of water. In the recumbent position she gently injects this freshly prepared suspension into the vagina night and morning. It is also stressed that she must continue this treatment *during* menstruation. In two or three days of home treatment the patient experiences marked relief from symptoms and as a rule speaks of a great lessening of the vaginal discharge. It is my practice also at the first examination to instill into the vagina a little 5% mercurochrome on a sponge, although I believe this to be unnecessary. If the routine is continued fairly faithfully over one or two months or through one or two menstrual periods, the patient may stop all injections and be free of symptoms.

This treatment, though quite empirical, has some theoretical basis. It has been shown that the *Trichomonas vaginalis* in cultures is found at the bottom of the test-tube, and also multiplies under true anaerobic conditions. Cleveland[3] has shown that increased oxygen tension is toxic for a number of parasitic species of trichomonas. Davis states clinically that a speculum examination, merely letting air into the vagina, will make it difficult to find the protozoan parasites in the fresh specimen of the patient's vaginal discharge the next day. In sodium perborate we have a preparation which has long been used in conditions of the mouth and throat. It gives rise to no toxic symptoms, is relatively non-irritating in the strength advised, and is deodorant. As it comes in contact with exudates it gives off bubbles of oxygen, but more slowly than hydrogen peroxide.

The series of cases thus treated by me with sodium perborate in private practice is small. I hope that this method may be tried by

others with more clinical material at their command. Nevertheless, the results have seemed striking in my hands. One patient, first seen with a florid vaginitis of two years standing, has been free from discharge and without treatment for one year, while several careful examinations show no trichomonads. Others have had one or more recurrences. It is my feeling that recurrences are due to reinfestation either from the environment in general or through the male. Recurrences in every case have been easily controlled with sodium perborate. That vigorous scrubbing of the vagina and other heroic treatment is not necessary in the treatment of Trichomonas vaginitis is supported by a recent report of Sure and Bercy[4] who have had good results with powder insufflation of quinine into the vagina, followed by the use at home of capsules of quinine sulphate used as vaginal suppositories.

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Acute Abdominal Surgery, from the Standpoint of the General Practitioner*

By L. O. SIMENSTAD, M. D.
Osceola

EPHRIAM McDOWELL, a so-called "General Practitioner", living in the comparatively small town of Danville, Kentucky, even now boasting of only 5000 people, was perhaps the originator of modern abdominal surgery; when he performed his first immortal ovariotomy on Christmas day, 1809—one hundred and twenty-three years ago. Then, as now, we had highly trained general practitioners, and McDowell was one of those whose tendency was towards surgery. His educational background had been excellent. He had studied in Edinburgh, and it was here, as a pupil of Mr. John Bell, that he heard of the possibility of removing a dropsical ovary; but it was not until fourteen years later that an opportunity presented itself. Meanwhile, in addition to being a good country doctor, he had performed all operations then known to surgery. And, at least not all of his patients died, for one, who had consulted him when seventeen years old, suffering with a stone in the bladder, later became the eleventh President of the United States—James K. Polk.

McDowell's operations were all without anaesthesia, as Morton did not demonstrate the use of ether to prevent the pain of an operation until 1846, and chloroform was not introduced by Simpson until one year later. In 1800, Sir Humphry Davy had suggested the use of nitrous oxide or laughing gas, but no anaesthetics to speak of were used in McDowell's time.

His first abdominal patient, Mrs. Jane Crawford, rode horseback sixty miles from Greene county. When she was operated upon, an eight inch right rectus incision was made, the pedicle was tied with waxed thread, the ten or twelve pounds of fluid were drained from the cyst, the sac, weighing perhaps 7 pounds, was removed, and then, with the ligature left hanging out of the abdominal wound, the incision was closed. She was able to make up her bed on the fifth day, returned home on the 25th day, and lived in good health for thirty years thereafter. It was fortunate that people of his time were rugged.

Modern abdominal surgeons have profited greatly from the experience of others, and the general practitioner of today is perhaps

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better trained, even along surgical lines, than the skilled surgeon was fifty years ago. In fact, training as a general practitioner, makes an excellent ground work for a surgeon, and many consider such training a necessary adjunct to success.

Whether or not this is true, I wish to discuss this morning some of the main differential factors in acute abdominal conditions as they affect the general practitioner; realizing that, although the points I might make are not new, they are still correct and we can learn much by their repetition.

Among the causes of "acute abdomen", so-called, would undoubtedly first come appendicitis, because of its great frequency. Then acute cholecystitis or gall stone attacks, lesions of the kidneys and ureters, lesions in the female of acute pelvic inflammation, extra-uterine pregnancy, twisted ovarian pedicle, the various intestinal or gastro-intestinal conditions, such as perforated gastric ulcer, acute pancreatitis, and finally, abscess of the liver and spleen, and other conditions occurring less frequently.

In making the diagnosis, there is first, of course, the history of the onset. Pain, usually the initial symptom, should be accurately described. Its type, location, intensity, direction of radiation, and relation to meals should be determined, and not simply spoken of as pain. Previous history of other attacks should be elicited if possible, as well as preceding operations. Is there vomiting or merely nausea? Is there diarrhoea or constipation? And is there temperature, which is a very important point in the differential diagnosis between peritonitis and mechanical obstruction. The urine should be examined in all cases, and the physical examination should be thorough; always including a rectal examination. You have heard the saying, "He who forgets to place his finger in the rectum, frequently gets his foot in it".

Now let us consider some of the more common problems in the differential diagnosis of acute abdominal conditions in the above order.

DIAGNOSIS

Probably the most common acute abdominal condition is appendicitis, the first case of which was recorded by Mestivin in 1769, where a pint of pus was evacuated by incision in the right iliac fossa, and, after death, a rusty corroded pin was found in the interior of the appendix.

In the 100 years up to 1860, only 141 cases could be collected by Kelley for his work, "Vermiform Appendix and its Diseases". Howard of Montreal, in 1858, said, "It is extremely unlikely for a practitioner to have but one case in his lifetime—at least in cities the size of Montreal".

A general practitioner, Reginold Fitz, used the word "Appendicitis" for the first time in 1886, and he showed that the infection originated in the appendix. He stressed the early diagnosis, the ease of diagnosis, and maintained that the treatment was entirely surgical.

General practitioners of the present time are very alert for appendicitis. Many pride themselves on never missing one, nor allowing it to perforate. Physicians of today do not give laxatives in acute abdominal conditions. Even parents and children have come to realize this fact, but even so, it is not taught enough, for the mortality throughout the country runs almost 10%. In order to lower this, a surgeon, at the last meeting of the American College of Surgeons in New York City recommended the prophylactic removal of appendices, which is a far cry from conditions 100 years ago.

Suppose now, for example, that you are in the country, and called to see a male individual about 20 years old. He has been sick twenty hours. The pain began as a general diffuse affair all over the abdomen, accompanied by some nausea, but no vomiting. Lately, his abdomen has become more tender in the right lower quadrant. The pain does not radiate down the leg or penis, and is not made more severe by urination, although urination may be more frequent. His temperature is 99 degrees. The abdomen is quite rigid, more perhaps in the lower right quadrant. There are no rales in the chest. Pressure over the abdomen in the region of McBurney's point is more painful than elsewhere.

Now there are several valuable pieces of information, even in so meagre a history.

In the first place, his original symptom was pain, followed by nausea, which came on several hours after the pain. The pain was vague at first, and tended to localize in the right lower quadrant. There was marked tenderness in McBurney's region, and rigidity of the abdominal muscles there, whereas there was less tenderness elsewhere in the abdomen. Of course, you should have a urine examination, and a leucocyte, but, if in a country home, where even these were unavailable, you would be fairly certain that this is a case of acute appendicitis and should be operated upon.

Now let us assume that you are called to a home to see a woman, 35 years old, who has had six children. Several hours after a meal, which may have, and probably has included some fried things or cream, she too is seized with an acute abdominal pain, more localized in the right upper quadrant, but accompanied by no marked rise in temperature. The pain, as in appendicitis, comes on suddenly, but becomes more and more severe until the patient is in agony. She states that the pain goes through to the back or shoulder blade. The pain, as in the case of the man with appendicitis, is followed by nausea, perhaps vomiting, but the rigidity and tenderness are in the right upper quadrant, the pain is referred to the back, and very severe. There is no evidence of bowel obstruction, and pelvic examination is negative. One may, with the above history, very properly make a diagnosis of an acute gall-bladder attack, and instead of immediate operation, although some surgeons recommend it, morphine should be given in generous doses; and by the next morning the pain is gone, although there is still definite tenderness over the gall-bladder region. Such a case should, of course, be kept under observation, and no Graham-Cole test should be employed until the acute symptoms of this attack have entirely disappeared. This test, or similar ones, are sometimes done, but I believe it is detrimental to the patient.

But if, in a case of this kind, at the end of twelve hours, the pain is much more severe, and there is an increase of the temperature and pulse rate, accompanied by exquisite tenderness on slight pressure over the gall-bladder region, a diagnosis of not only gall-bladder infection should be made, but the possibility of a local peritonitis should be considered. If the pain persists, and grows worse, one should carefully consider the possibility of perforation of the gall-bladder or acute pancreatitis, where immediate operation may be necessary. Whenever possible, these gall-stone colic cases should be carried through their attack and operated in the interval, but one must recognize the fact that in very severe cases of threatening gangrene and perforation early operation is much the safer and wiser plan.

As a third example, let us take a very acute abdominal attack in a male where the pain, very severe, begins in the right lumbar region, and passes downwards into right lower quadrant towards the bladder. His age is 33, and he has had no previous attacks. Although the pain is very intense, he has no rigidity of the abdominal muscles. There is a definite tenderness in the right costo-vertebral angle, and the patient says this definitely radiates downwards towards the bladder. The urine examination in this case may show blood, and it may not, although in either case we might be dealing with a calculus passing from the kidney to the bladder. The reason that the urine may be negative is that the stone may so completely obstruct the ureter that no urine for the time being, escapes from that side; and the urine from the opposite side, which furnishes all the bladder urine, is quite normal.

The next clinical picture also has an acute abdominal attack, with or without a previous history of ulcer. Usually there is no vomiting. In the first few hours there is no increase in the pulse rate, temperature or leucocyte count; but the pain, quite severe, is in the epigastrium. The characteristic feature of the abdominal attack is the extreme "board-like rigidity" of the abdominal wall and some tenderness. One can almost stand on it. If a definite history of peptic ulcer exists, the clinical diagnosis would strongly point to either a gastric or duodenal ulcer which had perforated. But you would certainly not give barium for an x-ray examination, although a flat plate might be taken to see if any free air exists in the abdominal

cavity. These cases should be operated early, and about all one needs is the history, if possible, of previous ulcer, and the extreme boardy abdominal rigidity.

Now take the picture of another acute abdominal attack in a young woman, 25 years old, with a temperature, usually over 100 degrees, malaise and tendernes over the lower abdomen, but not a definite tenderness like an appendix or gall-bladder, and perhaps a little lower than McBurney's area if on the right side. There may be chills and is usually a history of urinary frequency, caused by the profuse vaginal discharge. The attack usually follows soon after menstruation. A history of intercourse may or may not be admitted. Bimanual examination shows great tenderness in one or both fornices, and you may find gonococci if a smear is taken. It is very important to differentiate a case of acute salpingitis and acute appendicitis, and sometimes difficult; but, there is rarely so much rigidity in salpingitis, and the temperature is higher than in acute appendicitis.

And then in a woman, one may have a very sudden, acute, lower abdominal pain with a history of some menstrual irregularity, and spotting after an apparent cessation of the menses. The patient is of childbearing age. She has symptoms of internal hemorrhage. One must first consider the possibility of extra-uterine pregnancy, or, a tumor with a twisted pedicle. If so, pelvic examination will show a mass on one side or other, and, without a high temperature, one can almost surely rule out acute salpingitis.

Then there is the large group of intestinal obstruction cases, with their appalling mortality, due primarily to late diagnosis. If there is no history of infection from some other organ, causing peritonitis, one should always, in persons complaining of intermittent colicky abdominal pain, accompanied by nausea or vomiting, but unattended by abdominal tenderness, rigidity or diarrhoea, look for a post-operative abdominal scar. These cases may be able to pass gas or even have a partial bowel movement with castor oil but still have a partial obstruction. Too much confidence has been placed upon this castor oil test and enemas.

SIMPLE DIAGNOSTIC AIDS

A much more reliable test may be made by placing the stethoscope over the abdomen. If mechanical obstruction exists, loud peristaltic rushes with a metallic tinkle, like the bubbling sound produced by pouring water from a bottle, may be heard at the height of the pain, which is not prolonged like the pain of a gall-bladder attack, but only lasts a few minutes at the time. We must not wait for regurgitant vomiting, distention, or visible peristalsis, which are regularly present in subacute and chronic cases, if we expect to save lives.

Then a roentgenogram should be taken which will show gas, not only in the stomach and colon where it normally appears in the adult, but also in the small intestine, where its demonstrable presence by x-ray is always decidedly abnormal.

If there is obstruction, with the abdomen silent on auscultation, and gas distributed throughout the colon, it is almost a certainty that the obstruction is paralytic in nature.

How many lives could be saved by the use of these two simple diagnostic aids, the stethoscope and the roentgen ray. The roentgen ray determines whether intestinal stasis is present and the stethoscope tells whether it is mechanical or paralytic in character. The diagnosis can almost be made over the telephone, if we remember that there is a group of cases, fortunately small, occurring in neurotic individuals having considerable gaseous distention and intermittent colicky pains, at the height of which loud intestinal noises may be heard on auscultation. Roentgen rays, however, show that the gas is practically entirely in the stomach and colon.

When we come to strangulation obstruction, where the intestine is deprived of its blood supply, a different clinical picture is seen than in simple obstruction. The patient is more acutely ill, with often agonizing pain, a quickened pulse, some temperature, and later, symptoms of collapse. Local physical findings are almost always present, and peritoneal irritation may usually be elicited by the demonstration of rebound tenderness. It it very important to recognize and differen-

tiate these cases early, as early interference by an occasional operator is likely to be more successful than a late operation in the most skilled hands.

Obstipation, with symptoms of obstruction in persons past middle age, with a history of alternate diarrhoea and constipation, even without blood, often means obstruction from a carcinoma of the colon. Forty per cent of the patients suffering with cancer of the colon come to the hospital with an acute obstruction.

General practitioners are always suspicious of an intussusception in infants with severe colicky abdominal pains, frequent bowel movements with mucus and blood, and a tumor in the right ileocecal region. Prompt operation is usually successful; but, late operation, after gangrene has set in, is most often fatal.

And then, one should remember congenital pyloric obstruction in infants, with the vomiting beginning in the first few weeks of life.

You must also remember the pneumonias, which sometimes simulate an appendix, the gastric crisis of tabes, vascular lesions, such as coronary thrombosis, and those lesions such as a dissecting aneurysm of the aorta, which are fortunately rare.

SUMMARY

I have merely given you some of the more important things with which the general practitioner, who is usually the first one to see acute abdomens, comes in contact. You must remember that none of us, even the most expert diagnosticians, make absolutely correct diagnosis, 100% of the time. But all of us should be able to know when an exploratory laparotomy should be done. That is the important problem of the general practitioner, who wants to give his patients the best medical care. Most attacks of acute appendicitis, acute intestinal obstruction, strangulated hernia, ruptured gastric and duodenal ulcer, and extra-uterine pregnancy, require immediate surgical attention; whereas gall-bladders, kidney stones and salpingitis, can usually be left until later.

Many say that 80% of the cases can be diagnosed in the home, without special laboratory equipment. However, the history must be carefully elicited and the physical examination thorough. Many of the old time country doctors possessed a quality commonly called intuition, but it was not intuition as such; merely the benefit of long experience, each case leaving some imprint on our sensitive brain structure, which came out when another similar case was seen. We can all develop it, if we will try to be thorough, and try to give every patient the most careful diagnosis possible; realizing that we will not always be right. But, if we can judge when surgery is needed, even though we appear to have made a mistake in diagnosing a ruptured appendix instead of a perforated gastric ulcer, we need not feel too badly, for a man's life may be saved in either instance, whereas delay means almost certain death.

Mayo Foundation Extends Invitation

Members of the State Medical Society of Wisconsin are invited to attend a special program of lectures and demonstrations in medicine to be held under the direction of the May Foundation from March 5th to 9th inclusive. While this program is arranged primarily for Fellows of the Foundation, all members of the Wisconsin Society who find it convenient to attend will be cordially welcomed, according to the Director of the Foundation.

Morning sessions will be devoted to surgery, demonstrations of oxygen therapy and of intravenous therapy, and consideration of postoperative complications. In the afternoons medical subjects, including gastroenterology, dermatology and syphilis will be discussed and a symposium on dyspnea will be held. In the evenings clinico-pathologic conferences will be conducted.

Members anticipating attending the conferences may obtain a final program by writing to the Director of the Mayo Foundation, Rochester, Minnesota.

Treatment of Tuberculosis in General Practice, II

By ANDREW L. BANYAI, M. D.
Clinical Director, Muirdale Sanatorium, Wauwatosa

LIGHT TREATMENT

LIGHT treatment is a cardinal method of treatment for certain types of pulmonary tuberculosis. Moderate exposure to sunlight increases the number of red blood cells, the amount of hemoglobin, and the bactericidal power of the leucocytes. Under the influence of such exposure the leucocytes decrease in number and a rather marked relative increase in the lymphocytes sets in. The latter are considered the protective cells in tuberculosis. Light rays have a tonic effect upon the skin, muscles, and nervous system. Irradiation also improves elimination through the skin without increase in the metabolic rate. Improvement in the appetite and the gastrointestinal function is frequently noted. Ergosterol, normally present in the human skin, becomes activated and develops the characteristics of vitamin D under ultra-violet irradiation. Vitamin D, in turn, is able to stimulate the parathyroid glands and increase the calcium concentration of the blood. Calcium diminishes inflammatory exudation, it aids coagulation, and stimulates immunological response. The best results can be expected in patients with moderate symptoms who show some tendency to fibrosis and whose temperature does not exceed 99.5 degrees F. It is strictly contraindicated in patients having febrile temperature, acute forms of tuberculosis, predominantly exudative lesions, poorly compensated heart, marked degree of arteriosclerosis, non-tuberculous nephritis, and amyloidosis. No heliotherapy should be given during pulmonary hemorrhage and at least for two weeks following it.

Each patient must receive graded exposure closely following the scheme laid down by Rollier in Switzerland. On the first day only the feet are exposed, for five minutes. On the second day the feet are exposed, for ten minutes, and the legs below the knees for five minutes. On the third day the feet are exposed for fifteen, the legs up to the knees for ten, and the thighs for five minutes. On the fourth day the exposure of each of these areas is increased by five minutes, and a five minute irradiation of the abdomen below the costal arch is added. On the fifth day the chest is exposed for five minutes while the exposure time over the already exposed areas is increased by five minutes. From then on each part of the body is exposed for five minutes more each day until one hour irradiation of the entire body, with the exception of the head, is reached. The exposure time should be equally divided between the irradiation of the anterior and posterior aspects of each zone and the entire body.

Rules and precautions when giving sun cure: 1. Prevent chilling of body. 2. Protect the eyes and the head. 3. Increase fluid and carbohydrate intake. 4. Avoid exposure too close to meal times. 5. Avoid exposure to too much heat. The skin never should be permitted to become burned. 6. No skin erythema should be caused that persists longer than 24 hours. 7. Pulse and temperature must be kept within range of the pre-exposure level two hours after irradiation. 8. Symptoms of alkalosis, as headache, dizziness, nausea, vomiting, and abdominal cramps, indicating over-exposure, are to be avoided. 9. Development of focal reaction detectable by the increase in the number of rales over the diseased area and suggested by more cough and expectoration, also constitutional symptoms, must be prevented. 10. It never should be advised to the exclusion of other necessary therapeutic measures.

Brown eyeglasses or goggles may not be necessary if the patient wears a large wide-brimmed straw hat. Large paper or white linen caps will protect the head well. The sun cure should be taken in the reclining position on a comfortable couch or a heavy blanket laid on the floor. To avoid sudden weakness resulting from loss of water through excessive perspiration the patient must be instructed to drink water liberally before and after exposure to sun. The blood

sugar is likely to be lowered by heliotherapy; for this reason the carbohydrate intake must be increased. It is advisable to take sun cure before 11 A. M. and after 2 P. M. If temperature and pulse show unusual rise, the exposure is to be discontinued for a day or two, and then continued with an adequately decreased exposure time. Alkalosis may be effectively checked by the administration of thirty drops of dilute hydrochloric or dilute phosphoric acid in half a glass of water three times daily. The pigmentation that develops in the skin following repeated exposures is not a part of the healing process but only a by-product of irradiation. Satisfactory improvement is seen in patients who tan well, also in patients with slight or no tan at all. Therefore, pigmentation should not be looked upon as the purpose of treatment or a trustworthy sign of improvement. History of previous hemorrhage does not contraindicate heliotherapy, if the case is otherwise a suitable one. The occurrence of hemorrhage during cautiously given irradiation is not more frequent than in the same type of case without exposure to sun. Heliotherapy should not be interrupted on cloudy days. Recent investigations reveal that exposure to sun light, through certain permeable window glass substitutes, even during the winter months, has a decidedly beneficial effect. In every case of tuberculosis a graded general exposure must be applied, augmented, if necessary, by local radiation. When heliotherapy in the open air can not be practiced, artificial sources of light are recommended. We found the method of Mayer very satisfactory in using a mercury vapor quartz lamp. The patient lies on a comfortable couch or table at a distance of 36 inches from the lamp, which is focused for a one minute period to the upper and lower halves of the body for two exposures in front and back in order to expose as much of the skin surface as possible. A fifth exposure of the same duration is applied to any superficial or localized extra-pulmonary tuberculous focus if such is present. Exposures are increased by one minute a day until twenty minutes are reached over each irradiated area. At this time the lamp should be lowered and brought nearer the body about one inch every other day until it is 18 inches from the skin. Carbon arc lamps have proved of great value for general irradiation. The lamp-skin distance is permanently 4 to 8 feet, depending upon the intensity of the lamp.

Exposure to sunlight or irradiation from artificial sources of ultra-violet rays is used in all forms of chronic extra-pulmonary tuberculosis. In laryngeal tuberculosis good results were observed by us with the use of the Kromayer lamp. By this means it is possible to irradiate the larynx by holding the tip of the oral extension of the lamp slightly beyond the root of the tongue which is held pulled out by the patient during treatment. The exposures must be repeated daily, unless strong local reactions make discontinuation for two to three days advisable, and increased from five minutes on the first day by one minute at each time until twenty minutes are reached.

DIET

Our experience convinced us that an adequate nutrition can be maintained by the common house diet in the great majority of patients with pulmonary tuberculosis. The body weight of the undernourished tuberculous can be restored to normal without radical departure from the eating habits of the individual as long as his food includes the necessary amounts of protein, fat, and carbohydrates. Three square meals a day consisting of food to which the patient is accustomed are of more value than strange, supplementary, concentrated foods. A great many tuberculous patients are of normal weight. Overfeeding is not only unnecessary and unreasonable but also harmful because the extra weight overtaxes the pulmonary function. Increase in body weight in patients who are below par as the result of their tuberculosis should be accomplished primarily by proper attention to the disease.

Often rest alone is sufficient to improve the patient's appetite and increase his weight. Milk as an accessory food should not be forced upon the patient as long as enough nourishment is taken in the form of ordinary food. It may upset the digestive system, cause loss of appetite or diarrhea. When

milk is included in the diet it should be taken after meals and swallowed in small sips. There is no proof of any benefit derived from including unusually large quantities of eggs in the diet.

Remarkably good results are obtained in the treatment of lupus vulgaris by the so-called salt-free diet. It surpasses every other method of treatment in its cosmetic results. We found that this diet can be adapted to the regular house diet without losing any of its efficiency. The average diet without the addition of salt to the dishes and with the liberal use of butter and fats can be prepared in the home of the patient. Canned goods of all kinds, smoked and spiced meats, sausage and ham, smoked and salted fish are prohibited because of their table salt content. Patients on this diet should be given 7 drops of viosterol (100 D) and 15 gr. of calcium lactate three times a day. It is our opinion that every patient with skin or renal tuberculosis should be placed on a salt-free diet; and it should also be used for all pulmonary and orthopedic cases that do not show satisfactory response to regular diet.

The management of the salt-free diet has been greatly facilitated by the use of Curtasal, a salt substitute used in our practice. It has a salty taste, very much like common table salt, and is taken well by the patients. The foods can be prepared with Curtasal or it may be added to the salt-free food by the patient. The spectroscopic analysis (Professor Bock, Marquette University) shows that Curtasal contains only traces of sodium and chlorine.

(This is the second of a series of short discussions of the practical treatment of pulmonary tuberculosis.)

Anal Fissure*

By ARNE C. GORDER, M. D.
Milwaukee

THERE are few common disorders which have been the cause of more misunderstanding among the medical profession than the so-called "anal fissure". The main reason for this confusion is undoubtedly due to the fact that the term "fissure" is misleading and inaccurate. This faulty terminology has led to many pitfalls both in diagnosis and in treatment. True anal fissure is an ulcerative lesion located most frequently in the posterior quadrant of the anus just external to and seldom involving the mucocutaneous juncture. Occasionally, it is situated in the anterior quadrant, but is very rarely found in the lateral margins of the anus. It must be remembered, then, that anal fissure is, as an ulceration, a distinct entity and does not include any crack or abrasion which might occur around the anal margin. The old idea that any break in the continuity of the anal skin constitutes a fissure is still quite prevalent among the profession. Because of this fact, many ordinary abrasions in the marginal skin of the anus, which readily heal if given no treatment other than simple anal cleansing with a witch-hazel sponge after each stool, are frequently, inadvertently converted into true anal fissure by the application of some type of chemical or actual cauterant. It is obvious, therefore, that a clearer conception of the condition would prevail if it were known, not as anal fissure, but as anal ulcer or fissured ulcer of the anus.

CAUSE

Although trauma, either as a result of a scybalous or a large-formed stool, is probably the most important predisposing factor in the formation of the anal fissure, the direct, or underlying, causative agent is infection of the anal crypts, which are the little pockets lying just behind the pectinate line where the margins of the skin overlap the mucosa with a serrated border. The inflammation, arising in the crypts of Morgagni, spreads by direct extension under the anal skin and involves both the subcutaneous tissue and the skin. It is understandable that an anal canal thus affected will not easily withstand trauma. When an anal break does

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occur, an ulcer results, which, because of the diseased condition of the veins in the subcutaneous stroma, might even be called a varicose anal ulcer.

It is a noteworthy fact that well over ninety per cent of the fissures occur in the posterior quadrant of the anal canal. The predilection of the lesion for this particular area can readily be explained from an anatomic standpoint. On account of the concavity of the sacrum, an acute angle is formed by the juncture of the posterior rectal wall with the anal canal, and, consequently, as the stool is expelled from the rectum, there is a greater amount of pressure exerted over the posterior commissure than at any other portion of the anal circumference. Then, too, this region is anatomically the weakest portion of the anus and is therefore prone to receive the greatest degree of stretching from an unduly large stool. The anterior, ano-rectal wall is rather well immobilized by the prostate in men and the uterus and adnexa in women. The lateral anal walls, although somewhat limited in their excursion by the ischia, are strongly supported by the firm bands of the external sphincter muscle. This muscle arises from the coccyx, passes forward slightly, then splits to form the lateral portion of the external sphincter, and finally joins again posteriorly. The fibers are continuous around the lateral aspects of the anus, but do not encircle it either anteriorly or posteriorly. Thus the marginal skin of the anus is well supported laterally, but is poorly reinforced both anteriorly and posteriorly, with the weaker point at the posterior commissure.

CLINICAL COURSE AND FINDINGS

The most outstanding and frequently the only symptom of which the patient complains is intermittent anal pain. As a rule, it is well localized at the anus, but occasionally the pain extends into the lower lumbar area or into the thighs and legs. This pain, often of a knife-like sharpness, is naturally most marked during the passage of a stool. At times the attacks may be so excruciating and agonizing in character that the severity and intensity of the pain is entirely out of proportion to the size of the offending lesion. The ability of an apparently insignificant ulceration to produce such acute pain is comprehensible when one considers that the fissure is situated in an area which not only contains an exceptionally prolific sensory nerve supply, but which also is being constantly exposed both to the irritative discharges from the bowel and the "grinding" contractions of the anal muscles. Anal spasm with the alternating contractions and relaxations of the sphincter muscles is an exceedingly common complication of the anal ulcer, and undoubtedly accounts for a large part of the extreme discomfort which accompanies the disease. The spasmodic reaction of these muscles is initiated by the irritation of the fissure itself. The resulting muscle spasm produces pain which, in turn, induces spasm, and thus a vicious circle is set up which often becomes so pronounced that actual prostration may occur. As chronicity develops, the sphincters become hypertrophied, and, because of the alternating healing and breaking down of the fissure, there is a gradual deposition of fibrous tissue in the muscle bundles. Eventually, the tone and elasticity of the sphincters become definitely impaired and constipation develops. Bleeding is a fairly constant finding. The blood, nearly always bright red in color, is usually noticed in the stool in amounts varying from a few streaks to an occasional tablespoonful.

Digital examination of the ano-rectal canal, will, in the acute stage, elicit marked sphincter spasm which is elastic and clonic in character. In the long-standing and chronic types, it is not uncommon for the examining finger to experience the sensation of a "bone ring". This peculiar finding is due to the inelasticity and hypertrophy of the sphincter muscles heretofore explained.

Careful inspection of the anal canal by means of an anoscope and a suitable light appliance will clearly reveal the fissure which is single, and only multiple as Pennington brought out, when the disease is specific. External to the fissure is almost always found the "sentinel pile" or "tag", and internally will be seen a single enlarged papilla. Although hemorrhoids not infrequently accompany anal ulcer, the "sentinel pile" is not a

true hemorrhoid at all, but merely a skin tag which extends down over the fissure. If the tag is lifted up, the lesion will be disclosed directly beneath it. Pathologically, this skin tag consists of nothing more than engorged and phlebitic veins, which are a result of the direct extension of the inflammatory process originating in the anal crypts. The hypertrophied papilla is also a manifestation of this same infection. Early in the course of the disease, edema is responsible for the papillary enlargement, but later, as the acute stage subsides, fibrosis sets in and the papilla never returns to its normal size. The presence of the sentinel pile and hypertrophied papilla, together with the associated anal spasm, represents the characteristic complications of anal ulcer.

It is of utmost importance, from the standpoint of treatment, to recognize these hypertrophied papillae, which frequently reach sufficient size to prolapse from the anus. Too often these lesions are confused with polyps, which likewise may protrude through the anus. As a helpful differential point, it is advisable to remember that the papillae are covered by skin, while polyps arising from the mucosal lining of the bowel are naturally covered by mucosa. The tendency of the polyps toward malignant degeneration has been emphasized by Fitzgibbon and others, and for this reason they should always be removed by a burning operation. Anal papillae, however, never become malignant, but because they are covered with that part of the skin which possesses a preponderant sensory nerve supply, they should be excised with the knife and never the cautery. Any burning operation to eradicate anal papillae is followed by a most painful convalescence.

TREATMENT

The employment of palliative measures such as curettage, dilations, chemical or actual cauterants, and various anesthetic ointments and solutions are so frequently disappointing, and are accompanied by such a high percentage of inevitable failures, that the uncertainty of the treatment alone precludes its use. The number of unsuccessful results obtained is not astonishing when one reviews the pathogenesis of the lesion. It is very probable that many of the reported cures following the use of different palliative procedures were in cases of ordinary abrasion, which had been mistakenly diagnosed fissure. It is quite reasonable to assume that favorable results so reported have, to a certain extent, prejudiced the mind of the physician against the more radical treatment of anal fissure.

Surgery, with wide excision of the ulcer-bearing quadrant of the anus, has offered the best results in the treatment of this condition. Other surgical maneuvers such as divulsion of the sphincter ani and subcutaneous sphincterotomy have proven, even in the best of hands, but partially successful, and then only in well-selected cases. Unless all the pathological tissue is eradicated, one cannot entertain a very encouraging outlook for a permanent cure.

The operative removal of anal ulcer is best accomplished under regional anesthesia. I have found trans-sacral anesthesia highly satisfactory in proctological surgery, especially in those cases—anal fissures, for example—where relaxation of the sphincter muscles is much desired. It is not only an exceedingly safe type of anesthetic, but the relaxation produced is so complete that contraction found in the anus will be recognized as due to fibrosis and scar tissue rather than muscle spasm.

The amount of tissue excised depends entirely upon the extent of the inflammatory process. The wound must be wide enough, however, so that the edges will not approximate when sphincter activity is re-established. Likewise, enough tissue must be removed posteriorly so that that part of the wound will remain open after the internal or anterior portion is healed. Usually, two skin incisions are started at right angles to the external sphincter muscle at the juncture of the lateral and posterior quadrants on either side. These incisions are continued in a posterior direction from a point just below the mucocutaneous juncture until they are well beyond the thickened skin margin of the ulcer, where they are joined by a curved incision, thus forming a horseshoe-shaped outline. This entire flap containing

the ulcer-bearing tissue, "sentinel pile", and hypertrophied papilla, is dissected out down to the external sphincter muscle and severed by a transverse mucosal incision. If the external sphincter is markedly hypertrophied and forms a shelf across the wound, it is advisable to partially section the muscle to assure adequate drainage. The operation is completed by sewing the free edge of the rectal mucosa to the external sphincter. The sutures must be carefully placed, however, so that the direction of the suture line corresponds, as nearly as possible, to the original mucocutaneous border. After ascertaining that there is accurate hemostasis, a small piece of iodoform gauze is laid in the wound and a small Penrose drain is inserted into the anal canal to promote drainage.

Meticulous postoperative care plays a very important role in the ultimate cure of anal fissure. Hot boric dressings are continuously applied to the wound during the first seventy-two hours, and thereafter as indicated. These hot packs are an invaluable aid, not only in assisting drainage, but also in relieving the postoperative pain. It is not unusual for the patient to receive greater comfort from hot dressings than from opiates. The Penrose drain, together with the iodoform gauze covering the wound, is removed on the second postoperative day, and the patient is then encouraged to move his bowels. Ordinarily, the withdrawal of the anal drain is followed by a movement, but it is occasionally necessary to administer a mild laxative. The anus is irrigated after each stool with warm water and witch-hazel for a period of approximately two weeks. Anal cleanliness is further enhanced by treating the wound daily with antiseptic and cleansing applications. Healing, with the formation of a broad, flat, firm scar, is usually complete at the end of three weeks.

(For discussion see page 119.)

The Ambulatory Treatment of Hemorrhoids*

By J. M. SCANTLETON, M. D.
Sparta

SINCE 1915 I have been treating hemorroids in an ambulatory fashion. I am well aware that, in presenting this type of hemorrhoid treatment, I am advancing nothing new, but on the other hand I am convinced this method is not generally enough used.

Before proceeding to treatment, I believe it proper to briefly discuss the anatomy of the rectum, and to classify hemorrhoids and their causes.

The rectum is a straight tubular segment of gut about five and one-half inches in length, extending from the third sacral vertebra to the anus. It follows the sacrococcygeal curve for about three inches to the tip of the coccyx, and then passes downward and backward for about one and one-half inches to the anus. For descriptive purposes it is divided into an ampulla or upper rectum, and a lower or fixed rectum. The ampulla extends from the lower margin of the recto-sigmoidal juncture to the beginning of the anal canal. It is movable and its anterior and posterior walls are in apposition at rest. It can be inflated. The fixed rectum, (anal canal) or the lower one and one-half inches, is narrow, rigid, difficult to inflate, and has its lateral walls in apposition. Eighty per cent of lesions of the rectum occur in this lower one and one-half inches, and are very adaptable to operation under local anaesthesia. Most of the more serious lesions (as carcinoma) occur in the upper rectum and usually require major surgery.

The rectum has four coats, serous, muscular, submucous, and mucous. The peritoneal covering is found only at the recto-sigmoidal juncture, small areas on the anterior and lateral rectal surfaces, and where the peritoneal reflections anchor the bowel to the bladder and sacrum.

From the anus to the peritoneal attachment is about two and one-half inches in females and three and one-half inches in males.

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This of course has a surgical importance in rectal manipulations.

The muscularis is composed of circular and longitudinal fibers. The longitudinal are derived from sigmoidal bands which spread out over the rectum. Circular fibers are thin in the upper two-thirds but become more numerous near the anus where they form the internal sphincter.

The submucous coat is thick and as elsewhere contains connective tissue, blood vessels, nerves, and lymphatics.

The mucosa is vascular, thick, dark red, and presents many interesting irregularities as: the rectal valves, columns of Morgagni, anal papillae and crypts.

The rectal valves are usually three in number and obliquely placed with concavities upward. They form shelves which arrest the downward fecal current, and are made more prominent by distention.

Beginning a short distance above the mucocutaneous juncture or Hilton's white line are several (5 to 10) longitudinal folds of mucosa. They are known as the columns of Morgagni. Between the lower extremities of the columns are small cup shaped depressions known as the crypts, and at the distal end of these columns are several minute elevations known as the rectal papillae. The crypts are thought to collect mucus for fecal lubrication, and the papillae are special rectal sense organs. The crypts and papillae (the pectinate line) form an inaccurate dividing line between the mucous columnar epithelium above, and the thick stratified epithelium just below, which emerges gradually into true skin at the mucocutaneous juncture.

The rectum receives its blood supply from the superior hemorrhoidal, a continuation of the inferior mesenteric, the middle hemorrhoidal, branch of the internal iliac, and the inferior hemorrhoidal from the internal pudic. The middle sacral, a small branch from the aorta sends a branch to the rectum.

The veins have the same names as the arteries and in general follow their course. The superior hemorrhoidal arises above the mucocutaneous juncture from small saccules at different levels in the submucosa. From these clusters venules proceed and unite to form a net-work which encircles the rectum above Hilton's white line. They proceed upward as six or seven small branches on all sides of the rectum for about four inches where they pass through button-like slits in the posterior muscular coat and converge to form the superior hemorrhoidal vein. These rectal venules have no valves. The superior hemorrhoidal empties into the inferior mesenteric vein and portal circulation.

The middle hemorrhoidal and middle sacral gather blood from the external surface of the rectum above the levator ani muscle and join the internal iliac to empty into the vena cava.

The inferior hemorrhoidal is supplied by the inferior hemorrhoidal plexus beneath the anal skin, external to the mucocutaneous juncture. It empties into the internal pudic and thence to the internal iliac.

Lymphatic drainage above the pectinate line passes upward under the rectal mucosa to the sacral and hypogastric lymph nodes, while below this line the lymphatic channels pass over the perineum into the inguinal region.

There are many theories as to the cause of hemorrhoids. The lack of rectal valves, the upright position of the body with resultant stagnation of blood, increased muscular pressure where the venules pass through the slit-like openings in the posterior muscular coat, diarrhoea, constipation, sedentary life, pregnancy, obstructive diseases of the liver, and irregular habits. All these causes no doubt add their bit as etiological factors, but I am inclined to agree with Dr. Buie that the great exciting factor is trauma with resultant infection. This infection produces a phlebitis, the venus wall is thereby weakened, and varicosities result. The weakened vein with its fibrous tissue wall favors clotting, stagnation, and thrombosis.

CLASSIFICATION

Hemorrhoids are grossly classified into external, mixed or combination, and internal types.

1. *The external* are tributaries of the inferior hemorrhoidal veins and lie beneath the skin of the anal margins. They may be classified as follows: Thrombosed, simple

varicosity, edematous external hemorrhoids and skin tags.

(A) Thrombosed external hemorrhoids appear as small tumors beneath the surface of the skin of the anal margins. If the thrombosis is near the surface the color of the pile is blue, and if deeply buried the color may be that of normal skin. These tumors arise suddenly following some rectal trauma, such as passing a large constipated stool. They are usually painful and tender, the pain being most acute during the first two hours. The condition may subside, slough, or be lanced by the surgeon before relief is obtained.

(B) Simple varicosity may be likened to a varicose vein of the leg. They usually occur in older people and may be only visible when the patient is in the act of straining. These varicosities usually cause little or no symptoms and seldom require treatment.

(C) Edematous external hemorrhoids occur as the result of infection and inflammation preceded by some irritation and trauma. They appear as swollen irritated tag-like formations at the anal margin and they may be complicated with ulceration, strangulation, and sloughing.

(D) Skin tags or tabs occur about the anal margin or connective and cutaneous teat-like formations, the result of fibrosis following external thrombotic or inflammatory conditions.

2. *Combination or mixed types* sometimes called anal hemorrhoids, are, as the name implies, a combination of both external and internal types. They are thought to develop by the downward migration of internal hemorrhoids beneath the tissues of the anal canal where they unite with veins beneath the anal margins. They are composed of varicosities of both internal and external veins, and are covered by both mucous membrane and cutaneous tissues. The lower part of these hemorrhoids is usually pinkish in color, while the upper portion is purplish or bright red.

3. *Internal hemorrhoids* arise from tributaries of the middle and superior hemorrhoidal veins, and are situated in the lowest portion of the rectum with the pectinate line as their lower boundary. These hemorrhoids are classified according to their physical and pathological condition as: protruding, prolapsing, thrombotic, gangrenous, etc. This is the most common type of hemorrhoid.

4. *Capillary internal hemorrhoids* are small, bright red tumors beneath the mucous membrane which bleed easily. They have a very thin fragile covering, and are composed of intermingling venus and arterial capillaries in the mucosa.

TREATMENT

For descriptive purposes I will divide my treatment into (1) internal hemorrhoids, (2) external hemorrhoids, and (3) combination hemorrhoids.

1. *Internal hemorrhoids.* The patient, presenting himself for the initial examination, is ordered to take a cleansing soap suds enema in the forenoon, and to appear at the office for examination after lunch. This examination is made with the patient lying on the abdomen, buttocks elevated, and head and shoulders lowered. I first explore the rectum with a gloved finger, and then with a Hirschman's anoscope, five-eighths inches in diameter, which gives a good exposure of the lower rectum. If I find evidence of further pathology of the rectum or sigmoid, or if the history is suspicious, I conclude my investigation with the sigmoidoscope. For examination of the lower rectum I prefer a light reflected from a floor lamp, but often use a small electric lamp on a metal arm as a probe to better inspect suspicious tissues.

After the initial examination, when I can feel reasonably sure the pathology is confined to the lower rectum, I place the patient in the dorsal position with his feet in stirrups, and the buttocks as near the edge of the table as possible.

I am now ready for the first treatment which consists of an injection of ten per cent phenol in water. The instruments for this procedure are a Brinkerhoff speculum, a 15 m. tuberculin syringe with a twenty-five gauge needle about two inches in length. It is important to have a long fine needle so as not to obscure your view, and to create as little trauma as possible at the point of injection. I have seen annoying bleeding as the result of injection with a large needle.

I introduce the Brinkerhoff speculum, remove the sliding side, and engage the hemorrhoid. About ten to fifteen minims of the solution is injected into the pile at the crest, or that region of the hemorrhoid nearest the mid-line of the rectum. I can tell when I have injected enough solution by a little back pressure on the plunger of the syringe. It is important not to over-inject a hemorrhoid as this produces pressure pain and increases the danger of extensive sloughing. The injection should stop before the pile changes to a whitish color, and should be made directly into the hemorrhoid and not into surrounding bowel tissue. The needle is allowed to remain in place for about one minute, then withdrawn and a pledget of cotton on an applicator placed over the needle wound for a few seconds. This is to prevent bleeding and leakage of the solution from the hemorrhoid.

Phenol acts as an anaesthetic and there should be very little pain following an injection. The patient returns immediately to his occupation and the hemorrhoid painlessly sloughs in from four to seven days, leaving a bowel wall almost free from scar tissue.

Four to six injections are necessary in the average case, and I do not treat patients oftener than every five days.

It is important to always begin injection at the same point. I use three o'clock and go around the rectum in the reverse of the hands of the clock. Turning the speculum with the sliding side withdrawn is apt to produce pain, and for this reason the operator should know in advance which hemorrhoid he is going to treat. It is a very good plan to chart each individual on first examination, and mark each pile as injected. In this way the pile next treated can be engaged without unnecessary manipulation.

I prefer to have the injected hemorrhoid slowly slough instead of thrombosing, although either condition will destroy the pile. I do not inject acutely inflamed or ulcerating internal hemorrhoids. It is always safer to wait a few days for the acute process to subside.

Following injection I advise patients to return all protruding masses after defecation, to avoid heavy lifting and to take a daily dose of mineral oil except on the day of treatment. I do not give enemas except for the initial examination, for I prefer the patient not to disturb the sloughing hemorrhoid.

In my experience complications are rare with this form of treatment. In this series I have had but two secondary hemorrhages which required treatment. I believe this bleeding was caused by an injection too deep into the bowel wall with a resultant slough eroding a healthy vessel. I have had no painful or severe sloughs, no embolisms, and no fissures, except when I have been experimenting with the next type to be discussed, the combination pile.

The absence of severe pain, the rarity of postoperative hemorrhage, the ambulatory character of the treatment, and the end result a rectum free from macroscopic scar tissue, make this my treatment of choice for internal hemorrhoids.

2. *External hemorrhoids.* I consider the treatment of external hemorrhoids and the combination piles purely a surgical condition, and no injection should be made into this type of hemorrhoid.

The incidence of external and internal hemorrhoids in this series has been about one to five, but these figures include only the external types that have needed some form of surgical attention.

It is my custom to remove these external piles under local anaesthesia with some form of excision which allows the patient to remain ambulatory. The method used depends upon the type of hemorrhoid present.

(A) External tags, which are often painful and are usually insanitary, I excise with scissors. A small infiltration of one-half per cent novocain is used, the pile picked up with a forcep, and the excision made in the same direction as the radiating lines of the anus. I have rarely found it necessary to suture the skin edges or tie a vessel in this type of pile.

(B) Thrombosed external hemorrhoids are usually completely excised under novocain infiltration. The lines of excision run as parallel as possible to the anal folds or rugae. It is sometimes necessary to tie a small artery but the margins of the excision

usually fall together well. I rarely suture the wound. Small external thrombotic piles are usually treated successfully by hot local application.

(C) Simple varicosities have been let entirely alone, and in this series I have not found them causing any serious inconvenience.

(D) The oedematous external hemorrhoids are given local treatment of rest, hot applications, etc., and later the troublesome tags removed by excision.

3. *The combination pile* is removed by the linear excision method described by Gant. Under novocain infiltration anaesthesia a clamp is applied as an anchor to the base of the external portion of the pile. Another forceps is applied to the body and the pile pulled forward. The excision is made with scissors and sutured upward as cut with a locked stitch of No. 1 plain cat gut. The pedicle is ligated with the end of this suture.

All external operations are done on one hemorrhoid at a time, and not closer than at five day intervals. Following operation a gauze dressing is applied, and the patient is advised to remain inactive for the remainder of the day. Hot wet applications of hamamelis water are applied at frequent intervals if the pain becomes severe.

I have injected a large number of combination piles with phenol, using only three to four minims of the solution, in the hopes of producing a thrombosis which would extend from the internal to the external portion of the pile. It is of course desirable to produce a thrombosis and not a slough for the slough immediately becomes a painful ulcer or fissure. I have been fairly successful with this experiment, but have produced enough fissures in this type of pile to advise against the general use of injection methods in these cases.

The average period of treatment is from four to five weeks and I have entirely given up the use of all forms of palliative suppositories following injection. The patient is advised only to keep the stools soft with a daily dose of oil, to avoid harsh cathartics, and to replace all prolapsed hemorrhoids.

In conclusion I will say that I have found this method of treatment immensely satisfactory to the patient and to myself. The surgical procedures for external hemorrhoids have not taken these patients out of the ambulatory class, and they have not considered themselves surgical subjects. I believe my results are better with the ambulatory treatment, and each year I have done less and less radical hemorrhoid surgery. It has been possible to see and treat and increased number of rectal sufferers whose suspicions and fears of radical hemorrhoid surgery would have prevented their applying for operative treatment.

DISCUSSION

Dr. W. E. Ground (Superior): I am sure the introduction of the discussion of these rectal troubles, or anal troubles, is probably about as opportune as anything we could bring up, because the piles and fissures have been rather neglected.

I am pleased to know that the gentlemen have brought forward a system of treatment that is ambulatory. Most of the treatment of rectal conditions has been surgical and many patients neglect attention to their anal troubles because of the heavy surgery that has usually been demanded; namely, sending them to the hospital, and ether anesthesia, and all the pain and inconvenience that goes with it.

I have been using injections for the treatment of internal hemorrhoids for several years. I first began by using ordinary phenol, alcohol, and finally I began by using phenol in oil, as advocated by Goldbacher. But before that it was used by Blanchard. He was the first man to use phenol in oil, five and ten per cent solutions. I found that was quite satisfactory over a considerable time, but that the relapses were many after a year or so. I have had probably better success with using quinine and urea —injected not in the pile tumor itself, but in the area at the top pole of the pile, remembering that the venous circulation comes down from above, and by obliterating or discouraging the venous flow, you have a gradual shrinkage of the hemorrhoid.

That is all well enough for a simple internal pile. Later I have resorted to coagulation, by using a large Brinkerhoff speculum, and allowing the pile to project down into the fissure of the speculum. We touch the pile with a high frequency current—electrocoagulation.

They speak about cautery, but we must understand that there is a vast difference between cautery and electrocoagulation. An ordinary cautery applied by a hot iron is a very superficial affair. In electrocoagulation, as made by the high frequency, the current is passed through the tissue and is concentrated at the needle point, where you want the destructive process to occur. The needle point does not get hot, but the tissues immediately around do, so that a moderate amount of application to your

pile tumor heats the tumor and coagulates the hemorrhoid.

I have found the treatment by electrocoagulation, through a speculum, gives the best permanent results, and I have been using that for a few years.

As to the treatment of external hemorrhoids. Of course they must be preceded by a local anesthetic and I have found a solution of nupercaine—one-tenth of one per cent solution gives ample anesthesia—and the best feature about it is that it is prolonged. It lasts two, three, or four days.

Speaking of anal fissures, it does seem to me it is unnecessary to resort to a severe surgical operation to cure fissures. We have to deal with an aggravated type now and then, but the vast majority of anal fissures can be cured by a solution composed of benzol-alcohol, anesthesin, phenol and oil—St. Mark's solution. This is injected immediately back under the fissure. Yeomans of New York has also recommended this very highly. I use a nupercaine solution in all rectal anesthesias. It lasts several days and your patient gets off the table and complains of practically no after pain until the immediate effects of the operation have subsided.

So I feel if we can simplify the treatment of these things to a considerable extent we are justified in doing it. It lets us deal with a very severe and sometimes dangerous lesion without hospitalizing the patient, and at considerably less expense. (Applause)

Disease Prevention and the Control of Cancer

By W. D. STOVALL, M. D.*

Madison

THAT clinical methods of medical practice are applicable to the prevention of disease has not yet been fully appreciated by medical students and the rank and file of the profession. It is easy to understand why this is so. During his student days the medical student's attention is focused upon the sick individual. As a rule the patients he sees are far advanced in their illness and consequently the signs and symptoms are characteristic. The whole of the student's medical college career is spent dealing with sick people, not well people or people with incipient disease; with individuals, not groups of individuals; his all time job is to study the effect of disease on the individual without respect to the group. So it results from his training that the student starts out his medical practice with clinical pictures in his mind which have been created by far advanced disease rather than by incipient disease and that he separates public health from clinical medicine as if they are unrelated.

The clinical teachers are not alone responsible for this narrowing of the medical viewpoint of the student and future physician. The pre-clinical subjects are taught in the same individualizing fashion. Bacteriology and immunology are more often than not presented as independent sciences without any hint at the relation of the biology of bacteria to the reaction of the patient and symptomatology. There are, of course, references to certain tests which have been picked out of these sciences as of importance in diagnosis. This has resulted in the medical student leaving these courses with the idea that these subjects are at best only remotely connected with clinical practice and with the impression that outside of certain morphological characteristics which may be helpful in the recognition of certain infectious processes bacteriology can be largely forgotten and that outside of a few tests, like Widals and Wassermanns, immunology offers him no assistance in either diagnosis or treatment.

A few illustrations will show the practicality of pre-clinical science in medical practice; that preventive medicine as a practice belongs in the professional practice of medicine, and that it can be accomplished with signal success only by one who is well informed and highly skilled in the technique of medical diagnosis and treatment. Let us examine, for instance, scarlet fever. The streptococcus scarlatinae has two biological characteristics which are of importance as a cause of disease. One of these is the production of an extracellular toxin which is responsible for the cardinal sign of the disease, the rash, and in the uncomplicated disease it has disappeared in five to seven days. The other is the invasive property because of which such complications as mastoiditis,

* Chairman, Cancer Committee, State Medical Society.

cervical lymphadenitis and septicemia arise. It is apparent that the reaction of the infected person to the specific biological characteristics of this organism explains the course of the disease. And further, since the scarlet rash is due to a susceptibility to the toxin and since this toxin is extracellular, a means is afforded for the application of a biological test (Dick's test) for the determination of susceptibility to the disease. This is occasionally an important diagnostic aid. A case in mind illustrates the point:

A young male student in the university called a physician because of a sore throat. The physician discovered on examination that the patient had a rash and immediately sent him to the quarantine hospital with a diagnosis of scarlet fever. The next morning the hospital staff found no rash. The question is: Did he have a scarlet fever rash the night before? The application of Dick's test showed a strongly positive reaction in twenty-four hours. It is obvious that the patient did not have scarlet fever since the fading of the rash would indicate the development of sufficient antitoxin to protect his skin against the toxin. The positive reaction to the Dick test indicated clearly that the patient still had a susceptibility to the toxin. By this means a diagnosis of scarlet fever was excluded and the management of the case, both as it affected the individual and the public, was altered.

It seems clear to me, therefore, that medical education is partly responsible for the sharp line of demarcation which divides preventive from curative medicine, but not wholly. This demarcation has been accentuated by the development of sanitation. Bacteriology and chemistry have played a large part in the study of methods by which diseases spread. This has associated these sciences with the development of sanitary sewage disposal, milk pasteurizing, the detection of carriers, and quarantine methods; in short, with epidemiological studies. It has been a study of the mass action of pathogenic micro-organisms in a complicated environment. The physician whose attention has been focused on the individual illness of a patient has not seen the significance of the sick individual in this study of the mass action of disease, and in the organization of the community, state and nation-wide, for disease control. The epidemiologist, on the other hand, since the accomplishments of the more obvious sanitary controls, has found in his investigations the pivotal position occupied by the individual both sick and well in any scheme which contemplates the control of disease. The importance of the individual to the activities of the health organization whether public or private has revealed clinical medicine as one of the most effective instruments of disease prevention and control. The significance of these developments, so plain it seems to me that even he who runs may read, is that the sharp line of demarcation between the practice of clinical medicine and the practice of preventive medicine has been erased; the two activities have fused. The physician, therefore, must change his attitude toward the sick individual and must develop an interest in the mass action of disease.

These changes should not have been entirely unexpected. It is evident that changes in practice must take place if it is to keep pace with advances in knowledge. Change will continue; more and more diseases other than those which are recognized as communicable will come within the field of controllable diseases as science affords better knowledge concerning their diagnosis and treatment. Cancer has already reached this stage.

The progress which has been made in the past thirty years in the treatment of cancer is remarkable. At the close of the last century Halstead had just described a radical operation for the removal of the breast. The facility for carrying out this operation was limited to a few centers. Hospitals equipped adequately for so important an undertaking were confined to a few large cities and the number of surgeons in the country with techical training and skill were few. The development of hospitals throughout the country adequately staffed with nurses, internes and competent surgeons was an obligation for the public and the profession alike. The success which has been attained is apparent everywhere. Hospitals of large capacity with staffs of highly trained specialists are found everywhere within easy reach of all people. This development was no small task and the expense has not been inconsiderable.

While this building programme was un-

der way, our knowledge of cancer was advancing. The histology of new growths was intensively studied and the results correlated with the clinical course of the patients so that varying degrees of malignancy can now be recognized. New methods of tissue examination were devised so that frozen sections afford the surgeon the advice of the pathologist while his patient is still on the table and assists him in determining the type of treatment his patients require. In this way the pathologist has been added to the surgical team necessary for competent surgical treatment. More recently another member has been added to this team, the radiologist. By proper clinical study of tumor cases it is possible to choose a form of treatment, surgery alone, x-ray, radium alone, or a combination of them which will give the patient the best chance of recovery or prolongation of life in comfort. The cost of the equipment necessary to carry on such methods of study and treatment seems large but I wonder if it is any more unreasonable to expect hospitals over the state to be equipped for this kind of medical service than it was thirty years ago to expect that there would spring up all over the state remote from large centers of population hospitals where major surgery is an every-day affair? The organization of the profession for this work is not impossible.

RESPONSIBILITY OF PHYSICIAN

If physicians were taken by surprise in the rapid development of medical diagnosis and treatment as a means of disease prevention and control in the case of communicable diseases, they should not again fall asleep while the procession marches. Since nineteen hundred and thirteen there has been going on an intensive educational campaign to the public, in which they have been informed on the early signs of cancer and the necessity for consulting a physician on the first appearance of these signs. They have been told that early diagnosis means cure in many cases and that any lump, wart or ulcer which does not heal should be examined to determine the possibility of malignancy. This places the responsibility upon the physician. He must be informed on the methods by which an early diagnosis can be made and have the facility at hand with which to obtain this information and treat the case.

It is true that only about thirty-five per cent of the malignant tumors can be diagnosed early. They are the ones so located that they can be examined. Those which are located in the deeper tissues and organs of the body are seldom found until they are far advanced and there is no possibility of making a diagnosis earlier. Thirty-five per cent, however, are possible of early diagnosis and successful treatment.

The diagnosis of cancer requires the services of a clinician. The individual patient must be examined by a physician, often by a group of physicians. Cancer can not be controlled by lay education. It is essentially a clinical problem. Pathologists, radiologists, surgeons and physicians are required to determine whether or not a tumor is malignant, to recognize such a possibility early, and to decide upon the type of treatment best suited to the individual case. In this disease the practice of medicine on the individual is the only method of control; preventive medicine and clinical medicine are united.

Publicity about cancer should be guarded. It is possible to discredit the profession by creating the idea that all cancers which are diagnosed early can be cured. We know that in spite of early diagnosis many small benign appearing tumors metastasize early and cause death even after complete local removal. The profession must guard against the creation of cancer phobias among that group of people who are easily excited to fear and yet they must be so informed that they will seek medical advice early in the development of tumor growths in order that beginning malignancy may be recognized. The public must not be given a pessimistic view of cancer since this will drive them to consult quacks who are always ready to promise a cure. While the diagnosis and treatment of malignant tumors is a service to be rendered by clinicians, the education of the public on cancer control is also the profession's problem. An honest statement

about our present knowledge concerning the diagnosis and treatment of cancer will be a credit to the profession and a comfort to the public.

In its concern to have the public informed on cancer control the profession must not forget itself. In the past it has seemed to many of us that all of the effort has been spent upon the public. The profession has not been taken into the campaign and allowed to share in its benefits. With the study of this disease being pressed in so many research centers and because the recognition and proper treatment of early or precancerous lesions is an essential for control, it is necessary that the profession be informed on improved methods of diagnosis and treatment; and further that they be provided with the necessary instruments and develop the required skill with which to render this medical service. Because of the difficulties in the way of accomplishing such a large professional educational program there are those who are of the opinion that the solution to the cancer control problem will come through the treatment of cancer and suspected cancer patients in cancer institutes centrally located throughout the country. In a large country such as ours the rural population could not be reached in such a manner for the early recognition of cancer and precancerous lesions. The problem, it can not be over emphasized, is not the recognition of fully developed, easily recognized cancer, although such cases require adequate treatment; it is the recognition of cancer possibilities in small and benign appearing tumors or ulcers and early cancer, and their proper treatment. It seems no more impossible that our hospitals can be equipped for this work than that they were ever built in so many small communities all over the state. Nor does it seem impossible that our medical schools can supply in the next several years enough well trained clinical pathologists and radiologists to help carry out the program: "Every Hospital a Cancer Center".

This will require a change of attitude, however, on the part of surgeons and physicians. They must be willing to accept these specialists in medicine as fellow practitioners. When this change of attitude has occurred the problem so far as medical schools are concerned will be solved. Medical students will begin at once to take the special training required to prepare them as competent specialists in pathology and radiology. If by a professional educational program these changes can be brought about, the centralization of cancer diagnosis and treatment will be unnecessary.

The American Association for the Control of Cancer realizes that the control of cancer is in the hands of the physicians who see the cases. They are cooperating with the national and state medical associations to conduct a lay educational campaign, and for the distribution of medical literature to the profession. The Board of Directors of this organization is composed of some of the most prominent physicians in the country.

Your own Cancer Committee was reorganized in nineteen hundred and thirty. At that time we requested the American Association for the Control of Cancer to make a survey of the facilities in the hospitals of the state for the diagnosis and treatment of cancer. The results of this survey were published in full in the Journal for September, 1932. Based upon this report your committee made the following recommendation to the council which was unanimously adopted:

"1. The establishment of a permanent Cancer Committee for the State Society, a majority of the membership never changing in one year. It is suggested that this Committee be composed of at least one member from each councilor district and, when feasible, that the chairman be the State Chairman for the American Association for the Control of Cancer.

"2. The organization of a lay auxiliary committee to work with the State Society Committee.

"3. Provide for permanent Cancer Committees for each of the component County Societies, a majority of whose membership shall not expire in any one year.

"4. Authorize the development of a record system for hospitals receiving cancer patients.

"5. Provide for a central tumor registry where tumors removed in various hospitals can be sent for record and filing. These tumors must be accompanied by clinical histories, descriptions of operations, findings at operation and other pertinent matter which the Committee may deem necessary. In

order for a hospital to join the tumor registry it will be necessary to provide itself with a record system worked out by the Committee and to be able to supplement this record by a yearly follow-up on each case. The follow-up must be the designated duty of some hospital employee and will be carried out by mailing to these patients or their relative a form letter requesting the information desired.

"6. Authorize a meeting at least twice a year of the interested staff members of the hospital belonging to the tumor registry, the meeting to be called by the Chairman of the Cancer Committee.

"7. Provide that the records and tissues on file in the registry be open at all times to members of the profession who wish to use them for study.

"8. Discuss with the State Board of Health the advisability of making cancer a reportable disease.

"9. Initiate a professional and lay educational program through the cooperation of the agencies and along the lines suggested in the report of the American Society for the Control of Cancer.

"10. Authorize the publication of the report in one issue of the State Medical Journal.

"11. Authorize the drafting of a set of resolutions expressing the thanks and appreciation of the Council to the American Association for the Control of Cancer and Dr. Rector for the survey."

The present committee members are:

W. D. Stovall, Madison, Chairman---1934
D. L. Dawson, Rice Lake----------1935
R. L. MacCornack, Whitehall--------1935
C. G. Richards, Kenosha----------1935
F. Eigenberger, Sheboygan----------1934
F. Gregory Connell, Oshkosh--------1936
W. E. Ground, Superior----------1936
Paul Doege, Marshfield----------1934
S. J. Seeger, Milwaukee----------1934
G. R. Duer, Marinette----------1936
J. F. Wilkinson, Oconomowoc--------1936
G. Benson, Richland Center----------1935
G. E. Moore, Antigo----------1935

COMMITTEE EFFORTS

Since the committee was organized we have secured each year a place on the program of the State Medical Society for a speaker prominent in the field of cancer research. At one meeting Joseph Bloodgood, who conducted clinics for the physicians and dentists, spoke to a group of women under the auspices of the Federated Women's Clubs and to the Society. In addition we conducted a tumor diagnostic clinic for pathologists and radiologists and showed a cancer film. Last year in Milwaukee Doctor Cutler spoke on the Diagnosis and Treatment of Cancer of the Breast. We secured the cooperation of the State Board of Health for the passage of a bill making cancer a reportable disease to the State Board of Health. The card upon which these reports are to be made were drawn up by the committee and accepted by the State Board of Health. This card was made as brief as is consistent with the gathering of necessary information. These reports will be considered confidential; open only to accredited people for study.

The tumor registry has not been organized because of lack of funds. It is hoped that in the near future money will be available and that the registry can be opened. This registry will be the source of valuable information which can be used by physicians who are interested in studying the histology of malignant tumors in connection with complete clinical histories and to pathologists. We believe that it will serve to emphasize cancer as a diagnostic problem and result eventually in the employment of competent pathologists by many hospitals throughout the State.

The immediate objective of the state committee is the organization of medical society and lay committees in each county and councilor district. The county societies will help in the organization of the local lay committees and plan a cancer program for the county society at least once a year. This program should be planned for an outside speaker who will speak to the county medical society, hold a clinic, if feasible, and also speak at a public meeting planned by the county lay committee. The councilor district committees are to be composed of the chairmen of the local county committees and the member of the state committee who will be the district chairman. The state committee will help in the securing of speakers for the county societies and will secure literature for distribution to the public in the county as well as professional literature for the members of the society.

The California State Medical Society has just completed a two year study of medical opinion on the diagnosis and treatment of cancer. This study has resulted in an agreement upon certain standard methods of procedure and on subjects about which there is

(Continued on page 162)

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« « « EDITORIALS » » »

A Well-Merited Criticism

IT IS so unusual to have the press give space in its columns to the medical profession, especially of a constructive nature, that when this does occur it seems desirable to take cognizance of it, and if the subject matter be praiseworthy, to give it emphasis. Recently two well-known dailies, one in the east and the other a local publication, directed editorials to a sore spot in the medical curricula and a long recognized failure in the realm of medical practice. The occasion of these articles was the meeting of the American Psychiatric Association in Boston. I shall quote liberally from the editorials. The Boston paper headed its article "Psychiatry—a Profession, Not a Playground." The writer goes on to remark:

"Today the American Psychiatric Association, at its annual convention now assembled in Boston, has voted a decision of far-reaching import. It has determined to create a board of examiners who in the future will certify the qualifications of practitioners who deserve to be known as psychiatrists. Arguing on behalf of such a vote, Dr. James V. May, the president, defined the issue in pithy terms. 'The time has come,' he said, 'when we must decide whether this association is to assume the responsibility for the establishment of definite psychiatric standards which will be generally recognized and accepted in this country, or whether we are willing to leave the solution of these important problems to others. There would appear to be a well-defined tendency on the part of many to look upon psychiatry as the great popular playground of modern medical science. It seems to have a fatal fascination for the uninitiated, appealing to medical as well as to lay amateurs.'

"Every student of the times knows how true these words are. Not only the magazines but also the newspapers of today carry a constant stream of articles dealing with psychoanalysis, 'therapeutic psychology,' and other such modes of mental treatment. As often as not, these texts are written by men of no great depth of training either in medicine or in the operations of that extremely subtle and variable instrument, the human mind. Again, the advertising columns of various journals print the solicitations of many an 'expert psychologist,' the only test of whose expertness has been made by his own self-esteem. Men have even been known to appear in court as expert witnesses on the mental condition of defendants or other litigants, whose special competence to give such testimony is wide open to doubt. Inevitably the public becomes confused by all this, and tends to conceive the whole field as

a playground, even including spiritualism and psychic research."

A similar method of certification has been adopted by the internists and by the surgeons of the country. Why is it not a progressive step to apply the same arrangement to the psychiatrists—men who are responsible for the confinement of thousands of criminally insane and feeble-minded persons annually, as well as for the mental health of even greater numbers of private patients?

Again I quote from another editorial, evidencing the opinion of at least one paper as to our qualifications:

"No branch of medicine, it may be supposed, is so cluttered with inadequately trained men as that of psychiatry. Few medical schools offer any but rudimentary courses in this subject and interneships in hospitals for the insane are rare. All over the country therefore the greater number of our court alienists and privately practising psychiatrists are men with only a meager background in mental disorders and mental deficiency. The public, seeking psychiatric help, is just as likely to consult a charlatan as an expert.

"It is gratifying to learn that the American Psychiatric Association has come to realize this difficulty and is now proposing to do something to separate the qualified from the rest. As a beginning, the association will itself issue certificates to men it finds qualified, but its officers express the hope that leading medical schools will in the course of time institute special degrees in this important subject, as is already done in certain other specialties. It may be hoped that both these things will eventually be done and that the state of Wisconsin, along with other states, will then make the possession of such a certificate or such a degree a prerequisite to the practice of psychiatry within its borders and more especially before its courts. It should go without saying that physicians who treat mental disease should be even more closely supervised by the state than those who treat physical ills, for the mental patient is even less qualified to pass on the merits of his practitioner than other laymen."

It is unfortunate that we as a profession have not cleaned house before we are prodded from the outside and had our faults aired by the press.

The final quotation emphasizes what we have frequently called to the attention of the profession—a closer study of the individual as a mental entity in order better to understand and more successfully treat both functional and organic diseases:

"The importance of an understanding by the general practitioner of the basic elements of psychiatry and psychology is also evident when it is realized that neuroses, if not psychoses, frequently complicate the treatment of actual physical diseases and that undoubted physical symptoms sometimes have only a mental cause. In a civilization as complex as ours, absolute mental normalcy is rare indeed. Our physical condition is nearly always colored by our mental condition and successful treatment depends in no small measure on a proper understanding of the mental factors involved."

We are grateful for this helpful newspaper criticism and we feel that both the public and the profession will be the gainers from the decision voted by the psychiatrists at their Boston convention. A. W. R.

"Why Should They Go on Dying?"

IN A RECENT issue of a popular magazine, Paul de Kruif presents an article on collapse therapy in pulmonary tuberculosis.

The medical profession owes de Kruif much. In his "Microbe Hunters" and other books he has given to the public a picture of medical ideals and devotion to duty which, while taken for granted by the members of the medical fraternity, is not sufficiently appreciated by the public at large. Would that a bit more glory were given to that group of true scientists who spend most of their time and efforts in the research laboratory, and who at times sacrifice all that the lives of others may be saved!

In the article under discussion de Kruif again presents some very interesting and worth while stories of the pioneers of collapse therapy. We appreciate his efforts in this direction. Unfortunately, however, in this paper he has apparently rushed into

print poorly prepared and with statements that are not warranted even by the most enthusiastic phthisiologists.

According to "Why Should They go on Dying?" all that a patient with pulmonary tuberculosis—incipient or advanced—needs today is to have some doctor put a little air into the patient's chest, or perhaps cut a little nerve in the neck, or if necessary have a "deribbing operation" and then call it a day! Not a word about the large number of cases in which collapse cannot be used: not a word about the dangers to life that in spite of the utmost care and best technic still exist: not a word about the complications that still show up even in the hands of experienced men; and not a hint that a patient receiving artificial pneumothorax must have refills every week or two for a period of two, three and possibly four years!

Yes, the use of collapse therapy in pulmonary tuberculosis is undoubtedly one of the greatest advances in modern medicine, but it is by no means the panacea that de Kruif would lead his readers to believe.

Those of us who are having daily experience with these methods of treatment fully appreciate that collapse therapy has added a very definite ray of sunshine to those afflicted with pulmonary tuberculosis, but it is not all sunshine—there are also plenty of clouds.

Also let us bear in mind that collapse treatment is not a substitute for the well tried and well proven rest cure. The patient must appreciate that surgical collapse is but another means to increase rest of the sick lung.

De Kruif also takes the medical profession to task for being so slow in adopting this "little used cure" and bemoans the fact (?) that patients desiring this method of treatment must travel afar, because there are but a few places where such services are available. It is interesting to note that artificial pneumothorax was used in the Wisconsin State Sanatorium as long ago as 1914 and that today every sanatorium in the state—and there are at least twenty—uses the various methods of collapse when, as and if indicated. In some of our institutions forty to fifty per cent of the patients are receiving some form of collapse therapy in combination with the rest cure.

We appreciate that authors are permitted a certain amount of "poetic license", but why not have our facts reasonably straight? O. L.

Raising False Hopes

MUCH publicity has recently been given to the research work of Dr. Stephen J. Maher, chairman of the Connecticut State Tuberculosis Commission. These experiments, according to newspaper accounts, held out the possible hope of a specific cure for tuberculosis.

In the laboratory the fact that tubercle bacilli seem to spontaneously degenerate at times and give rise to involution forms resembling cocci and diplococci has been known for many years. These bodies are frequently found in old cultures of tubercle bacilli but their origin is not yet fully understood. Some investigators are of the opinion that these small bodies are a phase of the developmental cycle of the tubercle bacillus, while others seem to favor the idea of air contamination. According to reports, Dr. Maher has been able to artificially produce these changes—from tubercle bacilli to coccoid bodies—by adding sterile litmus milk to the glycerine broth on which the tubercle bacilli are grown.

Whether Dr. Maher's work reveals some new thought which may ultimately lead to a specific cure is of little consequence at the moment. We believe he did the right thing by imparting the results of his work to other interested physicians.

But, for the newspapers to misconstrue and garble a scientific report into screaming headlines promising a cure for tuberculosis and to falsely raise the hopes of thousands of patients simply to sell papers is quite the wrong thing.—O. L.

. . . . THE PRESIDENT'S PAGE . . . .

The University Medical School and Hospital

EVERY physician should read carefully Dr. Frank's presentation of the purposes and policies of the State University Hospital to be found in this issue of the Journal. The material here presented is the substance of a resolution adopted at a recent meeting of the Regents of the University, and forms the basis for the revised regulations for the conduct of the University Hospital.

The State of Wisconsin General Hospital was authorized in the special session of the Legislature of 1920, and was opened in 1924. It was established as a teaching hospital, and to provide treatment for patients in need of its services. Provision for payment of fees for certain services was made in the original statute.

This project involved the complicated problems of medical education, research and medical service. It was to be expected, because of its far reaching social implications, that adjustments would be necessary from time to time in order that the University might fulfill the objectives which determined the foundation of the Hospital. It has been the purpose of organized medicine to co-operate fully with the University in its effort to create facilities for medical education and to carry out its function as a part of the medical service of the state. Medical education must be looked upon as a continuous process which extends from the time of the medical student's matriculation to the time of the physician's retirement from practice. With changing facilities for practice, and with changing numbers of physicians, and with changing population, it may be advisable to shift the emphasis at times from undergraduate to graduate teaching. The time may come when the state, for the welfare of its people and as part of a program of medical education, may make it possible for every practicing physician to attend post-graduate courses at the University. With the changing facilities for the care of the various classes of patients in different sections of the state, adjustments in the relationship between the various counties and the State Hospital may prove desirable. During periods when the necessity for changes becomes apparent the obvious imperfections in existing regulations may be the occasion for irritation and controversy. These occasions have been in the past, and should be in the future, viewed in their proper perspective. We must not lose sight of the ultimate objective of both the organized profession and the University, which is a medical service for the people of the state—at once adequate and progressive.

The status of the private patient at the University Hospital has been a source of misunderstanding and controversy. It will be recognized that the regulations represent an attempt to meet the difficulties which have arisen in the past. The University, through its Board of Regents, has stated clearly that the reason for the admission of private patients to the Hospital is primarily one of securing the proper variety of teaching material. If the rules are administered in the proper spirit and if it is clearly understood by everyone concerned—by the public, by the patient, by the University authorities, and by the profession that private patients are admitted to the Hospital on this basis there should result from this service no interference with the efficiency of the University as a teaching center. It seems hardly necessary to point out that the admission of private patients to the Hospital on this basis is entirely different in principle from their admission on the theory that the general care of private patients is a proper function of the state. The problem of the private patient under the present statement of policy of the University is purely academic. It is one of medical pedagogy and not of serious social-medical import.

I believe that Dr. Frank is to be commended for his statesmanlike approach to these difficult problems. I wish to point out that the formulation of the regulations imposes an obligation on our profession to co-operate wholeheartedly in an effort to make the University's program a success.

Society Proceedings

BROWN–KEWAUNEE–DOOR

The January meeting of the Brown–Kewaunee–Door County Medical Society was held at the Beaumont Hotel at six-thirty p. m., on January 18th. The program was as follows:

"Pilonidal Cysts" by Dr. Arthur McCarey of Green Bay.

"Nose and Throat Conditions Often Overlooked by General Practitioner" by Dr. James Robb, Green Bay.

"Gas Bacillus Infection with Slides" by Dr. Eugene S. Knox, Green Bay.

CLARK

A meeting of the Clark County Medical Society was held at Owen the latter part of December. Following dinner at the Woodland Hotel, the members discussed the medical care of the indigent.

DANE

Dr. A. W. Adson of the Mayo Clinic, Rochester, spoke on "The Surgical Consideration of Brain Tumors" at the January meeting of the Dane County Medical Society on January 9th.

Dr. Mabel G. Masten of Madison discussed "Spontaneous Subarachnoid Hemorrhage" at this meeting.

FOND DU LAC

Members of the Fond du Lac County Medical Society met at the Hotel Retlaw, Fond du Lac, on January 10th.

Dr. Francis D. Murphy of Milwaukee gave an address on "Coronary Thrombosis and Its Complications." J. C. D.

Through an error in reporting the elections in the December issue, it was stated that Dr. H. C. Werner of Fond du Lac was named Censor. The censor elected at this meeting was Dr. C. F. Werner of St. Cloud, Wisconsin. J. C. D.

MILWAUKEE

The January meeting of the Medical Society of Milwaukee County was held at the Milwaukee County Hospital, Wauwatosa, on Friday, January 12th, at eight o'clock in the evening. Speakers at this meeting were:

Dr. W. F. Wegge, who spoke on "The Effects of Barbiturates"; Dr. L. D. Smith talked on "Spiking Operations for Fractured Hips Under Roentgenographic Control" and Dr. A. H. Lahmann and Dr. George S. Kilkenny gave a joint paper on "Recheck of 4,000 Obstetrical Cases at the Milwaukee County Hospital."

The social hour followed and luncheon was served.

POLK

Officers recently elected for the year for the Polk County Medical Society are: President, Dr. Lorne A. Campbell, Clear Lake; Secretary, Mr. George B. Larson, Frederic; Delegate, Dr. R. G. Arveson, Frederic; Alternate, Dr. J. D. Nicholson, Milltown; Vice-President, Dr. J. A. Diamond, Frederic.

PORTAGE

At a meeting held at St. Michael's Hospital, Stevens Point, on December 27th, the following were elected officers of the Portage County Medical Society:

President, Dr. H. M. Coon, Stevens Point; Vice-President, Dr. G. W. Reis, Junction City; Secretary-Treasurer, Dr. E. E. Kidder of Stevens Point; Censor, Dr. W. W. Gregory, Stevens Point; Delegate, Dr. H. P. Benn, Stevens Point and Alternate, Dr. E. E. Kidder.

RACINE

The annual meeting of the Racine County Medical Society was held on December 21st at eight o'clock at the Racine Elks Club.

A most interesting and instructive talk was given by Dr. M. Fernan–Nunez of Milwaukee on the subject of "Amebiasis."

"Medical Economics" was the subject of an address by Dr. John Docter of Racine.

Dr. W. A. Fulton of Burlington was elected an honorary member of the Racine County Medical Society; Dr. Gordon J. Schulz Union Grove, was elected a member of the Society by transfer from the Medical Society of Milwaukee County; Drs. Beatrice O. Jones and George W. Walter of Racine were elected members of the society.

Officers for the year 1934 were then elected:

President, Dr. J. F. Henken, Racine; President-Elect, Dr. R. D. Jamieson, Racine; Vice-President, Dr. F. B. Marek, Racine; Secretary and Treasurer, Dr. Susan Jones; Censor Dr. E. J. Schneller, Racine; Delegate to State Society, Dr. H. B. Keland, Racine, and Alternate, Dr. T. C. Hemmingsen, Racine.

The January meeting of the Racine County Medical Society was held on Thursday, the 18th, at Georley's Restaurant, 517 Main Street, at 6:30 p. m.

Dr. Fremont A. Chandler of Chicago gave a fine address on "The Diseases of the Lumbar and Sacroiliac Regions from an Orthopedic Standpoint." His talk was illustrated with slides and specimens.

Dr. W. C. Roth, past president, presented the gavel to Dr. J. F. Henken, the incoming president, with appropriate remarks.

Applications of Drs. David Wigod, Waterford,

Wisconsin, and Leif H. Lokvam of Burlington, Wisconsin, were presented to the Society and same referred to Board of Censors.

A social hour followed the meeting, and the attendance was good. S. J.

RICHLAND

The following officers were elected for 1934 of the Richland County Medical Society: President, Dr. George Parke of Viola; Vice-President, Dr. L. C. Davis; Secretary-Treasurer, Dr. Gideon Benson, Richland Center; Delegate, Dr. B. I. Pippin, Richland Center; Alternate Dr. Gideon Benson.

ROCK

At the regular meeting of the Rock County Medical Society held at Hotel Hilton, Beloit, on January 2nd, the following officers were elected:

President, Dr. F. E. Sutherland, Janesville; Vice-President, Dr. H. E. Kasten, Beloit; Secretary-Treasurer, Dr. C. F. N. Schram of Beloit. F. E. S.

SHEBOYGAN

The annual meeting of the Sheboygan County Medical Society was held at the Memorial Hospital in Sheboygan on December 28th.

Dr. Francis D. Murphy of Milwaukee talked on "The Diagnosis and Treatment of Cardiovascular Renal Diseases."

The following officers were elected: President, Dr. J. P. Zohlen, Sheboygan; Vice-President, Dr. Arthur Knauf, Sheboygan; Secretary, Dr. A. C. Radloff, Plymouth; Censor, Dr. H. F. Deicher, Plymouth; Delegate Dr. A. C. Radloff, Plymouth, and Alternate, Dr. Arthur Knauf. A. C. R.

WASHINGTON–OZAUKEE

Election of officers took place at a meeting of the Washington–Ozaukee County Medical Society: President, Dr. H. M. Lynch of West Bend; Vice-President, Dr. Arnold Barr, Port Washington; Secretary-Treasurer, Dr. R. S. Fisher of Allenton; Delegate, Dr. Lynch; Alternate, Dr. F. W. Lehmann, Hartford; Censors, Dr. N. E. Hausmann, Kewaskum; Dr. W. J. Wehle, West Bend; Dr. C. A. Balkwill, Grafton.

Committees to work with County Health Committee: Washington County—Dr. A. H. Heidner, West Bend; Dr. J. G. Hoffmann, Hartford; Dr. N. E. Hausmann; Dr. H. E. Froede, Jackson; Dr. R. S. Fisher.

Ozaukee County—Dr. O. J. Hurth, Cedarburg; Dr. C. A. Balkwill; Dr. W. H. Drissen, Port Washington; Dr. H. F. Scholz; Dr. Arnold Barr.

Cancer Committee Members: Dr. A. H. Heidner of West Bend; Dr. F. W. Sachse, Hartford; Dr. G. J. Warnshuis, Cedarburg.

WAUKESHA

Election of officers was held at the December 6th meeting of the Waukesha County Medical Society. They are: President, Dr. T. H. Nammacher, Oconomowoc; Vice-President, Dr. M. J. Werra, Waukesha; Secretary-Treasurer, Dr. J. F. Wilkinson, Oconomowoc; Delegate, Dr. H. A. Peters, Oconomowoc; Alternate, Dr. H. T. Barnes, Delafield. J. F. W.

NINTH COUNCILOR DISTRICT

The winter meeting of the Ninth Councilor District Medical Society was held at Wisconsin Rapids on Thursday evening, January 11th, at the Hotel Witter at six-thirty o'clock. After the dinner, the following program was given:

"The Work of the State Medical Society Cancer Committee" by Dr. Paul F. Doege, Marshfield.

"Perinephritic Abscess" by Dr. L. C. Pomainville, Wisconsin Rapids.

"Silicosis" (with x-ray plates) by Dr. William S. Middleton, Madison.

MILWAUKEE ACADEMY OF MEDICINE

New officers of the Milwaukee Academy of Medicine, elected at the annual meeting following a banquet at the University Club on January 16th, are:

President, Dr. W. E. Miller; President-elect for 1935, Dr. Ralph P. Sproule; Secretary Dr. T. L. Squier, re-elected; Vice-President, Dr. Eben J. Carey; Treasurer, Dr. J. J. Pink; Librarian, Dr. W. P. Blount; Chairman of Membership Committee, Dr. F. A. Stratton.

Council members named are: Dr. John O. Dieterle, re-elected; Dr. J. L. Garvey, Dr. T. J. Howard, Dr. W. M. Jermain, Dr. F. W. Mackoy and Dr. D. E. W. Wenstrand.

MILWAUKEE NEURO–PSYCHIATRIC

The January meeting of the Milwaukee Neuro–Psychiatric Society was held on Thursday, January 25th, at the University Club at eight o'clock.

Following the dinner at six-thirty o'clock, the following papers were presented:

"Bromism" by Dr. A. C. Washburne, Milwaukee.

"Complicated Behaviour in an Epileptic" by Dr. F. Storchheim, Milwaukee.

MILWAUKEE OTO-OPHTHALMIC

The annual meeting of the Milwaukee Oto-Ophthalmic Society was held at the University Club on January 23rd. Dr. Sanford R. Gifford of Chicago spoke on "A Few Practical Phases of Ocular Therapeutics."

Officers elected are: Dr. O. P. Schoofs, President; Dr. E. C. Bach, Vice-President; Dr. H. G. Schmidt, Secretary and Treasurer.

MILWAUKEE ROENTGEN-RAY

A meeting of the Milwaukee Roentgen-Ray Society was held January 4th at the University Club, Milwaukee, at which Dr. Robert Arens, director of the x-ray department at Michael Reese Hospital, Chicago, spoke on "Modern Trends in Radiation Therapy."

THE WOMAN'S AUXILIARY

MRS. EBEN J. CAREY, Milwaukee, *President*
MRS. ROCK SLEYSTER, Wauwatosa, *President-elect*
MRS. GEORGE H. EWELL, Madison, *Secretary*
MRS. R. G. ARVESON, Frederic, *Treasurer*
MRS. WALTER A. FORD, Sheboygan, *Press and Publicity Chairman*
MRS. JAMES BLAKE, Hopkins, Minn., *National President*

THE PROGRAM FOR 1934

1. Appoint a member to give a three minute resume at each meeting on the Auxiliary page of the Wisconsin Medical Journal.
2. Appoint a member to give a three minute resume at each meeting on the interesting article in Hygeia.
3. Appoint a member to give a three minute resume at each meeting on the editorials in the American Medical Journal and also articles that may be of interest written by the Bureau of Investigation in the A. M. A.
4. The following subjects are suggested to be given in the form of book reviews by the members or by a physician of your county society.
   - A. Discuss the worlds greatest plagues and epidemics and state where and when they occurred, with chief difficulties encountered in their control.
   - B. Enumerate the values of, and the results obtained by vivisection. Who is sponsoring Anti-Vivisection in this country and what do they hope to accomplish.
   - C. The method of control of infectious diseases in the state of Wisconsin.
   - D. Highlights of the history of Anaesthesia.
   - E. Highlights of the history of Medicine.
   - F. Vitamins as they concern our modern diet.
   - G. Safe and sane methods in the control of obesity, with particular stress placed on the harm of the drugs and preparations now sold for this purpose.
   - H. Public Health Activities as now conducted in the county.
   - I. Mental Hygiene — Some of its newest problems.

MRS. OSCAR W. FRISKE,
Program Chairman.

A Message from the State Hygeia Chairman

Dear Auxiliary Member:

A writer as far back as the middle of the nineteenth century complains "The external appearance of the human body is necessarily familiar to all. Its internal structure, however, and the manner in which its different functions are performed, are not understood as they ought to be by the generality of people."

Realizing the need for conveying authentic medical knowledge to the layman, in a colorful and interesting way, members of the A. M. A. decided to sponsor a health magazine, Hygeia, which deals every month with health problems faced by people of every age and in every walk of life. At its January meeting, the Council of our State Medical Society adopted a special resolution which will be found on page 153 of this issue of the Journal.

At the Detroit meeting in 1930 the A. M. A. passed the following resolution: "Resolved, That the House of Delegates urge the Woman's Auxiliary to the American Medical Association, including the county, state and national organizations to recognize as one of its chief activities the promotion of the distribution of this publication 'Hygeia' through parent-teacher associations, boards of education and similar bodies interested in education."

Our national president, Mrs. James Blake, has adopted as the Hygeia objective "To see that each school in every state is covered with a subscription." Our state president, Mrs. Eben J. Carey, urges us to become Hygeia conscious, to tell our friends about the splendid articles in the magazine and make this one of our main projects this year.

Realizing then as a doctor's wife the importance of assisting your husband in his program of health education, and realizing also that this is something your husband actually wants you to do, we believe each and every one of you will be anxious and interested to help meet the state auxiliary quota this year, which is 250 subscriptions,—120 more than we had last year.

Won't you help the Hygeia chairman in your county in living up to our State Medical Society's request, as well as Mrs. Carey's policy of giving all we can to the promotion of Hygeia this year.

Sincerely,

(Mrs. Fred) META NAUSE.

To The Press and Publicity Chairmen

So many of you have written asking me what sort of news I want most that I am taking the liberty to answer you through this column.

There had better be too much material than not enough! We can always cut if space is not available, but we cannot build up a bare outline.

A resume of your program, emphasizing the names of speakers, type of meeting, place held, etc., is of interest. Perhaps just a word about some outstanding report or a project that has begun to thrill you with results. Possibly some of you have augmented your treasury in some clever way. Tell us how you are growing both as an organization and as a community influence. Membership and attendance at meetings tell their own stories. In short tell the rest of us about the things that are making your Auxiliary a successful enterprise for you.

From your reports must come the news that is sent on to National and we want National to know that Wisconsin is taking her responsibilities sincerely and successfully. May I commend to you the reading of your National News Letter. It is full of inspiration and a great credit to the National chairman, who is Mrs. Robert Fitzgerald of Milwaukee.

Cordially,
(Mrs. W. A.) Marietta Ford.

BROWN–KEWAUNEE–DOOR

The first business-social meeting of the newly organized auxiliary to the Brown–Kewaunee–Door County Medical Society was held on January 11th at the home of Mrs. A. O. Olmsted, Green Bay, with about forty members present. Following a pleasant program of vocal music, tea was served. A paper explaining the scope of work of an auxiliary was read by Mrs. Donne F. Gosin, president. The February meeting will be held at one of the several homes offered for this purpose.

DANE

Dr. Arthur J. Camp, director of the Bureau of Investigation of the A. M. A., gave an illustrated talk on cosmetics entitled "Mrs. Gullible's Travels in Cosmetic Land" at the luncheon meeting of the Dane County Auxiliary on Wednesday afternoon, January 17th, at the College Club, Madison. All doctors' wives were invited to bring their friends. The program was most interesting.

DOUGLAS

Dr. M. H. Wall, Superior, president of the Douglas County Medical Society, addressed the first meeting of the Woman's Auxiliary which was held the evening of January 10th at the home of the president, Mrs. Victor E. Ekblad, Superior. Dr. Wall presented several helpful suggestions to the Auxiliary.

The second meeting of the Auxiliary was held February 7th at Hotel Androy. Subsequent monthly meetings of the auxiliary will be held regularly.

GREEN LAKE–WAUSHARA–ADAMS

Mrs. Arthur J. Wiesender of Berlin was elected president of the Auxiliary to the Green Lake–Waushara–Adams Medical Society at their annual meeting on December 8th. The members met with the doctors for a six-thirty dinner at the Hotel Whiting. Later they were entertained at the home of Dr. and Mrs. Burt Scott of Berlin.

KENOSHA

Mrs. Eben J. Carey, Milwaukee, state president of the Auxiliary, spoke on the history and aims of the auxiliary at a meeting of the Kenosha County Auxiliary held on January 8th at the Woman's Club. Mrs. Robert Fitzgerald, Milwaukee, publicity chairman of the national auxiliary, was also a speaker. Dr. W. C. Stewart, president of the Kenosha County Medical Society, gave a talk in which he offered suggestions as to ways in which the auxiliary could give helpful service.

MILWAUKEE

The Woman's Auxiliary to the Medical Society of Milwaukee County held its first meeting of the fiscal year on Friday, January 12, 1934, at the Y. W. C. A. Instead of the usual luncheon the meeting was announced as a "Musical Tea" arranged for the purpose of affording to all members an opportunity to meet the new officers and to become better acquainted among themselves. A most enjoyable program was given by members of the Auxiliary. Mrs. Ben Lieberman, concert violinist, who has studied abroad gave a group of violin solos; Mrs. Louis Warfield who has studied in Vienna and has sung in opera, sang a group of songs; and Mrs. M. E. Gabor, pianist, who studied in Budapest, played several piano solos. The accompanist was Winogene Hewitt Kirchner whose contribution was especially appreciated as she is not a member of the Auxiliary.

The new president, Mrs. Gurney Taylor, presided and during the course of the business meeting read the committee appointments for the year. Three new committees have been formed: a Budget committee and a Flower and Courtesy committee, whose names indicate their purposes, and an Educational committee which at each meeting will summarize the work of the Bureau of Investigation of the A. M. A. for the previous month as reported in the Journal of the A. M. A. It will also bring to the attention of the Auxiliary reports by various doctors as to their views on bills concerning the profession which are before the legislature at the present time.

As each member paid her dues she was presented with a copy of the Constitution and By-Laws which were given to the Auxiliary by their County Medical Society.

The speaker for the February meeting is Dr. H. Douglas Singer, Professor of Neuro-psychiatry at the University of Illinois.

ROCK

The January meeting of the Woman's Auxiliary to the Rock County Medical Society was held on the evening of the 23rd at the Woman's Club, Janesville. The members paid tribute to the late Mrs. C. F. N. Schram, Beloit, who was a charter member of the organization. Plans for the year were outlined at the meeting.

SHEBOYGAN

The Woman's Auxiliary to the Sheboygan County Medical Society held its January luncheon meeting at Pfeiler's restaurant. The tables were decorated in honor of the new officers. Business and programs for the year were discussed at the meeting.

WAUKESHA

Dr. A. W. Rogers, Oconomowoc, Chairman of the Council of the State Medical Society, addressed the Woman's Auxiliary to the Waukesha County Medical Society at its January meeting at the Majestic Hotel, Oconomowoc. Dr. Rogers is a member of the Advisory Council of the State Auxiliary.

WINNEBAGO

The Auxiliary to the Winnebago County Medical Society held its January meeting at the Sign of the Fox at Neenah. Mrs. Samuel Greenwood, Neenah, read "The Doctor's Wife"—a talk which was given in 1899 before a group of Chicago physicians. The next meeting will be at Steins Tea Room at Oshkosh the third Monday in February.

News Items and Personals

The Southeastern Surgical Congress will hold its fifth annual assembly in Nashville, Tennessee, March 5, 6 and 7. The Andrew Jackson Hotel will be hotel headquarters and the lectures and exhibits will be in the War Memorial Building. For information write Dr. B. T. Beasley, 1019 Doctors Building, Atlanta, Ga.

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The Women's Free Evening Clinic of Milwaukee at 934 North 12th Street which is staffed by women physicians and directed by Dr. Eleanore Cushing-Lippitt, is open every Monday evening during the year except during July and August. Its service is for ambulatory women patients who are employed at small wages through the day and cannot attend the day clinics and no one is accepted who is able to pay a physician. It offers services in internal medicine, minor surgery, gynecology, prenatal and post-natal care, and disorders of nutrition with a consulting service in diseases of the chest, mental and nervous disorders, and eye, ear, nose and throat diseases.

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Dr. H. C. Koch of Whitehall returned to his practice on January first after having spent three months in postgraduate work in Europe.

—△—

Mrs. C. F. N. Schram, wife of Dr. C. F. N. Schram of Beloit, died on January 15th at her home in Beloit. She had been in ill health for the past two years but up to several months ago had continued her activities in community affairs. Mrs. Schram was an active member of the Woman's Auxiliary of Rock County Medical Society, the Beloit Community Welfare Association and served as president of the Beloit Y. W. C. A. She is survived by her husband, two daughters, Jean, a student at Lawrence College, and Ruth, and one son, Hobart a student at Beloit College.

Announcement is made of the marriage of Edward William Forkin, son of Dr. and Mrs. G. E. Forkin of Menasha to Miss Margaret Tayloe of Memphis, Tenn., which took place at Memphis in January.

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Dr. and Mrs. Paul Hankwitz, Milwaukee, announce the marriage of their daughter, Dorothy Helen, to Mr. Spas Ivanoff of Madison.

—△—

On December 26th Miss Ingeborg Marie Midelfart, daughter of Dr. and Mrs. H. C. U. Midelfart of Eau Claire was united in marriage to Mr. Walter Herman Bauer of Madison.

BIRTHS

A son to Dr. and Mrs. R. E. McDonald, Milwaukee, on December 23rd, 1933.

A daughter to Dr. and Mrs. J. C. Docter of Racine on December 3, 1933.

A son to Dr. and Mrs. A. W. Bryan, Madison, on January 22nd.

ENGAGEMENTS

Announcement has been made of the engagement of Dr. Sylvester J. Darling, son of Dr. and Mrs. F. E. Darling of Milwaukee to Miss Helen Louise Barnes, also of Milwaukee. The wedding is planned for the summer.

MARRIAGES

Dr. M. J. Robertson of Bayfield to Miss Mary Jane Mertens, daughter of Mrs. H. G. Mertens, also of Bayfield, at Minneapolis on January 3rd.

Dr. G. M. Hoffman, Manitowoc to Miss Ruth Behnke also of Manitowoc on January 3rd at Manitowoc.

Dr. G. G. Shields of Abbotsford to Miss Blanche Knutson of Viroqua on December 28th at Milwaukee.

Dr. A. A. Cantwell of Shawano to Miss Alice Davis of Chicago on December 23rd at Wilmette, Illinois, at the home of the bride's uncle, Dr. D. J. Davis, Dean of the University of Illinois Medical School.

Dr. Anthony C. Hahn, Watertown, to Miss Harriet A. Nowack on January 23rd at Watertown. Dr. Hahn is associated with the bride's father, Dr. L. H. Nowack of Watertown.

DEATHS

Dr. John T. Scollard, Milwaukee, died on January 8th at Columbia Hospital, Milwaukee.

Dr. Scollard was born in Alberly, Wisconsin, in 1856. Following graduation from Oshkosh State Teachers' College, he served as high school principal at Stockbridge and Kewaunee. Later he entered Rush Medical College, graduating in 1887, and then moved to Milwaukee. He was a member of the faculty of the Wisconsin Physicians and surgeons College for nine years. He also taught at the old Milwaukee Medical School.

He was a member of the Medical Society of Milwaukee County, the State Medical Society, and the American Medical Association.

He is survived by his daughter, Mrs. Verna S. Gleason of Milwaukee.

Dr. Edwin F. Bickel, Oshkosh, died on January 10th at Mercy Hospital where he had been a patient since January 3rd.

Dr. Bickel was born February 8, 1878, near Mercersburg, Pa., and was a graduate of the Medico–Chirurgical College of Philadelphia in 1903. He began the practice of medicine at Shamokin, Pa., where he remained until 1914 when he came to Oshkosh. During the World War, Dr. Bickel served as a captain in the medical corps being stationed at Fort Riley, Kansas, and Camp Pike, Arkansas.

Dr. Bickel was actively identified with the local hospitals, serving as chairman of the Board of Mercy School of Nursing and as chief of internes for Mercy Hospital. He was a preceptor for the University of Wisconsin Medical School.

He was a member of the Winnebago County Medical Society, the State Medical Society, and of the American Medical Association.

Survivors are three children, Ralph F. of Philadelphia; William, a student at Northwestern University Medical School, and Miss Laura who is attending the University of Wisconsin.

Dr. F. C. Suiter, La Crosse, died in New Orleans on Sunday, January 14th, of a heart attack. Dr. and Mrs. Suiter had left La Crosse two weeks previously for an extended trip in the south.

Dr. Suiter was born in Illinois on January 10, 1858, the son of Dr. Walter F. Suiter who was a surgeon in the Civil War. Upon graduating from the State University of Iowa Medical College in 1884, Dr. Suiter became associated with his father in La Crosse with whom he remained until 1890, when the elder Dr. Suiter moved to California.

He was a member of the La Crosse County Medical Society, the State Medical Society, and the American Medical Association. Members of the La Crosse County Medical Society served as honorary pallbearers.

He is survived by his widow.

Dr. Fred C. Dana, Fond du Lac, died suddenly on January 17th of heart disease.

Dr. Dana was born November 24, 1888, in Fond du Lac. He was a graduate of the Chicago College of Medicine and Surgery, Chicago, in 1915. He practiced for a short time in Chicago and then came to Fond du Lac.

He is survived by two sisters.

Richard Dewey, (the originator of the "Cottage" plan for the care of mental patients) died August 4, 1933, at his home which he appropriately called Journey's End at La Canada, California; after more than fifty years of leadership in psychiatry and the allied branches of medicine.

He was a native of Forestville, (Chautauqua County) New York. His grandfather Elijah Dewey was a revolutionary soldier, and his mother's father (Richard Smith) was a member of the New York State Legislature in 1816.

His early education was received at the district school of Forestville. At the age of twelve he attended Dwight's rural high school at Clinton, New York. In 1864 he entered the University of Michigan from which he also obtained his M. D. degree in 1869.

The following year he served as resident physician at the Brooklyn, New York, City Hospital. Shortly afterward at the outbreak of the Franco–Prussian war he became a volunteer assistant Surgeon in the German Army, serving at L'Hospital de la Seminaire, Pont-a-Mousson, and also in the reserve hospital at Hessen Cassel until his discharge in 1871 (at which time he was granted a medal for Pflichttreue im Kriege).

He then spent a number of months studying microscopy and pathology under Virchow.

Early in life he became interested in the study of music, loved to sing, and later wrote many songs, also music for same, for college glee clubs and the like.

During his University career he wrote much for student publications. One of his contributions (a play) was entitled "Mary the Male-Clad Medical Student" whose prologue was

> "How long must injured women wait
> In sackcloth before science's gate?"

This was written as may be surmised at the time women were first seeking admission to medical colleges.

For many years he maintained membership in

musical societies and devoted a great deal of study to musical composition in 1913 writing the words and music of "Thou Mighty Nation" dedicated to and sung by the Mendelssohn Club.

In 1917 (at the time his son Donald entered the service) he wrote the words and music of another patriotic song entitled "Starry Flag, Now Bravely Borne".

His interest in psychiatry was manifested soon after his return from Europe when he began his service as assistant physician at the new hospital for the insane at Elgin, Illinois.

In August 1879 he became superintendent of the Hospital for The Insane at Kankakee, where the system of having separate buildings for various groups and varieties of patients was instigated. The successful operation and elaboration of this plant was due entirely to his efficiency as an organizer and administrator.

His first paper before the Association of Medical Superintendents of American Institutions for the Insane was read in June 1882 and published in the Ames Journal of Insanity the following year.

In 1883 he read a paper entitled "Congregate and Segregate Buildings for the Insane" characterized by Tuke (well known English alienist) as "clearly and temperately written" and commended by him to any interested in this system of caring for the insane.

In April, 1893, he resigned—(shortly after the inauguration of John P. Altgeld, the first democratic governor of Illinois after the Civil War) and opened an office in Chicago for the private practice of psychiatry.

In 1895 he became the medical director of the Milwaukee Sanitarium at Wauwatosa. Among the men interested in this Institution at the time were Drs. Frank Billings and Archibald Church. For 25 years he directed the medical care and exercised supervision over the sanitarium, and shortly thereafter moved to California.

During a considerable portion of this time (at the Sanitarium) he maintained an office in Chicago and served for a number of years as the first editor of the American Journal of Insanity.

He served as President of the American Medico-Psychological Association in 1895. This was the outgrowth of The Association of Medical Superintendents of American Institutions for the Insane which he had become a member of in 1881.

For fully ten years or more after his retirement to California he continued to manifest his keen interest in medicine,—attended meetings of the American Psychiatric Association, and contributed a number of excellent papers to the American Journal of Psychiatry. As recently as May 1930 he was in attendance at the meeting of the American Psychiatric Association, in connection with the First International Congress for Mental Hygiene at Washington.

He wrote in all over forty papers on mental disorders. A portion of his time in later years was given to the writing a resume of his own career in the service of his fellow man which is in three sections dealing respectively with his childhood, home life, education up through his hospital internship—the second section covering the period of his service in the Franco–Prussian War—and finally, his work as a psychiatrist,—in all a most interesting contribution and a very valuable addition to the history of progress and achievement in American psychiatry.

As Dr.Brush said of him in 1931 he seemed in his career to follow the injunction in the Meditations of Marcus Aurelius:

"Labor not unwillingly, nor without regard to the common interest, nor without due consideration, nor with distraction;—and be not a man of many words or busy about too many things.

"And further let the Deity which is in thee be the guardian of a living being, manly and of ripe age . . . who has taken his post like a man waiting for the signal which summons him from life, and ready to go".

Beloved, by his many friends who are scattered far and wide, his memory is perhaps cherished most jealously by those of us who were fortunate enough to know him during a considerable part of his many years of service in this community and our own Society.

A memorial presented before the Milwaukee Academy of Medicine by Herbert W. Powers, M. D., Chairman of the Academy.

SOCIETY RECORDS

New Members

C. H. Golden, Wonewoc.
L. W. Beebe, Superior.
R. L. Towne, Nekoosa.
George Thompson, Kenosha.
J. A. Fleischmann, 308 E. North Ave., Milwaukee.
N. D. Demeter, 1029 W. Wells St., Milwaukee.
R. A. Frisch, 606 W. Wisconsin Ave., Milwaukee.
S. J. Faber, Room 203, Hotel Racine, Racine.
Joseph C. Springberg, South Wayne.
Charles R. Brillman, Avoca.
George S. Kilkenny, 709 N. 11th St., Milwaukee.
Robert E. Schade, 2200 North 3rd St., Milwaukee.
Cornelius F. Dunn, 1204 W. Wisconsin Ave., Milwaukee.
William E. Kiley, 2020 E. North Ave., Milwaukee.
Edwin Wilde, 606 W. Wisconsin Ave., Milwaukee.
Joseph D. Warrick, Delavan.
V. S. Downs, Lake Geneva.
George O. Dunker, 536 W. Wisconsin Ave., Milwaukee.
Ely Epstein, 735 N. Water St., Milwaukee.

Changes in Address

J. H. Blekking, Sheboygan Falls to Oostburg, R. #1.
P. J. Dailey, Antigo to Elcho.

Correction of Records

Dr. Vernon James Hittner, Seymour, Wisconsin, dropped from roll for reason of faulty election.

The University Hospitals; Purpose and Policy*

By GLENN FRANK
President of the University of Wisconsin

THE hospitals operated by the University of Wisconsin, in conjunction with its Medical School, exist to further, directly and indirectly, three major purposes: (1) medical research, (2) medical education, and (3) medical service. These three purposes are so interdependent in objective and so interlocked in operation that it is impossible to tear them apart and determine policy in terms of any one of them alone.

These hospitals are manned, in the main, by the full-time members of the faculty of the Medical School. As licentiates in the State of Wisconsin, registrants in their community, and members of the State Medical Society, they retain the normal rights and privileges involved in such status, except for such limitations in practice as may be self-imposed or determined by University policy at the time of their appointment.

In determining the operating rules of its hospitals, the University seeks to establish the procedures that will best enable the members of its medical staff to discharge their triple responsibility: (1) to medical education as teachers in the Medical School, (2) to the public as physicians and surgeons in the University Hospitals, and (3) to the medical profession as colleagues. The rules and regulations respecting the selection, admission, and discharge of patients are dictated by what the State and the University consider essential to the maximum effective service of the University Hospitals in providing clinical facilities for medical education, in carrying out the State's policy of public medical service for the economically under-privileged, and in the furtherance of advancing standards of medical practice in the State.

In determining what is essential in these three fields, the University begins with certain assumptions, viz:

First, the University assumes that its hospitals cannot adequately serve the interests of medical education unless in them teachers and students are able to meet all the problems confronting the medical profession. The clinical base of an adequate medical education must include all kinds of patients and all kinds of diseases. If the hospitals serving as clinical laboratory to a medical school serve only a single class of patients or restrict themselves to a limited range of diseases, the teachers of the medical school cannot adequately present or the students become adequately conversant with the whole round of problems with which the graduates of the school will have to deal in practice.

In conformity to this assumption, the rules and regulations of the University Hospitals provide for all kinds of patients, from public to private, although all but a limited per cent are patients provided for at State and County expense.

Second, the University assumes that the State expects it to administer the services of the University Hospitals in strict conformity to the public purpose stated in the legislative mandates that created these hospitals, permitting neither an arbitrary extension nor an arbitrary limitation of this purpose.

In conformity to this assumption, the rules and regulations of the University Hospitals follow the specifications and spirit of the mandatory and permissive clauses of the various legislative enactments relating to these hospitals.

Third, the University assumes that it is obligated to administer the University Hospitals in a manner that will supplement and stimulate a progressively improved medical practice and contribute to the strength, efficiency, and stability of the medical profes-

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* Extract from December 13, 1933 meeting of the Board of Regents.

Upon motion of Regent Mead, seconded by Regent Gundersen, it was voted, That the Regents approve the statement of purpose and policy respecting the University Hospitals presented by the President and that the Administrative Committee of the Hospitals be directed to issue a revised edition of the rules and regulations in conformity with this statement.

(Copies of the rules and regulations have been mailed all members of the State Medical Society. Additional copies may be obtained from Dr. C. R. Bardeen, Dean of the Medical School, University of Wisconsin, Madison.)

sion throughout the State, believing that it can best discharge its duty to the public by thus strengthening the medical profession, since it is to the medical profession that the people must regularly look for medical counsel and care.

In conformity to this assumption, the University avoids any hospital policy that would create a competing service destructive of the strength and standards of the medical profession's service to the public. Such service as the University Hospitals render to other than State and County cases is rigidly limited in amount, is not permitted to infringe upon the needs of State and County cases for the facilities of the hospitals, and is rendered primarily in the interest of the maintenance of an able clinical staff and adequate clinical diversity in patients and diseases.

The three major purposes of the University Hospitals—medical research, medical education, and medical service—are furthered by the admission and treatment of three major types of patients: (1) the public patient, (2) the special rate patient, and (3) the private patient. The broad policy respecting each may be stated as follows:

Public Patients: One of the primary purposes of the University Hospitals is to provide medical service for the economically under-privileged whose hospital expenses, in whole or in part, are borne jointly by State and County. The regulations regarding the admission and discharge of these public patients are defined by statute. They are admitted upon order of the County Judge, who verifies the fact of economic need, and upon a statement from a local physician, who verifies the fact of medical need. It is the purpose of State policy to provide adequate medical service for its economically under-privileged who, otherwise might go unattended. It is not the purpose of State policy unduly to centralize this service to the under-privileged in the University Hospitals. The 1933 Legislature amended the statutes to provide that any county having hospitals may send to the Wisconsin General Hospital, at joint State and County expense, not to exceed two public patients per thousand of its population. The cost of the care of any public patients in excess of two per thousand of population must be borne wholly by the county. This limitation does not apply to the Wisconsin Orthopedic Hospital for Children. The obvious purpose of this legislative limitation is to encourage a larger use of adequately equipped local hospitals in the care of public patients.

Special Rate Patients: The University Hospitals provide medical service to patients whose economic circumstances enable them to pay the cost of hospital care, but for whom the payment of professional fees constitutes a barrier to their access to adequate medical care. This group, intermediate between public and private patients, is charged a special per diem rate based upon the average cost of the hospital care provided for this group. These special rate patients pay their own way as far as the cost of hospital care is concerned, but do not pay for professional service, which is furnished without charge by the clinical teachers of the Medical School. To insure the confining of this service to the deserving, patients are admitted to the wards as special rate cases only upon the recommendation of a physician, and, so far as compatible with public interests, only upon recommendation of the patient's family physician. No patient may be admitted as a special rate case without responsible local reference from the patient's community.

Private Patients: The University Hospitals provide hospital care and professional service of specialized character for a limited number of private patients who pay for both hospital care and professional service. The average number of beds that may be occupied by private patients is, under present conditions, limited to thirty during any given year. The admission of this limited number of private patients enables the University to insure the maintenance of an adequate clinical diversity of types of patients and types of diseases which is essential in teaching hospitals. This rounding out of a complete collection of all kinds of patients also enables the University to administer its hospitals in a manner that will meet any implication of public purpose that the nature of the Uni-

versity Hospitals as State institutions may, from time to time, involve.

Both the need of clinical diversity and the public purpose will best be served if private patients are referred to the University Hospitals by their physicians. Clinical diversity will best be served because physicians will obviously refer the unique and unusually difficult case. Public purpose will best be served because the University Hospitals, upon admitting the patient, will have the counsel of his or her physician on the problem and record of the case, and, upon discharging the patient, will be able to return him or her to the physician with a technical statement of the results of study and treatment in the hospital, thus assuring continuity of care.

Private patients are, therefore, restricted to patients referred by physicians in so far as such restriction does not prevent the securing of adequate clinical diversity or contravene the nature and responsibility of the University Hospitals as State institutions. Any exceptions to this policy of reference must be approved by the administrative committee of the hospitals and only for the purpose of enabling the University Hospitals best to discharge their proper functions as institutions dedicated to the furtherance of medical education, medical research, and the public hospital policy of the State.

Income Tax Provisions Affecting The Medical Profession

I. FEDERAL

The information contained in this digest regarding Federal Income Tax Regulations is based on the Revenue Act of 1932 as amended by the provisions of the National Industrial Recovery Act of June 1933. However, this office is of the opinion that the coming session of Congress may enact new income tax legislation retroactive to January 1, 1933, resulting in important changes which will affect the taxpayer's income tax liability for the calendar year 1933. You will receive an amended income tax bulletin from this office if Congress enacts new income tax legislation affecting your 1933 return of income.

LIABILITY TO FILE

Returns must be made to the Collector of Internal Revenue of the District in which the individual affected resides before March 15, 1934, at which time the tax is due and payable. In the event the taxpayer desires to pay his tax on the installment basis, the first installment of one-quarter of the tax is due on March 15, 1934, and a quarterly installment every three months thereafter, namely, June 15th, September 15th, and December 15th. A written extension of the time for filing a return can be had for cause by filing application therefor with the collector of internal revenue in the district in which the applicant resides, but such application should be made sometime before March 15th, as a penalty may be imposed for failure to file.

Responsibility for making these returns is vested in the individual. As will be noted from reading the paragraphs following, liability to make a return depends not on whether one has a tax to pay, but on the amount of his reportable income.

Under regulations effective in 1932, all persons deriving incomes from a business or profession, or both, are required to file their return upon Form 1040 (the large form). This form is also used by persons reporting an income of $5,000 or over, regardless of the nature of its source. The small form, or 1040A, is for persons who secure their incomes from wages, salaries or interest alone, and where the gross amount is less than $5,000.

The large form, or 1040, will be mailed to all Wisconsin physicians by the Collectors of Internal Revenue. If such blank is not received, apply to the Collector of Internal Revenue of the district in which you reside.

Every person having a *gross* income of $5,000 or more must file a return, regardless of the amount of his *net* income or of his marital status. Where a husband and wife living togther have an aggregate *gross* income of $5,000 or more, they must file separate returns, or a joint return, regardless of the amounts of their joint or individual *net* incomes.

All of the following persons *must* file a return where their *gross* income was less than $5,000: (1) every unmarried person and every married person not living with husband or wife, whose *net* income was $1,000 or more; (2) every married person living with husband or wife, whose *net* in-

come was $2,500 or more. Where the aggregate *net* income of husband and wife, living together, was $2,500 or more, each may make an individual return or they may unite in a joint return.

The normal tax rate for the calendar year 1933 under the Revenue Act of 1932 is 4 per cent on the first $4,000 of *net* income, and 8 per cent on the remainder. Surtaxes, which are graduated and applicable only to *net* incomes in excess of $6,000, are based upon *net* income before exemptions, dividends and taxable liberty bond interest are deducted.

If the marital status of a taxpayer changes during the taxable year, the personal exemption shall be an amount which bears the same ratio to $1,000 as the number of months during which the taxpayer was single bears to twelve months, plus an amount which bears the same ratio to $2,500 as the number of months which the taxpayer was married and living with husband or wife, or was the head of a family, bears to twelve months. For this purpose a fractional part of a month shall be disregarded unless it amounts to more than half a month, in which case it shall be considered as a full month. Changes in the credit for dependents allowed a taxpayer are apportioned in like manner.

DETERMINATION OF INCOME

The term *gross* income as applied to a physician includes the total compensation received by him during the taxable year for professional services, in whatever forms such compensation may be paid, plus the amount received in interest, rent, dividends, securities, or from the transaction of any business conducted by such physician.

The term *net* income as applied to a physician means the *gross* income computed under the above definition less allowable deductions for professional expenses. What constitutes allowable deductions will be considered in detail in the subsequent paragraphs.

The term *deduction* as applied to a physician means any amount allowable as a professional expense. Various classes of deductions are treated in detail below.

The terms *personal exemption* and *credit for dependents* have reference to the amounts allowed because of one's marital status or family obligations. These matters are treated in full detail in Instruction 22 of the income tax return blank.

ITEMS NOT REPORTABLE AS INCOME

The following items are not required to be reported because they are exempt from taxation: Allowances received under the War Risk Insurance Act; gifts, bequests, devises and inheritances; dividends on stock of federal reserve banks, land banks and intermediate credit banks; dividends from corporate earnings accumulated prior to March 1, 1913; amounts received through health, accident or workmen's compensation insurance, and damages received by the taxpayer for illness or injuries suffered by him; life insurance proceeds paid by reason of death of the insured (where a policy matures during life the amount of the proceeds, in excess of the net premiums paid, is taxable income); state court jury fees; stock dividends (i. e., issuance of its own stock by a corporation as a dividend to its shareholders); and compensation paid to its officers and employees by a state or political subdivision thereof for services rendered in connection with the exercise of an essential governmental function of the state or political subdivision.

All interest received from obligations of a state or political sub-division thereof; from securities issued under the Farm Loan Act; interest on first Liberty Loan 3½% Bonds and U. S. Bonds issued prior to September 1, 1917, and interest on the obligations of the possessions of the U. S. need not be included in the computation of *gross* income.

The following exceptions should be noted, however. Interest received on Liberty 4% and 4½% bonds and Treasury 3%, 3⅛%, 3⅜%, 3¾%, 4%, and 4¼% bonds are exempt up to $5,000 aggregate principal. All interest received on such obligations in excess of $5,000 total holdings is reportable for surtax purposes, but is not subject to the normal tax.

NATIONAL INDUSTRIAL RECOVERY ACT

The NIRA made two changes affecting individual income tax returns. The first eliminated the loss carry-over feature of the 1932 Act with the result that business net losses and losses sustained from the sale of securities classed as non-capital assets (that is, securities held for less than two years) may be taken as deductions only in the year when they were incurred.

The second change provided for a 5% tax on dividends received by any person other than a domestic corporation. The tax is paid by the payor corporation and is withheld from the amount of the dividend distributed. We are of the opinion that the full dividend should be shown on the taxpayer's return as a part of gross income, and that the 5% tax withheld should be taken on the return as an allowable tax deduction. This tax applies only to dividends declared after June 16, 1933, the date of the enactment of NIRA, and prior to January 1, 1934, on which latter date this provision became inoperative.

Caution: If you have any difficulties understanding the two above paragraphs, write the Society Offices or see your local internal revenue collector.

PERSONAL EXEMPTIONS AND CREDIT FOR DEPENDENTS

In the case of a single person, a personal exemption of $1,000 is allowed as a deduction from net income subject to tax. In the case of the "head

of a family" or of a married person living with husband or wife, a personal exemption of $2,500 is allowed. If a husband and wife living together make separate returns, the personal exemption may be taken by either of them or divided between them, but may not exceed $2,500 in the aggregate.

A credit of $400 is allowed for each person, other than husband or wife, dependent upon and receiving his *chief* support from the taxpayer, if such dependent person is under 18 years of age, or is incapable of self-support because mentally or physically defective.

INDEX TO DEDUCTIONS

An index of deductions which will be allowed on the tax return, some of which are peculiar to physicians, are listed below. The number given after each heading refers to the paragraph numbering on the pages following. The paragraphs explain in detail how to arrive at the deductions and depreciation.

Automobiles (1)
- Depreciation.
- Insurance (1), (11-b).
- Maintenance.
- Professional use.
- Repairs.
- Salary of chauffeur.

Bad Debts (2)
Bandages (4)
Depreciation
- Automobiles—25% annually on cost price. (1)
  - Classification includes snowmobiles and other motive equipment.
- Instruments (4)
  - 20% annually on cost of surgical instruments and general equipment; 25% on cost of x-ray equipment.
- Medical Library (3)
  - 10% annually of cost price.
- Office equipment (5)
  - 10% annually of cost price.

Dues (7)
Equipment (4)
- Both long and short-lived.

Fire Losses (11-d)
- Professional equipment and other property.

Insurance Premiums
- Automobile (1)
- Malpractice (11-b)
- Professional Equipment (11-b)

Laboratory Materials and Expenses (4) (11-c)
Law Suits (11-a)
Library (3)
Licenses (8)
Medical Meetings (9)
Medical Supplies (4)
Office Expenses (5)
- Heat, light, supplies, telephones, water, short-lived office equipment, annual depreciation on furnishings and fixtures.

Office Rental (6)
Post-Graduate Studies (9)
Professional Dues (7)
- County Society.
- State Society, $12.
- Special Societies as:
  - College of Surgeons
  - College of Physicians
- Any other paid in interest of profession.

Professional Subscriptions (7)
Salaries (10)
Scientific Meetings (9)
Sale of Spectacles (11-e)
Taxes and Licenses (8)
- Automobile license.
- State taxes on gasoline and oil required for professional use of car.
- License to prescribe alcohol.
- Occupational tax.
- Re-registration fees.
- U. S. Narcotic tax.
- Taxes on equipment or materials required in professional work.

Theft of Professional Equipment (11-d)
Travelling Expenses (9)
- Both professional calls and scientific meetings.

Wages and Salaries (1) (10) (11-c)
- Chauffeur (1)
- Clerk (10)
- Laboratory assistant (10) (11-c)
- Maid (10)
- Nurse (10)
- Stenographer (10)
- Any other employee rendering service in connection with taxpayer's practice or in the care and treatment of patients. (10)

DEDUCTIONS ALLOWABLE

1. Automobiles

The cost of operation and maintenance of an automobile used in making professional visits is deductible. These costs include gasoline, oil, tires, insurance, repairs, garage rental, and depreciation. If the same car is used for both professional and personal purposes, only such part of the maintenance as arises out of the use for professional purposes is deductible. Sums spent for taxi, bus, or railroad fare, while on professional calls, is deductible.

Depreciation is also deductible and is based upon the estimated useful life of the car. If that period be 4 years, 25% depreciation based on cost price may be taken annually for 4 years. What has been said with respect to automobiles applies to other motive equipment.

2. Bad Debts

If the physician's books are kept according to the "Cash Receipts and Disbursements" system, he may not charge off any unpaid debts because "if his books are kept according to this system, he is only reporting as gross income those accounts which have proved to be good and therefore bad accounts

cannot be deducted because they have already been excluded."

If the books are kept upon an "accrual basis" (that is, on the basis of expenses actually incurred and payable even though not yet paid, or income earned although not yet collected), it is permissible to charge off all debts which have been definitely ascertained to be worthless, and have been charged off on the books or records, during the fiscal year covered by the report. *We urge all members who may be keeping accounts on the "accrual basis" to secure permission to change to a cash basis.*

3. Library

Most physicians maintain a professional library. Taken as a whole it is doubtful whether the useful life of such a library exceeds ten years. Accordingly annual depreciation equal to 10% of the cost of such library may be deducted.

4. Medical Supplies and Instruments

Medicines used in the physician's office to treat patients, bandaging, laboratory materials, and all other medical supplies required for the operation of a physician's office may be deducted as necessary expenses, as may equipment, the life of which is less than one year. The average useful life of surgical instruments and equipment generally is estimated at 5 years which means that 20% of the cost may be taken as annual depreciation. X-ray equipment may be depreciated at 25% of cost annually.

5. Office Expense

General office expense is deductible. Among the principal items are heat, light, office supplies, telephone rentals, water, office equipment having a useful life of a year or less, and depreciation on office furnishings and fixtures. Ten per cent of original cost is a reasonable average depreciation rate for office equipment, furnishings and fixtures.

6. Office Rent

If a physician pays rent to another person for office space, he is permitted to deduct the amount from his gross income. This includes regular office space in a rented home provided office hours are maintained there. Where a physician maintains his offices in a rented home he may deduct as rental expense only that proportion of the total rent paid which his office space bears to the entire house. If he owns his home and maintains an office in it, he cannot claim a deduction for office rent.

7. Professional Dues

Dues paid to professional associations to which he belongs in the interest of his profession are deductible. Subscriptions to all medical journals or scientific publications are likewise deductible.

8. Taxes and Licenses

Any taxes paid upon materials required in professional work are exempt. All licenses which the physician is required to take out may be deducted. This includes the license to prescribe alcohol, narcotic license, automobile license, local occupational and re-registration taxes, and state taxes on gasoline and motor oil for professional use of car.

9. Traveling Expenses

Traveling expenses necessary for professional visits to patients are deductible. Traveling expenses in bona fide attendance upon scientific meetings are deductible. The expenses of attending post-graduate medical courses are *not* deductible, however.

10. Wages and Salaries

Deductions are permitted for the salary of a nurse, laboratory assistant, stenographer or clerical worker employed in the office so long as the duties of such persons are in connection with the physician's professional work. Wages paid to maids taking care of the office and answering the telephones are also deductible, as are any sums paid employees for services rendered in connection with the taxpayer's practice, or the care and treatment of patients.

11. Miscellaneous

(a) Expense of Defending Malpractice Suits—Expenses incurred in the defense of a suit for malpractice are deductible as business expense. Expenses incurred in the defense of a criminal action, however, are not deductible.

(b) Insurance Premiums—Premiums paid for insurance against professional losses are deductible. This includes insurance against damages for alleged malpractice, against liability for injuries by a physician's automobile while in use for professional purposes, and against loss from theft of professional equipment, and damage to or loss of professional equipment by fire or otherwise. Under professional equipment is to be included any automobile belonging to the physician and used for strictly professional purposes.

(c) Laboratory Expenses—The deductibility of the expenses of establishing and maintaining laboratories is determined by the same principles that determine the deductibility of other corresponding professional expenses. Laboratory rental and the expenses of laboratory equipment and supplies and of laboratory assistants are deductible when, under corresponding circumstances, they would be deductible if they were part of a physician's general office expense.

(d) Losses by Fire, Theft, etc.—Loss of and damage to a physician's equipment by fire, theft or other cause, *not compensated by insurance or otherwise recoverable*, may be computed as a business expense and is deductible, provided evidence of such loss or damage can be produced. Such loss

or damage is deductible, however, only to the extent it has not been made good by repair and the cost of repair claimed as a deduction. Deductions may likewise be taken for loss of or damage to *non-professional* property of a physician caused by fire, flood, theft or otherwise, *where not compensated for by insurance or otherwise recoverable.*

(e) Sale of Spectacles—Oculists who furnish spectacles, etc., may enter as income money received from such sales and deduct as an expense the cost of the article sold. Entries on the physician's account books should, in such cases, show charges for services separate and apart from charges for spectacles.

II. STATE

The information herein contained is based upon the Wisconsin Statutes, 1931, Laws of Wisconsin, 1933, Rules and Regulations of the Wisconsin Tax Commission under the Income Tax Act of 1931, published September, 1932, and the forms to be used in making 1933 returns. It should be noted that the three year average feature is no longer operative; that there have been no changes in personal exempitons or credits for dependents, nor in normal tax or teachers' retirement fund surtax rates; that the Emergency Income Tax Act of 1933 was effective for that year only. Principal legislative changes enacted in 1933 will be subsequently considered.

LIABILITY TO FILE

Returns of 1933 income must be made to the assessor of incomes of the district in which the taxpayer resides, on or before March 15. A written extension of the time in which to file may be granted for cause, but may not exceed 30 days.

Every person, including emancipated minors under 18 and minors 18 to 21, who received a net income of $800 or more, if single, and $1600 or more if married, must file a return whether notified to do so or not.

The normal tax, which is graduated, varies from 1 per cent on the first $1000 of net income to 7 per cent on net incomes in excess of $12,000. The teachers' retirement fund surtax is based on 1/6 of normal taxes after deducting $37.50 from the gross surtax.

In general, the definitions contained in the preceding federal income tax digest are applicable as well to state taxes.

INSTRUCTIONS ON THE FILING OF SEPARATE INCOME TAX RETURNS FOR HUSBAND AND WIFE

Section 71.09 (4) (c) requiring that the incomes of husbands and wives be combined for assessment purposes has been held unconstitutional by the United States Supreme Court. To give effect to this decision the Tax Commission has adopted the following regulations:

1. Wives must file a separate return on Form 1B if they have income of their own, but in case they have no income no return need be filed.

2. In the event that both husband and wife have income and file separate returns, the personal exemption of $17.50 will be divided between the two according to their own choice, that is to say, the husband may claim it all, or the wife may claim it all, or they may divide it between them as they see fit.

In the event that they express no choice in the matter of the division of the personal exemption, the assessor of incomes shall divide it between them so as to give them the full benefit of the deduction. To illustrate, assume the husband has an income of $2,000.00 and the wife an income of $500.00, and they express no choice as to the division of the personal exemption. The assessor of incomes will apply $5.00 of their personal exemption against the wife's return, thereby wiping out the tax on her entire income, and apply the remaining $12.50 against the tax of the husband.

3. The income of children under eighteen years of age shall be included in the return of the husband or head of the family, and the personal exemptions for such children shall likewise be allowed to the husband or the head of the family, unless it can be established to the satisfaction of the assessor that they are in fact being supported by the wife, in which event the wife will be entitled to deduction for the personal exemptions of the children.

PERSONAL CREDITS AND EXEMPTIONS

The statutes themselves are so clear as to personal exemptions, credits for dependents, and the date determining the personal status of a taxpayer for income tax purposes that they are quoted here in full:

"71.05 *Exemptions.*

(1) There shall be exempt from taxation under this chapter income as follows, to-wit:

(a) Pensions received from the United States.

(b) All inheritances, devises, bequests and gifts received during the year.

(c) All insurance received by any person or persons in payment of a death claim by any insurance company, fraternal benefit society, or other insurer, except insurance paid to a corporation or partnership upon the policies on the lives of its officers, partners or employes.

* * *

(2) There shall be deducted from the tax after the same shall have been computed according to the rates in section 71.06, a personal exemption for natural persons as follows:

(a) For an individual, eight dollars.

(b) For husband and wife or head of a family, seventeen dollars and fifty cents. For the purposes

of this chapter, the term "head of a family" means a natural person who maintained a household and supported therein himself and one or more persons who were dependent upon him for support; but no additional exemption shall be allowed for those dependent upon the head of a family except in case of a widow or widower supporting children under the age of eighteen years.

(c) For each child under the age of eighteen years who is actually supported by and dependent upon the taxpayer for his support, an additional four dollars.

(d) For each additional person, except persons defined in subsection (2) (c) of section 71.05, who is actually supported by and entirely dependent upon the taxpayer for his support an additional four dollars, except in case of head of a family. In computing taxes and the amount of taxes payable by persons residing together as members of a family, the income of the wife and the income of each child under eighteen years of age shall be added to that of the husband or father, or if he be not living, to that of the head of the family and assessed to him except as hereinafter provided. The taxes levied shall be payable by such husband or head of the family, but if not paid by him may be enforced against any person whose income is included within the tax computation.

(e) The personal exemptions provided by this section shall be determined by the personal status of a taxpayer on the last day of the last year included in the computation of income except as otherwise provided in this chapter."

1933 LEGISLATIVE CHANGES

Among the changes in income taxation enacted by the 1933 regular session of the Wisconsin Legislature are five which are summarized here because of their applicability to physicians as well as to all other taxpayers.

1. **Back Taxes and Refunds.** The Tax Commission may conduct audits and collect back taxes at any time within 6 years after the close of the period covered by a given return, except that the Tax Commission is not barred by the lapse of any period of time in cases of evasion, fraudulent intent, or failure to file. Refunds are also obtainable by a taxpayer if he makes claim therefor within 6 years after the period for which he seeks such refund.

2. **Compromise and Payment of Delinquent Taxes.** Delinquent income taxes may be compromised by the Tax Commission, and the compromised amount including penalties and interest paid in convenient installments. This will prove highly advantageous to numbers of taxpayers now in arrears.

3. **Computation and Payment of 1933 Income Taxes.** Taxpayers are now required to compute their own income tax on the face of the return blank and to make an initial payment on or before the 15th of March unless their fiscal year varies from the calendar year. The initial payment must be the entire tax if the latter does not exceed $5.00, and must be at least ⅓ the total tax and not less than $5.00 if the tax exceeds the latter amount. The balance of the tax must be paid by August 1. A 2 per cent discount is allowed for payment in full by March 15.

The state income tax is now payable to the Tax Commission through designated representatives at the local assessor's office of the district in which the taxpayer resides.

4. **Contested Assessments.** The taxpayer who is contesting his income tax assessment may deposit the amount assessed plus interest to the first of the month following payment with the State Treasurer. If it later be determined that the taxpayer was over-assessed, the overpayment so deposited will be refunded with 6 per cent interest from the date of deposit.

5. **Emergency Gift Tax.** This law provides in brief that the donor and donee of any transfer by gift of property of any kind shall report such transfer on their respective income tax returns. Space is provided on the upper right hand column of the regular income tax blank for this purpose. The tax will be assessed by the assessor of incomes in the district in which the taxpayer resides and the taxpayer notified of the amount due, probably some time in June, 1934. The tax is imposed on transfers of property made between July 8, 1933, and July 1, 1935. The rates are graduated from 2 per cent to 8 per cent for gifts valued at less than $25,000 and reach a maximum of 15 per cent on large transfers. The principal exemptions from the tax are: (a) payments by an employer for the benefit of his employee or the latter's family, including medical services, and (b) transfers of reasonable amounts of property to members of one's immediate family for current maintenance, support and education.

DEDUCTIONS ALLOWABLE FOR PROFESSIONAL EXPENSES

A. Statute

The statute is so explicit on what constitutes allowable deductions of major items of expense that it has seemed advisable to insert portions of it for the aid of physicians making state returns.

"71.04 *Deductions From Incomes of Persons Other Than Corporations.* Persons other than corporations, in reporting incomes for purposes of taxation, shall be allowed the following deductions:

(1) Payments made within the year for wages or other compensation for services actually rendered in carrying on the profession, occupation or business from which the income is derived. But no deduction shall be made for any amount paid for services actually rendered in the carrying on of the profession, occupation or business from which the income is derived unless there be reported the name and address and amount paid each person to whom a sum of seven hundred dollars or more shall have been paid for services during the assessment year. No deduction shall be allowed un-

der this section for any amounts expended for personal, living or family expenses.

(2) The ordinary and necessary expenses actually paid within the year in carrying on the profession, occupation or business from which the income is derived, including a reasonable allowance for depreciation by use, wear and tear of the property from which the income is derived, * * *

(3) Losses actually sustained within the year and not compensated by insurance or otherwise, provided that no loss resulting from the operation of business conducted without the state, or the ownership of property located without the state, may be allowed as a deduction, and provided further that no loss may be allowed on the sale of property purchased and held for pleasure or recreation and which was not acquired or used for profit, but this proviso shall not be construed to exclude losses due to theft or to the destruction of the property by fire, flood or other casualty. No deduction shall be allowed under this subsection for any loss claimed to have been sustained in any sale or other disposition of shares of stock or securities where it appears that within thirty days before or after the date of such sale or other disposition the taxpayer has acquired (otherwise than by bequest or inheritance) or has entered into a contract or option to acquire substantially identical property and the property so acquired is held by the taxpayer for any period after such sale or other disposition.

(4) Dividends, except those provided in section 71.02 (2) (b) 2 and 3, received from any corporation conforming to all of the requirements of this subsection. Such corporation must have filed income tax returns as required by law and the income of such corporation must be subject to the income tax law of this state. The principal business of the corporation must be attributable to Wisconsin and for the purpose of this subsection any corporation shall be considered as having its principal business attributable to Wisconsin if fifty per cent or more of the entire net income or loss of such corporation after adjustment for tax purposes (for the year preceding the payment of such dividends) was used in computing the average taxable income provided by chapter 71 * * *

(5) Interest paid within the year on existing indebtedness; provided, the debtor reports the amount so paid, the form of the indebtedness, together with the name and address of the creditor. But no interest shall be allowed as a deduction if paid on an indebtedness created for the purchase, maintenance or improvement of property, or for the conduct of a business, unless the income from such property or business would be taxable under this chapter.

(6) Taxes other than inheritance and special improvement taxes upon the property or business from which the income hereby taxed is derived paid by such persons during the year, including therein taxes imposed by the state of Wisconsin or the United States government as income taxes; provided, that such portion of the deduction for federal income taxes as may be allowable shall be confined to cash payments made within the year covered by the income tax return; and provided further, that deductions for income taxes paid to the United States government shall be limited to taxes paid on net income which is taxable under this chapter; and provided further that income taxes imposed by the state of Wisconsin shall accrue for the purposes of this subsection only in the year in which such taxes are assessed.

(7) Contributions or gifts made within the year to the state or any political subdivision thereof for exclusively public purposes, or to any corporation, community chest fund, foundation, or association operating within this state, organized and operated exclusively for religious, charitable, scientific, or educational purposes, or for the prevention of cruelty to children or animals, no part of the net income of which inures to the benefit of any private stockholder or individual, to an amount not in excess of ten per centum of the taxpayer's net income of the calendar or fiscal year as computed without the benefit of this subsection."

* * *

B. Index to Deductions

This index is designed to assist the physician in ascertaining what deductions are allowable. The number given after each heading refers to the paragraph numbering on the pages following. The paragraphs explain in detail what deductions and depreciation are allowable.

Automobiles (1)
- Depreciation.
- Insurance (1) (4)
- Maintenance.
- Professional use.
- Repairs.
- Salary of chauffeur.

Bad debts (2)

Bandages (9)

Conventions (8)

Depreciation
- Automobiles—25% annually of cost price (1)
- Instruments (9)
  - 20% annually of cost price of surgical instruments and general equipment; 25% on x-ray equipment.
- Medical Library (6)
  - 10% annually of cost price.
- Office equipment (10)
  - 10% annually of cost price.

Dividends Received (3)

Dues (12)

Equipment
- Office (10)
- Professional (9) (16-a)

Fire, losses by (7)

Instruments (9)

Insurance Premiums (4)
- Automobile (1)
- Malpractice (4)
- Professional Equipment (4)

Interest Paid (5)
Laboratory Materials (9), (16-a)
Law Suits (16-b), (16-d)
Library (6)
Licenses (13)
Losses, by fire, flood, theft, suit, etc. (7) (16-d)
Medical Convention (8)
Medical Supplies (9)
Miscellaneous (16)
Office Expenses (10)
  Heat, light, supplies, telephones, water, short-lived office equipment, annual depreciation on furnishings and fixtures.
Office Rental (11)
Post-Graduate Studies (14)
Professional Convention (8)
Professional Dues (12)
  County Society.
  State Society, $12.
  Special Societies as:
    College of Surgeons
    College of Physicians
  Any other paid in interest of profession.
Professional Subscription (6)
Salaries (15)
Sale of Spectacles (16-c)
Scientific Meetings (14)
Subscriptions (6)
Taxes and Licenses (13)
  Automobile licenses.
  Federal income and property taxes.
  Import duties, etc.
  Personal property taxes.
  Professional license fees.
  Real property taxes on office owned and used by taxpayer in practice.
  Wisconsin income taxes and surtaxes paid.
Theft, loss by (7)
Traveling Expenses (14)
  Both professional calls and scientific meetings.
Wages and Salaries (15)
  Chauffeur (1)
  Clerk (15)
  Laboratory assistant (15) (16-a)
  Maid (15)
  Nurse (15)
  Stenographer (15)
  Any other employee rendering service in connection with taxpayer's practice or in the care and treatment of patients. (15)

C. Explanations of Deductions

In seven instances below, references are made to numbered paragraphs of the federal portions of this digest. Such references make it unnecessary to recopy explanatory paragraphs applicable equally to the making of state and federal returns.

1. Automobiles (See Federal Digest, 1).

2. Bad Debts (See Federal Digest, 2).

3. **Dividends Received.** Cash dividends received from a corporation's surplus accumulated since January 1, 1911, are deductible by the persons receiving the dividends, if the following requirements are fulfilled:

(1) The corporation paying the dividend must have filed a Wisconsin income tax return for the year preceding the payment of the dividend.

(2) The income of the corporation paying the dividend must have been subject to the Wisconsin income tax law for the year preceding the payment of the dividend.

(3) The principal business of the corporation paying the dividend must have been attributable to Wisconsin for the year preceding the payment of the dividend.

If 50% or more of the entire net income or loss of a corporation, after adjustment for income tax purposes, for the year preceding the payment of a dividend, was used in computing the taxable income of such corporation, it will be considered that the principal business of such corporation was attributable to Wisconsin.

4. **Insurance Premiums.** Premiums paid for insurance against professional losses are deductible. This includes insurance against damages for alleged malpractice, against liability for injuries by a physician's automobile while in use for professional purposes, and against loss from theft of professional equipment, and damage to or loss of professional equipment by fire or otherwise. This further includes premiums for various forms of insurance on the building owned and used in connection with the practice, or a fair proportion thereof where the building is also a home. Under professional equipment is to be included an automobile belonging to the physician and used for strictly professional purposes.

5. **Interest Paid.** In general, all interest paid on existing indebtedness is deductible, except interest paid on indebtedness created for the purchase, maintenance, or improvement of property.

Interest paid on indebtedness created to purchase and carry securities the income from which is not subject to tax is not a proper deduction from gross income.

Interest paid on state and federal income taxes is deductible, but interest paid on fines levied for violations of law is not allowable as a deduction.

Interest paid by an individual on indebtedness created for the purpose of acquiring a home is deductible from gross income. Likewise, interest paid by an individual on money borrowed to pay personal debts, such as hospital bills and other family obligations, is considered a proper deduction from gross income.

Interest paid by an individual on money borrowed for the purpose of securing an education is allowable even though other expenses of obtaining such education are not allowable.

6. **Library.** A fair rate of depreciation on the physician's library may be deducted covering wear

and tear sustained through use. In determining the rate, however, obsolescence may not be considered since the Wisconsin Income Tax Law does not recognize losses in value due to such causes. The fact that medical books become out of date during the course of ten years cannot be considered in determining the rate of library depreciation. An annual depreciation of 10% of the cost of such library seems reasonable, however.

Costs of subscriptions to scientific medical journals essential to keep the physician abreast with the progress of his profession are deductible.

7. **Losses by fire, etc.** Loss of and damage to a physician's equipment and other property used by him in connection with carrying his professional practice by fire, theft or other cause, not compensated by insurance or otherwise recoverable, may be computed as a business expense, and is deductible, provided evidence of such loss or damage can be produced. Such loss or damage is deductible, however, only to the extent that it has not been made good by repair and cost of repair claimed as a deduction.

Losses on automobiles, aircraft, summer homes, motor boats, furniture, etc., purchased and held for pleasure are deductible from gross income where sustained because of theft, fire, flood, or other casualty. Losses on property used for both pleasure and practice are deductible only to the extent that such property was used in the practice, unless such losses were sustained through fire, flood, other casualty, or theft when the entire loss is deducted.

8. **Medical Conventions.** Ordinary and necessary expenses incurred in attending medical conventions of professional scientific societies necessary to enable the physician to carry on his profession, are deductible.

Costs of attending professional conventions must be strictly limited to the necessary cost and expense directly attendant upon such conventions. The type of professional convention here contemplated is confined to such as are, as a general rule, ordinarily and generally attended by persons of the same professional standing as the taxpayer, as necessary to the maintenance and carrying on of their regular practice and profession.

9. **Medical Supplies and Instruments** (See Federal Digest, 4).

10. **Office Expenses** (See Federal Digest, 5).

11. **Office Rental** (See Federal Digest, 6)

12. **Professional Dues.** Professional dues paid to professional associations to which the physician may belong in the interest of his profession may be deducted.

13. **Taxes and Licenses.** All taxes and licenses incident to the professional scope of the physician may be deducted. The following taxes would be deductible by any physician:

(1) Real property taxes paid on office owned by him and used by him in his practice.

(2) Personal property taxes paid on his apparatus and equipment.

(3) Wisconsin income taxes and surtaxes paid.

(4) Federal income and profits taxes paid on net income subject to tax under the Wisconsin income tax law are deductible in the year in which actually paid in cash. The portion of a federal surtax paid on dividends from Wisconsin corporations is not allowable for Wisconsin income tax purposes, however.

(5) All license fees incident to his profession.

(6) Automobile licenses on automobiles used exclusively in the practice of his profession. See paragraph (1) supra.

(7) Import or tariff duties and business, license, privilege, excise, and stamp taxes, are deductible if incurred in connection with the carrying on of the taxpayer's practice and profession.

14. **Traveling Expenses** (See Federal Digest, 9).

15. **Wages and Salaries** (See Federal Digest, 10).

16. **Miscellaneous.**

a. Laboratory Expenses (See Federal Digest, 11-c).

b. Legal. Expenses incurred in the defense of a suit for malpractice are deductible as business expense. Expenses incurred in the defense of a criminal action, however, are not deductible.

Legal expenses incurred in connection with the operation of a taxpayer's profession are proper deductions unless such business is conducted in violation of the law. To be deductible, however, such legal expenses must be reported on form 9 or 9a.

c. Sale of Spectacles (See Federal Digest, 11-e.).

d. Unclassified. Payments required to be made for damages growing out of the carrying on of the profession such as injury to property, interference with property rights, breach of contract, and libel are deductible from gross income.

Miscellaneous expenses which are incurred in producing taxable income and are allowable deductions include the following: fees paid to auditors, tax experts, and lawyers in connection with income tax matters, welfare work expense incurred in keeping up the morale in an organization.

(End).

Proceedings of the Council, Milwaukee, January 6, 1934

THE Council of the State Medical Society of Wisconsin held its annual January meeting at the University Club, Milwaukee, convening at 9:40 A. M., Saturday, January 6th.

Roll Call. The Council was called to order by the Chairman, Dr. A. W. Rogers and roll call disclosed the following present: Councilors Rogers, Stang, Smith, Schiek, Blumenthal, Gavin, Heidner, Johnson, Beebe, Harper, Pope and Cunningham; President Seeger, President-elect O'Leary, Treasurer Sleyster, Speaker Carter, Vice-Speaker Gundersen, Retiring President Jackson, and Dr. J. Gurney Taylor, delegate to the American Medical Association, and the Secretary. Absent: Councilor Duer and Delegate Bannen.

2. **Approval of Minutes.** Upon motion of Heidner–Smith, minutes of the June meeting as published in the Wisconsin Medical Journal of July, 1933, were approved.

3. **Election of Chairman.** With President Seeger presiding it was moved by Smith–Stang–Gavin that the Secretary be instructed to cast the unanimous ballot of the Council for Dr. A. W. Rogers, Oconomowoc, to succeed himself as Chairman of the Council for the term ending January, 1935. Carried.

4. **Election of Secretary.** With the Chairman presiding, it was moved by Stang–Smith that the Chairman cast the unanimous ballot of the Council for Mr. J. G. Crownhart of Madison to succeed himself as Secretary of the Society and Council for the term ending January, 1935. Carried.

5. **Election of a Treasurer.** It was moved by Smith–Gavin that the Secretary cast the unanimous ballot of the Council for Dr. Rock Sleyster, Wauwatosa, to succeed himself as Treasurer of the Society and Council for the term ending January, 1935. Carried.

6. **Report of the Treasurer.**

TREASURER'S REPORT
STATE MEDICAL SOCIETY OF WISCONSIN
As at December 31, 1933

	Gen'l Fund	Med. Defense Fund
Balance January 1, 1933	$1,553.67	$1,011.28
Receipts during year 1933	31,790.00	2,109.00
	$33,343.67	$ 3,120.28
Disbursements during year 1933	32,691.54	3,033.49*
Bank Balance in Funds December 31, 1933	$652.13	$86.79

* This item of Disbursements includes a purchase of $2,000.00 par value Fourth Liberty Loan Bonds for the Medical Defense Fund.

No attempt has been made to ascertain the present market value on the bonds held for the society, but they are all considered high grade and none have defaulted in their interest payments. All bonds are listed at their par value.

Recapitulation of Funds

General Fund:		
Bank Balance December 31, 1933	$652.13	
Investment Securities	25,000.00	$25,652.13
Medical Defense Fund:		
Bank Balance December 31, 1933	$86.79	
Investment Securities	11,000.00	11,086.79
Total Cash Resources as at December 31, 1933		$36,738.92

Investment Securities

General Fund:				
Northern States Power Co.	1941	5%	$4,000.00	
American Tel. & Tel. Co.	1936	4%	4,000.00	
Wisconsin Public Service	1942	5%	3,000.00	
T. M. E. R. & L. Co.	1961	5%	2,000.00	
Milwaukee Gas Light Co.	1967	4½%	2,000.00	
Canadian Nat'l Ry. Co.	1969	5%	2,000.00	
City of Milwaukee	1936–37	4½%	3,000.00	
Ironwood & Bessemer Ry. & Lt. Co.	1936	5%	1,000.00	
Beloit Water, Gas & Elec. Co.	1937	5%	1,000.00	
Wisconsin Power, Light & Heat Co.	1946	5%	1,000.00	
St. Joseph's Congregation, Racine	1941	5%	1,000.00	
N. Y. State Elec. & Gas Corp.	1980	4½%	1,000.00	25,000.00
Medical Defense Fund:				
Commonwealth Edison Co.	1957	4½%	$2,000.00	
Bell Telephone Co. of Canada	1955	5%	2,000.00	
Pacific Tel. & Tel. Co.	1937	5%	1,000.00	
North American Co.	1961	5%	2,000.00	
Wisconsin Gas & Elec. Co.	1952	5%	1,000.00	
Milwaukee County Sewer	1944	4½%	1,000.00	
U. S. Liberty Loan—Fourth	1934	4¼%	2,000.00	11,000.00
Total Bonds				$36,000.00

Analysis Medical Defense Fund

Bank Balance January 1, 1933	$1,011.28	
Receipts, dues	1,674.00	
Receipts, interest on Bonds	435.00	$3,120.28
Paid to attorneys	$988.88	
Paid to accrued interest on Bonds	44.61	
Bonds purchased	2,000.00	3,033.49
Bank Balance Medical Defense Fund Dec. 31, 1933		$86.79

6. **Report of the Treasurer (continued).** The Treasurer further reported that the First Wisconsin Trust Company had offered at the rate of $1.00 per annum per $1,000 of par value of securities affected, to hold the securities of the surplus fund of the Society in safekeeping, to attend to the collection of income and maturing principal and to advise of dates of maturity and redemption calls. After discussion it was moved by Heidner–Smith that the Treasurer be instructed to enter into such an agreement for safekeeping of securities with the First Wisconsin Trust Company. Carried. It was then moved by Stang–Gavin that the Treasurer's report be accepted. Carried.

7. **Report of the Secretary.**

To the Council:

At the conclusion of the calendar year of 1932 the Society had 1,975 members and during the period of 1930–1931 and 1932, the Society had suffered a loss of 175 members.

At the conclusion of the calendar year of 1933, the membership was 2,044,—an increase of 69 members. So far as is known, Wisconsin is the only Society reporting an increase in membership this last year.

Finances

Your Secretary looks upon the increased membership as an evidence not alone of appreciation of the value of the work accomplished but more particularly as a recognition of the fact that the profession faces problems most of which can *only* be solved through group action. At this meeting of the Council it is essential to determine upon the budget of expenditures for the calendar year of 1934 which governs our activities.

During such times of economic uncertainty as presently exist it might be wholly natural to view the budget of an organization as we would view our own personal budgets. To take such a view, however, would be to the mind of your Secretary an error for the members do not pay dues as a matter of savings. On the contrary, the dues are trust funds but with the trust obligations of wise expenditure rather than present close savings at the expense of the future of medicine.

Having in mind that the Society has built, during the eleven years of service of your full time secretary, a surplus of $25,000 in the general fund that is still intact due to the careful investments of the Treasurer, it would seem that our present obligation to the membership lies in attaining a still further advanced position which will reflect to the scientific and material benefit of each member.

The budget as recommended by the Executive Committee of the Council is before you. Your Secretary is of the belief that it should be considered carefully item by item and that none should hesitate to make additional recommendations to the end that the anticipated income of the year may be so expended as to bring the largest possible dividends to the great body of our membership. And, by so doing, we will simultaneously promote the delivery of an adequate scientific service for all who stand in need of that care.

The Journal

Dr. H. P. Greeley, Chairman of the Editorial Board of the Journal, is to be with us at this meeting to present the plans of the Board for a constantly improved publication.

Up to two years ago the Journal, while sharing all of its proportionate expense including overhead, was strictly self-supporting. In the last two years the decrease in advertising revenue suffered by all Journals has necessitated the Journal drawing upon the Society through the budget. During the last twelve months the budget provided $2400 from the general fund. A like amount will carry it in its present form during the calendar year of 1934. The Editorial Board wishes you to consider an additional allowance of $600. This request will be presented by Dr. Greeley.

Delegate to Neighboring States

In the order of business will be found a suggestion from Dr. Harold A. Camp, Secretary of the Illinois State Medical Society that Illinois, Michigan, Iowa, Minnesota and Wisconsin again establish reciprocal relations to the end that each Society be represented by an official delegate at the time of the annual meeting in each of the neighboring states. This plan was put in operation some years ago but was dropped as not accomplishing the true purpose.

It seems to the Secretary that if our President-elect be the designated delegate during his term of office that much good will result to our own Society from the little expense that will be involved. Such contacts cannot help but be of great value to your officer who must shortly embark upon his term of service as the active head of the profession. Your Secretary has suggested an appropriation of $200 for the traveling expense involved inasmuch as all of it will be out of the state.

Medical Relief for the Unemployed

Under the Federal Emergency Relief Administration, Wisconsin was one of the early states to organize through county societies and secure agreements to provide free choice of physician and an

emergency medical allowance. So far as is known to the Secretary, this plan is working in all counties of the state with the exception of Milwaukee where unusual situations have prevented the same speedy accomplishments as have been secured elsewhere. It is anticipated, however, that the arrangement will be working in Milwaukee county directly.

The early accomplishment of the medical phase of this project in Wisconsin, even at the very low allowances of the emergency period, has meant thousands of dollars to Wisconsin physicians as compared to some other states where plans were not perfected until as late as December first, last. In addition, it should be recalled that under a state agreement some $500,000 was secured for emergency medical service a year prior to the allotment of funds in other states.

The refusal of the federal government to permit the use of federal funds for the hospitalization of the indigent has been a serious blow to hospitals, not only in Wisconsin but elsewhere. Every effort has been made to have the federal administration reconsider its position but to date no such reconsideration has been forthcoming. Here is a typical result of governmental administration, through lay authorities of medical service for to say that allowances shall be paid for operations in the home and that nurses may be employed to attend upon such patients, but that nothing will be granted if the operation is within the safer confines of a class A hospital is to place a positive government approval upon what well might be very bad medicine. That this has not occurred in practice, as it has not, is to the very great credit of the medical profession. It is mentioned here only to emphasize the dangers that are very real and in constant attendance upon any governmental effort to direct through a bureaucracy the kind and type of medicine that the individual patient shall receive. Everywhere the government has placed emphasis upon minimums of medical service rather than essentials of service.

With the close and understanding cooperation of Miss Florence Peterson, State Director of Relief, a wise administration in Wisconsin has avoided many of the natural implications of rules promulgated through a desire to economize in the one principal necessity to both life and a recovery program.

Compensation Under C. W. A.

Almost simultaneously with the organization of the Civil Works Administration in Wisconsin, through the efforts of Dr. J. Newton Sisk and the State Administrator, an order was obtained which called for free choice of physician to any injured on civil works projects. Through continued contacts all efforts to substitute inadequate panels have been promptly quashed. Mr. Harry A. Nelson of the Wisconsin Industrial Commission is presently handling this field as compensation director. The utmost cooperation between Mr. Nelson and the medical profession has obtained.

It is anticipated, however, that the most serious medical problems will eventually, if not directly, result from this compensation effort. It is to be recalled that there is now in Wisconsin upwards of 140,000 men and women employed by the government under this program. All are entitled to medical aid and compensation if injured as result of employment. The numbers so entitled to care exceed all enlistments from this state during the World War, yet not one of the present army has been examined prior to employment even for the purpose of noting existing defects. When we recall all the government hospitals erected to care for World War veterans who had to pass a physical examination prior to enlistment, one acquainted with the growth of government institutions must at least conjecture as to the future requirements and allotments that will be made for those injured under the Civil Works Administration. It will doubtless present an early problem and one that will largely involve the medical profession.

Secondly, it has already been advocated that inasmuch as Civil Works employees receive but from $60 a month upward such person and his family should receive free medical attention. Should the C. W. A. program extend beyond February 15th—and its continuance until early summer already seems assured—we shall undoubtedly hear more of this proposal.

Civil Works Service Projects

As one phase of the Civil Works program, service projects are being initiated in Wisconsin which include, among others, health surveys, antitoxin administrations, public health nursing, etc. Wisconsin stands in the fortunate position of having Dr. W. A. Werrell of Madison as director of all service projects in this state. Again close contacts have obtained and Dr. Werrell has selected as an advisory committee to him in passing on questioned health projects, Dr. W. F. Lorenz, Dr. James Dean, and your Secretary.

By reason of the haste in endeavoring to make all projects effective at the earliest possible date, your Secretary has serious doubts over the accuracy of the final reports that may be made, if not over the actual surveys themselves. A questionnaire was just this week submitted to your executive officer for approval by an ex-student of the University who has taken a course in statistics and who is now employed on a C. W. A. project. The questionnaire dealt with the health of the people during the depression and such questions as the following are typical extracts:

"In your opinion did some people neglect their health during the past two and three years due to lack of money to pay for medical attention and hospitalization?

"In your opinion are there still many people neglecting their health due to lack of funds for medical attention?

"Have contagious diseases spread due to lack of medical attention during the past year?"

To appreciate the seriousness of the implication of such reports gathered on a hearsay basis by totally incompetent "statisticians" we must recall that presumably they will later be quoted in legislative halls as "official government surveys" and as having been made by federal funds under federal direction.

Even a proposed county wide survey proposes as a purpose of a survey of health conditions the following:

"From the information secured in this survey, contemplate the demands likely to be made on public and private agencies from a health standpoint, *and plan measures to meet these demands.*"

When we reflect that in the instant case the survey is to be under the official direction of relief agencies, such a statement in a plan proposed as a model for other counties causes your Secretary grave concern lest haste and inability to prepare data should disseminate erroneous information that will create a totally false but lasting impression upon the laity of this and other states.

Medical Service for Transients

As is known to the Council, conferences have been held with state officers and Society officials on the subject of providing the best medical service for the Federal transient homes in this state. Unfortunately the Industrial Commission has seen fit to insist upon naming a medical director for each such home, which plan would preclude the operation of that outlined by your State Society in which all willing members of the county society affected would operate under a chief-of-staff designated by the Society and acceptable to the Commission. Your Secretary, under the direction of the President, has communicated to the Industrial Commission the fact that a splendid medical service established under the Society plan at no greater expense cannot be secured if the Commission insists upon its position. No answer has been received to this communication at the date of this report.

Wisconsin General Hospital

At this meeting of the Council it is the pleasure of the executive officer to call attention to the fact that new rules and regulations relating to the admittance of patients to the Wisconsin General Hospital have become effective. Copies of such rules and regulations with a preliminary statement by the President of the University will be distributed at this Council meeting and will appear in the February issue of the Journal, except for the rules which will be mailed simultaneously with the Journal to each member of the Society. A more detailed report on this subject will be presented by President Seeger and members of his committee and your Secretary expresses his confidence that the report will meet with the approval of every member of the profession who has been concerned by some of the public aspects of the problem as it heretofore existed.

Special Legislative Session

The Wisconsin legislature is now convened in special session to consider a state law pertaining to the subject of liquor. Contacts have been made with all members of the Senate and Assembly to the end that any law passed shall not again include permits and permit fees for physicians and hospitals who necessarily require alcohol in their everyday practice.

It is possible that the call of the special session will be widened to comprehend additional subjects following passage of a liquor control bill. If this occurs it is likely that the entire subject of poor relief will be brought into the legislative session, requiring close attention to your Society officers.

An Emergency Period

This report is no effort to recite the many fields of individual work of your State Society that require continuous attention, the results of which are reported in some detail at each annual meeting. Your Secretary desires, however, to call the attention of the Council to the fact that we live in what might well be called, from an organization standpoint, an emergency period. A year ago the Council appropriated for the emergencies that might arise during the year the sum of $3,500 from the surplus. By careful management this appropriation was not called upon during the year. The Executive Committee recommends, however, that an appropriation of $2,500 from any surplus in the general funds of the Society again be made for the current year to be expended upon mail ballot of the Council forwarded at the request of the President and Secretary. This seems a wise provision to your Secretary and he commends the suggested appropriation.

The extent of the emergency and the demands that it makes upon the office of your State Society is testified by the fact that during the year of 1933, 120,000 pieces of mail were addressed in the office of the State Society. This means 10,000 pieces of mail a month of which some 5,000 represent the Journal and the addressing of The Crusader, but 5,000 represents bulletins to the membership and direct correspondence. In December, the daily personal mail answered by the Secretary was between sixty and one hundred letters a day. The part-time services of a public stenographer were needed almost continuously to supplement the services of the Secretary's one stenographic assistant.

The Secretary desires to take this opportunity to commend to the Council the loyal aid of the office personnel all of whom have responded time after time throughout the year to frequent calls for work that involved overtime. Without such faithful service some of the present accomplishments could not be reported.

Summary

While the Society operated during 1933 on the reduced dues of $12.00, it was not necessary to use any portion of the surplus of the general fund.

The budget for the current year as presented by the Executive Committee of the Council contains within itself an unappropriated surplus of $2,500. The financial standing of the Society is seemingly sufficient to meet any emergency that may occur within the year and at the same time to permit of still greater efforts.

That greater efforts must be made by the organization seems apparent to your Secretary in view of the distinct social trends of current legislation and social thought.

Your Secretary does not believe that he overemphasizes the importance of organizational activity when he says that we must not only stand ready to meet but actually anticipate in every possible way, regardless of immediate cost, the many phases of the social reorganization program. As so well stated by President Lewis of the American Medical Association "change is not synonymous with progress" and we must be prepared and actually in position to give to lay authorities the benefit of a guidance in medical matters that is based on long years of study and experience. Only in that way may we discharge the trust that a public responsibilty and an increased membership places upon us all.

Respectfully submitted,

J. G. Crownhart,

Secretary.

MEMBERSHIP REPORT

December 31, 1933

County Society	Last Year	This Year	Loss— Gain+	Delinquent	Deceased	Removed	New Members	Honorary
1st District—								
Dodge	22	21	— 1	1	--	1	1	--
Jefferson	29	32	+ 3	1	--	--	4	--
Waukesha	49	51	+ 2	1	--	--	3	1
Totals	100	104	+ 4	3	--	1	8	1
2nd District—								
Kenosha	39	38	— 1	--	--	2	1	--
Racine	61	60	— 1	3	--	1	3	--
Walworth	25	27	+ 2	--	--	--	2	1
Totals	125	125	----	3	--	3	6	1
3rd District—								
Dane	161	171	+10	4	1	4	19	2
Columbia	30	34	+ 4	--	--	1	5	--
Green	21	20	— 1	1	--	--	--	--
Rock	66	67	+ 1	6	1	1	9	--
Sauk	13	16	+ 3	--	1	--	4	--
Totals	291	308	+17	11	3	6	37	2
4th District—								
Crawford	7	7	----	1	1	--	2	--
Grant	32	29	— 3	5	--	--	2	--
Iowa	10	9	— 1	1	--	--	--	--
Lafayette	10	8	— 2	1	--	1	--	--
Richland	11	14	+ 3	--	--	--	3	--
Totals	70	67	— 3	8	1	1	7	--
5th District—								
Calumet	12	12	----	1	--	--	1	--
Manitowoc	35	37	+ 2	1	1	--	4	1
Sheboygan	52	52	----	2	--	1	3	--
Washington–Ozaukee	21	25	+ 4	--	--	1	5	--
Totals	120	126	+ 6	4	1	2	13	1
6th District—								
Brown–Kewaunee–Door	66	66	----	2	--	1	3	--
Outagamie	40	40	----	1	1	1	3	--
Fond du Lac	52	53	+ 1	--	2	2	5	--
Winnebago	59	57	— 2	4	1	--	3	--
Totals	217	216	— 1	7	4	4	14	--
7th District—								
Juneau	6	8	+ 2	--	--	--	2	--
La Crosse	52	52	----	1	--	--	1	2
Monroe	14	17	+ 3	1	--	--	4	--
Trempealeau–J–B	27	27	----	1	--	1	2	--
Vernon	8	8	----	1	--	--	1	--
Totals	107	112	+ 5	4	--	1	10	2
8th District—								
Marinette–Florence	18	20	+ 2	--	--	1	3	--
Oconto	8	10	+ 2	--	1	--	3	--
Shawano	11	13	+ 2	--	--	--	2	--
Totals	37	43	+ 6	--	1	1	8	--
9th District—								
Clark	11	11	----	--	--	1	1	--
Green Lake–W–A	11	11	----	1	--	--	1	--
Lincoln	13	13	----	2	--	--	2	--
Marathon	36	34	— 2	1	1	--	--	--
Portage	21	25	+ 4	--	1	--	5	--

County Society	Last Year	This Year	Loss— Gain+	Delinquent	Deceased	Removed	New Members	Honorary
Waupaca	15	17	+ 2	--	--	--	2	1
Wood	28	29	+ 1	--	1	--	2	--
Totals	135	140	+ 5	4	3	1	13	1
10th District—								
Barron–W–S–B	27	22	— 5	3	1	1	--	--
Polk	15	14	— 1	--	--	1	--	--
Chippewa	21	24	+ 3	--	--	--	3	1
Eau Claire–Dunn–Pepin	51	45	— 6	1	1	5	1	--
Pierce–St. Croix	23	21	— 2	1	--	1	--	--
Rusk	4	4	----	1	--	--	1	--
Totals	141	130	—11	6	2	8	5	1
11th District—								
Ashland–B–I	18	16	— 2	3	1	--	2	--
Douglas	30	26	— 4	3	--	2	1	--
Totals	48	42	— 6	6	1	2	3	--
12th District—								
Milwaukee	611	618	+ 7	33	4	1	45	--
13th District—								
Forest	5	7	+ 2	--	--	--	2	--
Oneida–Vilas	6	7	+ 1	--	--	--	1	--
Langlade	11	12	+ 1	--	1	--	2	--
Price–Taylor	7	8	+ 1	--	--	--	1	--
Totals	29	34	+ 5	--	1	--	6	--
Grand Totals	2,031	2,065	+34	89	21	31	175	9

7. **Report of the Secretary (continued).** It was moved by Stang–Blumenthal that the report of the Secretary be accepted. Carried.

8. **The Budget.** Upon motion of Smith–Pope it was the decision of the Council to discuss each item of the budget separately. After general discussion lasting over an hour, it was moved by Stang–Cunningham that the budget as prepared be approved as a whole. Carried. The budget follows:

Income

Based on an estimated 2,000 members (which allows for a possible decrease, though a further increase is expected) the income through dues will be $24,000. In addition to this the Society receives the $150 salary paid Mr. Crownhart as Secretary of the Wisconsin Hospital Association and the further sum of $1,180 as interest on bonds held.

The total estimated **income** is thus $25,130.

Budget

Item	1933 Budget	1934
A. Rent	$ 840.00	$ 840.00
B. Office (this includes all printing, postage, telephone, telegraph, office supplies, bulletins, and such miscellaneous items as the annual audit for Secretary and Treasurer, etc.)	2,400.00	2,750.00
C. Press Service (In 1933 this was handled partly in the office and partly out of the office. It is now handled entirely in the office)	1,325.00	500.00
D. Travel of Secretary and Assistant	600.00	1,200.00
E. Journal	2,400.00	3,000.00
F. Annual Meeting	1,800.00	1,800.00
G. Hygeia (to public officers and members of Legislature)[1]	270.00	270.00
H. Legal Services (See pages following for explanation of item)	750.00	600.00
I. Committee Expense	750.00	750.00
J. Salaries:[2]		
1. J. G. Crownhart[3]	6,000.00	6,000.00
2. Ruth Buellesbach	1,890.00	1,890.00
3. Ellinore Beck	1,530.00	1,530.00
4. Florence Ripley	1,530.00	1,530.00
5. G. H. Schroeder (Treasurer's Assistant)	270.00	270.00
6. Extra help (public stenographer's services)	-------	300.00

The following services were in the 1933 budget that are not required in 1934:

Committee on Public Policy	$3,600.00	-------
Secretaries' Conference	150.00	-------
Dues of 2000 members at $12.00		$24,000.00
Interest on bonds in General Fund		1,180.00
Salary of J. G. Crownhart as Secretary of Wisconsin Hospital Association		150.00
		$25,130.00
Budget		23,230.00
Unappropriated in 1934		$ 1,900.00

Editorial Board—See Budget Item E

The Journal, after paying its share of overhead and all costs of publication, is presently costing the Society in the neighborhood of $2,400 a year. This item is recommended to the Council at $2,400 for the 1934 Budget. The Editorial Board suggests that the appropriation be increased to $3,000 to permit more pages to be devoted to scientific articles.

Legal Services—See Budget Item H

During 1933, the Society expended its full budget of $750 for legal services. The budget for 1934 carries this item at $600. The legal services item comprehends both service to the Secretary in discharging his daily work, and answering questions of

[1] A standing appropriation already approved.
[2] All salaries were reduced 10% in 1933.
[3] The Secretary receives $1,200 from the *Wisconsin Medical Journal*. His total salary is $7,200.

component societies and members on legal phases of the practice of medicine. A careful file is maintained that the material is available for future reference. We very frequently find that in answering the question raised by one member that the subject matter requires legislative correction or that the answer is of sufficient importance so that all members should be apprised of it.

It would take more space than is possible to go into the details of the legal services during the year 1933 but the following items are abstracted as indicating the scope and value of the work:

1. Revision of our pamphlet Summary of Wisconsin Poor Relief Laws, approved by the Attorney General.

2. An opinion on the obligation of a physician to continue the treatment of a case when he finds noncooperation by the patient.

3. A question of income tax deductions permissible under the state law.

4. The right of druggists to treat the sick.

5. Effect of the N. R. A. upon physicians' employees.

6. Ownership of x-ray films.

7. Exemption of Sundays and legal holidays in the 24-hour period of notification of emergency treatment under the provisions of Chapter 165.

8. Effect of the Federal cotton processing tax.

9. Conference with the Commissioner of Insurance on opinion holding against plans for hospital insurance.

10. Legal requirements for starting hospital.

11. Conference with Industrial Commission on fee schedules under the Compensation Act.

12. Investigation of the National Discount and Audit Co., contract (a concern soliciting physicians throughout the state).

13. An opinion on non-disclosure of information necessarily obtained by treating the indigent.

14. Opinion concerning legal status of component societies in expelling a member.

15. Advice and counsel relative to powers of local health officers to conduct general campaign for inoculation of all citizens at city expense.

16. Interpretation of a section under the Compensation Act on requiring testimony of physicians.

17. Conference on Civil Works Administration regulations.

18. Conference on medical services in transient homes.

19. Investigation of reasonableness of medical panels under the Workmen's Compensation Act.

20. Conference on rules and regulations concerning Wisconsin General Hospital.

21. Examination of bills in special session with reference to use of alcohol by physicians.

22. Legal status of counter prescribing of the so-called hypnotic drugs.

23. Conferences on how to secure payment of accounts to some 400 members from a Wisconsin Insurance Company that has discontinued business.

24. Investigation of the powers of a county physician with reference to treating the indigent sick.

25. Investigation of the legal right of the Industrial Commission to reduce a physician's bill.

26. Investigation of whether a court will interfere with county society in expelling members.

Salary Data—See Budget Item J

	1928	1929	1930	1931	1932	1933
J. G. Crownhart	$6500	$7700	$8000	$8000	$8000	$7200
Florence Ripley	1560	1560	1620	1680	1700	1530
Ellinore Beck			1560	1680	1700	1530
Ruth Buellesbach				2100	2100	1890

The General Duties of *Florence Ripley* are:

1. Receives remittances from county secretaries, handles account books and remittances to state treasurer.

2. Issues membership certificates and handles all membership records.

3. Handles all correspondence between the state Society and the American Medical Association on membership.

4. Keeps addressograph records of membership, additional Journal mailing list, officers, and hospital mailing list records up-to-date.

5. Addresses by addressograph Journal mailing envelopes, envelopes for the mailing of the Crusader of the Wisconsin Anti-Tuberculosis Association to the membership only, and all bulletins. Also supervises mailing of weekly press service.

6. Corrects proof for the Journal.

The General Duties of *Ellinore Beck* are:

1. Handles all dictation of the Secretary (averages thirty letters a day).

2. Handles the extensive subject files, investigation files, and general files of the office.

3. Assists with the proof reading of the Journal.

4. Compiles the news items, society proceedings, deaths, and society records for the Journal each month.

5. Prepares, under general supervision of the Secretary, the final copy as it is to appear in the Journal.

6. Handles all advertising contracts of the Journal to see that the ads appear in the proper spaces and in the proper months.

The General Duties of *Ruth Buellesbach* are:

1. Prepares three radio talks each week and delivers them over a hook-up of Stations WHA (Madison) and WLBL (Stevens Point). Sends copy of radio talks to American Medical Association and other societies requesting to be kept on our mailing list.

2. Prepares the weekly press release of the State Society.

3. Acts as Executive Secretary of the State Woman's Auxiliary.

4. Does the research work assigned by the Secretary preparing data for the Society projects and investigations.

5. Represents the Secretary at constant conferences with Capitol officials to keep the Society posted on state and federal projects and plans.

8. **The Budget (continued).** In discussing salaries the Secretary retired from the room. After disdussion by all present it was the sense of the meeting that there should be no increases in salaries during the current year. It was moved by Dr. Gavin and variously seconded that in consideration of the fact that the Secretary had preserved for the Society $3,500 of the surplus, the expenditure of which had been authorized during the past year, his economies and efforts should be recognized by a bonus for the year of one-tenth of the amount saved —$350. Carried unanimously.

8a. **Hygeia.** When the Hygeia appropriation was reached members of the Council discussed how the value of this publication might be enhanced through a wider Wisconsin circulation list. After general comment it was moved by Sleyster–Smith that:

1. The Secretary is instructed to communicate to the officers of the state and county auxiliaries the endorsement of Hygeia by the Council of our Society and the House of Delegates of the American Medical Association, and

2. That the Council urges all proper activity by the Auxiliary to the end of increasing subscriptions to Hygeia in Wisconsin, and

3. That the Council suggests that in its contents will be found many suggestions for program material, and

4. The Secretary is instructed to forward a copy of his letter to officers of the county and state medical societies asking that it be called to the attention of members to the end that Hygeia may be placed on the reading tables of all members, and

5. Finally, the Secretary is requested to cooperate with the State Board of Health accepting the offer extended by Dr. C. A. Harper, Councilor and State Health Officer, to the end that ways and means may be devised for placing this educational publication in the schools of the state. Carried.

9. **Wisconsin General Hospital.** President Seeger reported in detail upon statement of policy of the Regents, and rules and regulations adopted by the administrative committee of the hospital interpreting this statement. This material appears elsewhere in this issue of the Journal. It was moved by Pope–Stang that the Committee authorized by the last House of Delegates be known as the "Committee on Coordination of Medical Services." Carried.

10. **Dues Waived.** Upon recommendation of the Executive Committee of the Council, it was moved by Stang–Blumenthal that pursuant to the By-Laws no further dues be required from Dr. W. H. Washburn, Milwaukee, a member for forty-six consecutive years. Carried.

11. **Authors Violating By-Laws.** The Editorial Board reports that it has found two members guilty of the violation of Chapter II, Sec. 3 of the By-Laws which reads "All papers read before this Society shall be its property. Each paper, when it has been read, shall be deposited with the Secretary. Authors of papers read before this Society shall not cause them to be published elsewhere until after they have been published in its Journal or returned by the Editorial Board. Authors who fail to observe this section shall be ineligible to appear on programs of the State Society for a period of five years."

The Editorial Board feels that the one penalty specified may be too severe and asks the Council to recommend to the House of Delegates that such sentence be changed to provide a penalty of "from one to five years in the estimation of the Editorial Board."

The Executive Committee of the Council recommended that favorable action upon this request be denied.

After discussion it was moved by Blumenthal–Sleyster that the Council do not recommend any change in the By-Laws to the House of Delegates. Carried.

12. **Annual Meeting Dates.** The Secretary reported that September 12, 13 and 14 appeared to be the most satisfactory dates for the 1934 meeting at Green Bay. Upon motion of Cunningham–Smith these dates were approved.

13. **Principles Affecting Health Insurance.** The Secretary called attention to the Council that members had received from the Society's office the mimeographed communication from the Board of Directors of the Medical Society of Milwaukee County suggesting approval for a set of principles concerning the general subject of health insurance. The Executive Committee of the Council recommended that this material be referred by the Council to the Executive Committee for study and a conference between the Executive Committee and Drs. Leland and West of the American Medical Association, with a report to be made to the Council not later than early spring. Upon motion of Smith–Heidner such procedure was adopted.

14. **Mail Ballots.** Upon motion of Stang–Blumenthal, the Council formally approved affirmative mail ballots on the following matters:

A. Part-pay members shall conclude payments for one year before part-pay privileges shall be extended for the payment of dues during a second year.

B. Accepting the report of the Auditing Committee of the Council that the annual audits of the Secretary-Managing Editor and Treasurer for the calendar year of 1932 are found to be correct and that they be accepted.

C. Outlining procedure for selecting orthopedic specialists to handle clinics for the Wisconsin Association for Care of the Disabled.

D. Acceptance of the special committee report on the Old Fort Winnebago Hospital.

E. Authorizing the President to appoint a special contact committee on Medical Care for Veterans.

F. Granting the Council Award to Drs. A, B, and C. (This award will be announced at the 1934 meeting.)

15. Medical Service for the Indigent in the Emergency. The Council received a resolution proposing a systematized method for the handling of medical relief in the emergency. This resolution was presented by a group of officers assembled in Madison in December to discuss the subject of medical care of transients. After a thorough discussion, it was moved by Dr. Blumenthal, seconded by Dr. Stang, that to avoid overlapping committees the Executive Committee of the Council be constituted a special committee to supervise administration of medical relief within this state during the emergency; and, second, that every county medical society be urged to establish special committees within the Society to coordinate local efforts, the method of selection to be left to the local society affected and the life of the committee to be until the emergency is at an end. Carried.

16. Emergency Appropriation. Upon recommendation of the executive committee of the Council it was moved by Stang–Schiek that the Council appropriate from any surplus the sum of $2,500 to cover emergencies during the year of 1934; this appropriation to be expended by a majority mail vote of the Council submitted upon recommendation of the President and Secretary. Carried.

17. Public Health Leadership. President Stanley J. Seeger, supported by the Secretary, presented in some detail the basic thought that we live in an emergency period and that medicine, if it wishes to discharge its fullest responsibilities to the public and to the profession, must now seek to formulate a comprehensive program for directing and correlating public health efforts through the medium of the County Medical Society. An appropriation of $10,000 from the surplus was suggested as the amount that might be needed during the first year of this effort, it being the thought of the President and the Secretary that the work might well be self-supporting thereafter. The President urged that no specific plan be adopted by the Council until a full time medical director could be secured and until such time as the director had had from three to six months in which to visit in other states and report to the Council in a special meeting on those methods that seem most likely to give to the profession a permanence of leadership in health activities such as would bring credit upon the profession and further advance to the public health. The President and Secretary emphasized the nature of the emergency and urged prompt action if the opportunity that they sensed was not to be lost to the profession.

The proposal was discussed by all present and at the end of an hour it was moved by Blumenthal–Stang that the Executive Committee of the Council report a plan as soon as possible for a mail ballot by the Council. It was moved by Sleyster–Gavin that the motion be amended to include an appropriation of $350 to the Executive Committee for the purpose of holding a meeting at Milwaukee at which authorities from other states might be invited prior to the report to the Council. The amendment was put and carried and the motion as amended was then adopted.

18. Delegate to Other State Societies. A letter from Dr. Harold Camp, Secretary of the Illinois State Medical Society states "Several of us have in past years discussed the old plan operating for many years, of one State Society sending official delegates to the meetings of nearby societies. It is quite obvious that through this procedure, it will give us the opportunity of receiving reports of other meetings to our mutual advantage. I am certain that our Society would encourage such a procedure and name an official visitor as our representative to attend your meetings, if you desire it, and favor such a plan. We propose to bring this up at the next meeting of our Council which will be held on January 3, 1934, and get the opinion of this executive group."

The Secretary suggested that the Society would receive greatest value from such contacts if the President-Elect be designated as the official representative at the meetings of the Minnesota, Iowa, Illinois and Michigan societies and further suggested that inasmuch as this travel was all out of state, that an appropriation of $200 be granted for the expense involved. It was moved by Cunningham–Smith that the proposal be placed on the table. Carried.

19. Medical History. The Secretary presented the thought that there was now within the state one who was exceedingly competent to write upon the subject of the old medical history of Wisconsin and urged that some action be taken at this time. It was moved by Smith–Blumenthal that the President, Chairman of the Council, and Secretary ascertain whether funds for this effort might not be secured from the State Historical Society and that in event that they were not so secured that these officers be authorized to appoint a committee for the purpose of soliciting funds necessary. Carried.

20. Executive Committee of the Council. Moved by Smith–Cunningham that the Chairman of the Council be authorized to appoint an Executive Committee of the Council to consist of the President, Chairman of the Council, Secretary, Treasurer, and two additional Councilors.

The terms of the two additional Councilors are to expire on January first of each year. It shall be the duty of the Executive Committee to (1) advise the President and Secretary on their request in matters of importance concerning their duties which in themselves do not warrant the calling of a special Council meeting but in which emergency action is essential; (2) to prepare the tentative budget of the Society, and (3) meet prior to each Council meeting for the purpose of making recommendations to the Council in the interest of expediting Council meetings and avoiding two-day sessions. Carried. The chair appointed Councilors Gavin and Blumenthal as the two representatives required.

21. **Communication from Minnesota.** The Secretary presented a letter from the Secretary of the Minnesota State Medical Association suggesting that a county society bordering upon Minnesota had been placed in false position by reason of a letter that its representative had sent county officials in neighboring counties in Minnesota stating the terms under which hospitals in the Wisconsin County affected would care for indigents from the counties affected in Minnesota. Moved by Smith–Blumenthal that the Secretary contact the Society affected for the purpose of clearing the misunderstanding. Carried.

22. **Wisconsin Anti-Tuberculosis Association.** Dr. J. F. Wilkinson, Chairman of the Special Council Committee to maintain contacts with the Wisconsin Anti-Tuberculosis Association, presented a written report. Upon motion of Blumenthal–Smith the report was received and the Committee continued for the year 1934.

23. **Child Health and Protection.** Councilor Blumenthal, as Chairman of the State Society special committee on Child Health and Protection, reported on the work of the Committee and on some of the difficulties that had been encountered in establishing a program which, by reason of operations through the county medical society, would work the greatest public benefit.

24. **New Charter.** After a statement by Councilor Stang expressing the wish of the local profession, it was moved by Stang–Gavin that a new charter be granted the present Eau Claire and Associated Counties Medical Society in the name of the Eau Claire–Dunn–Pepin County Medical Society. Carried.

The Council adjourned at 5:15 P. M.

Respectfully submitted,

J. G. Crownhart,
Secretary.

Approved:

A. W. Rogers, M. D.,
Chairman of the Council.

The Journal Book Shelf

BOOKS RECEIVED FOR REVIEW

Behind the Doctor. By Logan Clendening, M. D. With illustrations from contemporary sources, portraits, photographs, and original drawings. Price $3.75. Alfred A. Knopf, New York.

Food-Borne Infections and Intoxications. By Fred Wilbur Tanner, B. S., M. S., professor of bacteriology and head of the department, University of Illinois. First edition. The Twin City Printing Co., Champaign, Ill.

Syllabus of Psychiatry. By Leland E. Hinsie, M. D., professor of clinical psychiatry, College of Physicians and Surgeons, Columbia University; research associate in psychiatry, New York State Psychiatric Institute and Hospital. Price $2.50. State Hospitals Press, Utica, New York.

Medical Treatment of Disease. By Robert D. Rudolf, M. D. (Edin.). Professor of therapeutics in the University of Toronto. Fourth edition. Price $4.00. The University of Toronto Press. 1934.

The Adrenal Cortex. By L. R. Broster, O. B. E., F. R. C. S. (Eng.). Surgeon to Charing Cross Hospital and H. W. C. Vines, M. A., M. D. (Camb.) Pathologist, Charing Cross Hospital Institute of Pathology. H. K. Lewis & Co., Ltd., London, 1933.

Mental Hygiene in the Community. By Clara Bassett, consultant in psychiatric social work, division on Community Clinics, The National Committees for Mental Hygiene, Inc. Price $3.50. The Macmillan Company, New York.

The Technique of Contraception. By Eric M. Matsner. The Williams & Wilkins Company, Baltimore.

Treatment of the Commoner Diseases. By L. F. Barker, M. D. professor emeritus of medicine, Johns Hopkins University; visiting physician, Johns Hopkins Hospital, Baltimore. J. B. Lippincott Company, Philadelphia.

Blood Pictures. By Cecil Price–Jones, M. B. (Lond.). Third edition. Price $2.40. William Wood and Company, Baltimore.

Acidosis and Alkalosis. By Stanley Graham, M. D., Leonard Gow Lecturer on the Medical Diseases of Infancy and Childhood, University of Glasgow, and Noah Morris, M. D., lecturer in biochemistry, University of Glasgow. Price $2.75. William Wood & Company, Baltimore.

The Principles and Practice of Rectal Surgery. By William B. Gabriel, M. S. Lond., F. R. C. S. Eng., surgeon to St. Mark's Hospital for Cancer; surgeon to the Royal Northern Hospital. H. K. Lewis & Co. Ltd., London, 1932.

Sexual Impotence. By William J. Robinson, M. D. Eugenics Publishing Company, New York, 1933. Price $3.00.

Post-Operative Treatment. By George S. Foster, M. D. surgeon to The Lucy Hastings Hospital, Manchester, N. H. The Christopher Publishing House, Boston. Price $5.00.

The Treatment of Rheumatism in General Practice. By W. S. C. Copeman, M. A., (Cantab.) M. R. C. P. (London), Hon. physician, B. R. C. S. Clinic for Rheumatism, Peto Place. William Wood & Company, Baltimore.

The Principles and Practice of Otology. By F. W. Watkyn–Thomas, F. R. C. S., surgeon, Central London Throat, Nose and Ear Hospital, etc., and A. Lowndes Yates, M. C., M. D., London, honorary assistant surgeon, Ear and Throat Department, Prince of Wales Hospital. Price $8.25. William Wood and Company, Baltimore.

A System of Clinical Medicine. By Thomas D. Savill, M. D. Price $9.00. William Wood & Company, Baltimore.

Rose and Carless' Manual of Surgery. Fourteenth Edition. Revised by Cecil P. G. Wakeley, D. Sc. Lond., and John B. Hunter, M. C. Price $9.00. William Wood and Company, Baltimore.

Thomas Young, F. R. S. By Frank Oldham, M. A., B. Sc., formerly scholar of St. John's College, Cambridge. Edward Arnold & Co., London, 1933.

Modern Clinical Psychiatry. By Arthur P. Noyes, M. D., Superintendent of State Hospital for Mental Diseases, Howard, R. I. Cloth, $4.50 net. W. B. Saunders Company, 1934, Philadelphia.

A Short History of Surgery. By Sir D'Arcy Power, K. B. E., F. R. C. S. Eng., honorary librarian of the Royal College of Surgeons of England. John Bale, Sons and Danielsson, Ltd., 83–91 Great Titchfield St., London, W. I.

Fundamentals of Biochemistry. By T. R. Parsons, B. Sc. (Lond.), M. A. (Cantab.) Sidney Sussex College, Cambridge. Fourth edition. Price $3.00. William Wood & Company, Baltimore, 1933.

The Cure of Haemorrhoids, Varicose Veins and Ulceration, and Allied Conditions: by Modern Methods of Injection and Bandaging. By Stuart McAusland, B. A. (Lond.), M. D. Ch. B. (Liv.). Honorary physician, Hahnemann Hospital, Liverpool; in charge of varicose vein and haemorrhoid clinics. John Bale, Sons & Danielsson, Ltd., London.

Neuroanatomy. By J. H. Globus, B. S., M. D., associate professor of neuropathology and neuroanatomy, New York University and Bellevue Hospital Medical College; associate neurologist and associate neuropathologist, Mt. Sinai Hospital, New York. Sixth edition. Price $3.50. William Wood & Company, Baltimore, 1934.

BOOK REVIEWS

Any scientific publication reviewed in this column may be obtained for inspection. Orders for such inspection should be directed to the Medical Library Service, 424 N. Charter Street, Madison, Wis.

Colds and Hay Fever. By Frank Coke, F.R. C. S. William Wood and Company, Baltimore. 1933.

"Sneezing"—the title first chosen by the author for this small volume would seem a more fortunate selection.

It is difficult to determine whether Dr. Coke has written with the lay or professional reader in mind. His description of the normal function of the nose, to which the first chapter is devoted, is elementary to a high degree.

The same is true of much of the material in the other five chapters. These are entitled in order: Common Cold or Infective Coryza; Hay Fever, Other Allergic Causes of Sneezing, Paroxysmal Rhinitis and Chronic Nasal Catarrh. A different order might be suggested by the medical reviewer, placing the last chapter third with the infectious disorders in sequence followed by those believed to be allergic or hypersensitive in character.

However, the author departed from his first choice of title because, as he explains in the preface, he feared "the paper knives of our most serious profession" might not cut the leaves of a book on "Sneezing". He also says that the book aims to help the physician diagnose the causes of these complaints and offers him reasonably certain methods of treatment.

Whatever the title and for whomever the volume is primarily intended, the reader is impressed with the simple and easily understandable presentation of the etiology and symptomatology of these common conditions responsible for a truly high morbidity.

Considerable portions of each chapter are devoted to treatment, prophylactic, palliative, specific and non-specific. Many of the methods commonly used in the United States are mentioned. Much stress is laid upon others, particularly the use of certain drugs, not ordinarily prescribed by American physicians, and various procedures thought by many specialists in this country to be of little worth, and in some instances, even harmful to the patient. The discussion of hay fever including causes and methods of treatment is less authoritative for American than for British practitioners. This naturally follows, because the ragweed pollens which are the major offenders in the etiology of hay fever in this country are negligible factors in the production of the same disorder in England where the various grass pollens assume the chief role.

The whole text, written by an eminent specialist in his field, is probably better suited to English than American readers. W. A. M.

Diseases of the Heart. The methods for their diagnosis, prognosis, and treatment. By William D. Reid, M. D., F. A. C. P., assistant professor of cardiology, Boston University School of Medicine. Copies obtainable from author, 65 cents per copy. Address 510 Commonwealth Ave., Boston, Mass.

This book may, in a sense, be compared to a laboratory manual and is intended to bridge the gap between the formal textbook and the actual problems of diagnosis and treatment which present themselves when the medical student or general practitioner is confronted with patients in whom there is reason to suspect the presence of heart disease. Many textbooks dealing with the subject of heart disease describe in detail the various types of cardiac disorders under the usual headings of etiology, pathology, symptomatology, objective signs, differential diagnosis and treatment. The medical student, even though he has thoroughly familiarized himself with this material, may have difficulty in applying his knowledge to the study of the patient. Dr. Reid has attacked the problem from this angle and gives many practical hints as to the most effective manner of interviewing the patient, round-

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ing out the more essential points of the history, performing the physical examination, arriving at a diagnosis, prescribing treatment and making a prognosis. Special emphasis is laid on the duty of the physician to keep his patient encouraged and several cases are cited illustrating the author's ideas of "What to tell the patient". The subject of treatment is discussed under two headings, the "urgent" or emergency case and the "non-urgent" or more chronic type. The author should be particularly commended for his attitude toward the use of cardiac drugs. He advises giving whatever drug is indicated in sufficient doses to obtain the full effect or until toxic manifestations begin to appear. He points out the necessity for individualizing each case and prescribing treatment according to the particular indications rather than adhere to hard and fast rules previously laid down.

It is the opinion of the reviewer that a few important and well established points were omitted or given insufficient emphasis. In the first place, no mention was made of the simple procedure of measuring venous pressure, which is of distinct assistance not only in determining the presence and degree of myocardial insufficiency, but also in following the progress of a case under treatment. In discussing measures to be instituted in the cardiac emergency, no mention was made of the very valuable procedure of venesection which so frequently gives prompt and spectacular relief in cases of pulmonary edema and acute cardiac decompensation. The value of the theophylline-theobromine group of vasodilators in the treatment of angina pectoris was not sufficiently stressed. These preparations are very effective in coronary sclerosis and, if used continuously in proper dosage, will frequently accomplish a definite diminution in both the number and severity of seizures. The routine administration of quinidine was recommended following coronary thrombosis to prevent certain dangerous arhythmias. This, however, raises a serious question as to whether quinidine by its depressant action on an already badly damaged myocardium, may not produce more disastrous results than the relatively uncommon arhythmias which it is intended to forestall.

As stated by the author, this book is intended to supplement, not to replace, the textbook, and reference to a modern text is repeatedly advised throughout. The fact that the material is presented from the point of view of the physician who is confronted with the responsibility of making a diagnosis and prescribing treatment makes the book of practical value not only to the medical student but also the general practitioner who feels somewhat uncertain of his ability to attack cardiac problems and who desires some practical assistance along this line. C. M. K.

Teaching Methods in Medicine. The application of the philosophy of contemporary education to medical schools. By William Duncan Reid, A. B., M. D., F. A. C. P., assistant professor of cardiology, Boston University School of Medicine; Member, Evans Memorial, Research Division of the Massachusetts Memorial Hospital. Copies obtainable from author, $1.00 per copy. 510 Commonwealth Ave., Boston, Mass.

The author makes a plea for the application of modern methods of pedagogy in the teaching of medicine. He points out that up to the present no training in teaching methods has been considered necessary for teachers of medicine and that consequently such teaching ignores the fundamental principles so successful in other branches of education. A description of the curriculum of forty-seven medical schools is given, which permits the author to point out the desirability of avoiding over-crowding the curriculum and to pay more attention to the technic of teaching medicine. Such technic based on the recognized principles of education are described under the headings of Major, Minor and General. In part II of this small volume he makes suggestion for the organization of medical curricula. The book is of interest to medical educators and because of the suggestions and the bibliography cannot help but be of value to those desirous of improving present educational practices in medicine. J. S. E.

Surgical Anatomy. By Grant Massie, M. B., M. S. (Lond.), F. R. C. S. (Eng.). Assistant surgeon, Guy's Hospital; surgical tutor, Guy's Hospital Medical School; examiner in anatomy for the fellowship of the Royal College of Surgeons of England; second edition. Lea & Febiger Co., Philadelphia, 1933.

A surgical anatomy which presents concisely the anatomy with the clinical application. It contains four hundred and forty-one pages. There are numerous anatomical illustrations and schematic sketches to show relationships. The second edition has been carefully revised and numerous alterations and additions made. New sections are added, dealing with injuries of the carpus, infections of the hand, and the surgical approach to certain of the long bones. A section on the sympathetic nervous system is included.

It is a delightful book for refreshing the memory. E. R. S.

Nutrition in Health and Disease for Nurses. By L. F. Cooper, B. S., M. A., supervising dietitian Montefiore Hospital, New York City; Edith M. Barber, B. S., M. D., writer and consultant, Food and Nutrition; and Helen S. Mitchell, B. A., Ph. D., professor of physiology and nutrition, Battle Creek College, Fifth edition, revised. J. B. Lippincott Company, Philadelphia.

This volume presents a very simple treatment of its subject matter, which is however rather sketchy in the section on diseases. Probably too much space is devoted to the purchasing of food and to such items as food supply and food customs. This reduces the amount of material which would be interesting to nurses or hospital dietitians. The book would be of greater value to lay readers or to undergraduate students in home economics, and is not

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The Diagnosis and Treatment of Diabetes. By W. Wilson Ingram, M. C., M. D., Honorary physician and physician in charge of the Clinic for Diabetes Mellitus, Royal North Shore Hospital, Sydney; Honorary Director, Institute of Medical Research, Royal North Shore Hospital; Honorary Consulting physician, Hornsby and District Hospital, and G. V. Rudd, M. Sc. (Melb.) Research Biochemist, Institute of Medical Research, Royal North Shore Hospital, Sydney. Angus & Robertson, Limited, 89 Castlereagh St., Sydney, 1933.

This volume presents nothing essentially new to the American reader. The diets are moderately liberal in carbohydrate. The presentation is simple and could be easily followed by intelligent patients. The text is written for general practitioners rather than for diabetics to use. The most unsatisfactory feature is the use of type diets in which bread features largely, although it is "suggested" that part of this bread is to be substituted by a certain list of fruits and vegetables. There is no definite provision for the use of any of the bulky vegetable foods which are now considered so valuable as sources of vitamins, minerals, and bulk. E. L. S.

A Text-Book of Medicine. (By 141 American Authors) edited by Russell L. Cecil, A. B., M. D., Sc. D., professor of clinical medicine, Cornell University Medical College; associate attending physician, New York Hospital, New York City. And Associate Editor for Diseases of the Nervous System, Foster Kennedy, M. D., Professor of neurology Cornell University. Third edition, revised and entirely reset. Cloth, $9.00 net. W. B. Saunders Company, Philadelphia.

The third edition of the text by Cecil partakes of the same virtues and shortcomings as its predecessors. As stated in the preface, the subject of medicine is entirely too broad to presuppose comprehensive information on the part of any one author; yet the subdivision of a subject such as tuberculosis among seven different authors is clearly illogical and conducive to confusion. Any one of the authors in this section is an authority and thoroughly capable of exhausting the entire subject. Such unity of attack would further insure a more cohesive presentation. Doubtless the present plan has distinct advantages in rendering available to the student and physician the authoritative presentation of a given subject by a representative physician who has given particular attention to the same; and in this respect the text under discussion stands in an intermediate position between the older type of text-book of medicine and the larger systems. With the principle there is no dispute on the part of the reviewer; but the subject matter lacks a certain continuity and regularity of approach to be found in the earlier texts by a single author, usually supported in the specialties by collaborators.

Attention is called to certain incongruities and inaccuracies in the text. On page 15, for example, the author refers to phenacetin, pyramidon and aspirin by their proprietary names rather than to the official preparations—an example which we would not condone in our students. A lag in the information of text books is cited in the failure to note the work of Rovenstine and Waters in relation to the high atmosphere of oxygen which is obtained through the properly applied nasal catheter, on page 39. On page 67 camphorated oil is suggested as a stimulant of some value in scarlet fever, although it has for years been known that camphor in oil is not readily absorbable and has no value in this relation. The use of magnesium sulphate intravenously to relieve edema of the brain as suggested on page 68 must likewise receive severe condemnation by reason of the serious danger of the depression of medullary centers that may result from its use. The section on focal infections is entirely inadequate to the importance of the subject. Under Erythema Multiforme there is no mention of the visceral manifestations which may constitute so important a part of the picture. On page 139 the William Wood Gerhard spelled his name without the terminal "t". The perpetuation of the teaching of advantageous results from the use of chaulmoogra oil or its esters in leprosy will not be supported by the observations of recent years in the Hawaiian Islands. In the therapy of tularemia there is no mention of the recent reports of a curative serum by Foshay, a circumstance which might well be explained by the inertia of all medical texts. The same situation relates to the recent observations of Castle and Rhoads in the matter of the responsibility of a vitamine B_2 deficiency in sprue. In view of the sharp limitation of treatment in other sections of the text, it is difficult to condone the detailed dietary for the treatment of colitis. The chapter on pneumoconiosis is not especially exhaustive and certain inaccuracies have crept into the evaluation of the importance of x-rays in its diagnosis. Certainly it is hard to reconcile the statement that "an early pneumoconiosis is detected better by physical than by x-ray examination". Certainly this is entirely at variance with the ordinary experience. Then, too, no mention is made of the value of vital capacity determinations and fluoroscopy in establishing limitation of pulmonary elasticity from this process.

Obviously in a text of this type there will be marked inequalities in the space allottment and in the completeness of presentation of given subjects, a criticism inherent in the method; but conspicuous sections are numerous and detailed enough to satisfy the most critical, whereas other sections are peculiarly superficial. In the judgment of the reviewer the text is one of the best of the recent series in this field and well deserves its wide popularity and use among students and practitioners. Many of the criticisms above made are in unessential details; but the fact remains that the advertised "141 American authors" might to advantage be reduced many times in the interest of a uniform approach. W. S. M.

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The Story of Childbirth. By Dr. Palmer Findley. Doubleday Doran & Company, Garden City, New York.

The author has chosen a subject as old as the human race itself and presented it in a way that is not only illuminating but charming. The story of human reproduction is developed in all its phases from the earliest historical references through its various evolutionary changes up to the present scientific concepts. Especially noteworthy is his discussion of the old superstitions concerning menstruation, conception, maternal impressions, and the like. The status of modern obstetrics with all its developments and, at the same time, all its weaknesses is developed with a clarity and wisdom that is worthy of great praise. The value and attractiveness of the book are enhanced by the addition of 125 well chosen illustrations.

It is profoundly to be hoped that this book will be widely circulated not only among the medical profession but among the laity as well. The physician interested in obstetrics will find much of practical, as well as of historical, value in it. The laity in general will gain from it a better appreciation of the problems involved in human reproduction. The book should prove a mine of information to the expectant mother and cause her to face motherhood with a much clearer insight into the great epic in a woman's life. To all it will present anew the need for better obstetric education, training and practice, in the fight for which the author has been such a noteworthy leader. J. W. H.

Oral Surgery. By Sterling V. Mead, D. D. S., M. S., B. S., professor or oral surgery and diseases of the mouth, and director of research, Georgetown University Dental School. Price $12.50. C. V. Mosby Co., St. Louis, Mo.

The book as a whole is well written and although quite elementary, I would consider it an excellent book for a reference book for medical students. The chapters on diagnosis, surgical technique, emergency measures, fractures, infections of the cheeks, floor of the mouth and of the neck are especially to be commended. There are about 200 pages, extending from chapter 17 to chapter 28, which deal entirely with dental problems of such nature to be of more interest to a dental student or dentist than to a medical student or physician or surgeon who is not specializing in this particular field.

The chapters relative to cleft lip and cleft palate are well written and interesting reading. I criticize, however, the surgical techniques that are brought forth, because several have been described as still being in use which are absolutely obsolete and are condemned. The more recent advancements in the surgical treatment of cleft lip and cleft palate are not described. The time of choice for operation for the correction of cleft lip and cleft palate is just the reverse of what the Oral and Plastic Department of the University of Wisconsin recommends. The pre-operative management of infants with cleft lip and cleft palate and also the post-operative management is well written and many important procedures brought forth.

In summary, I would say that this book is one that can be well used as a reference book for medical students, under the supervision of one who has specialized in this particular field. V. B. H.

Handbook of Chemotherapy. By Dr. Viktor Fischl, departmental director of the Schering–Kahlbaum A.–G., Berlin, and Prof. Dr. Hans Schlossberger, Member of the Reich Board of Health, Berlin–Dahlem. English translation from the German by A. S. Schwartzman, A. B., M. D., Washington, D. C. H. G. Roebuck & Son, Publishers, Baltimore, Md., 1933.

This work, as indicated by the title, covers a number of established drugs with chemical relatives with respect to their action on infectious organisms of various orders.

A large amount of work is reported on synthetic substitutes for such agents as vermifuges, including carbon tetrachloride, oils, including chaulmoogra and substitutes, chenopodium, salicylates, thymol, santonin, pyrethrum, the anti-malarials, emetin and derivatives, the acridin derivatives, and other dyestuffs including the trypans and methylene blue, germanin (Bayer 205) and derivatives.

An excellent bibliography is given covering each section, which should be of a very great aid.

This section of the series of volumes should prove of very great value to investigators in the field of specific chemotherapeutics rather than to the practitioner, since it is not written from the standpoint of the practical application.

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CANCER CONTROL

(Continued from page 123)

disagreement; no recommendation is made but the points of disagreement are recorded. This material is being published in serial form in their journal. When the publications are completed they will be reprinted. We have had correspondence with the secretary and it seems likely that we can send a copy of this reprint to each member of our

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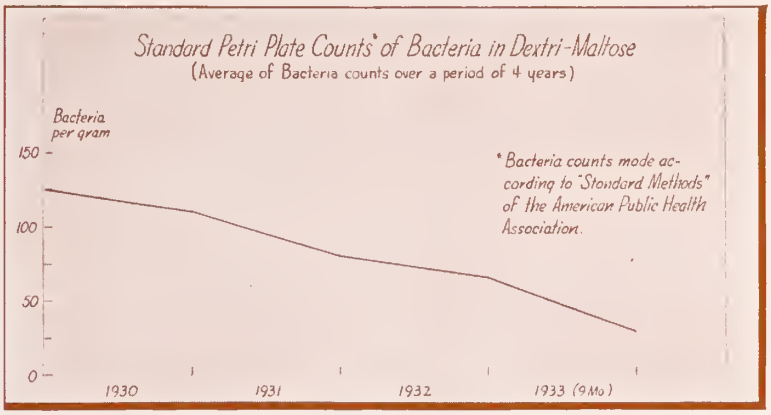

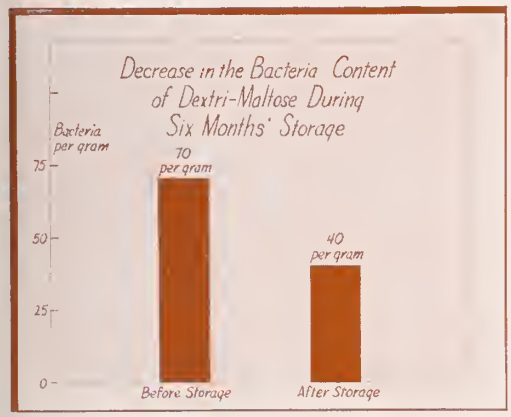

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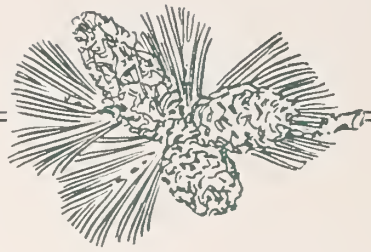

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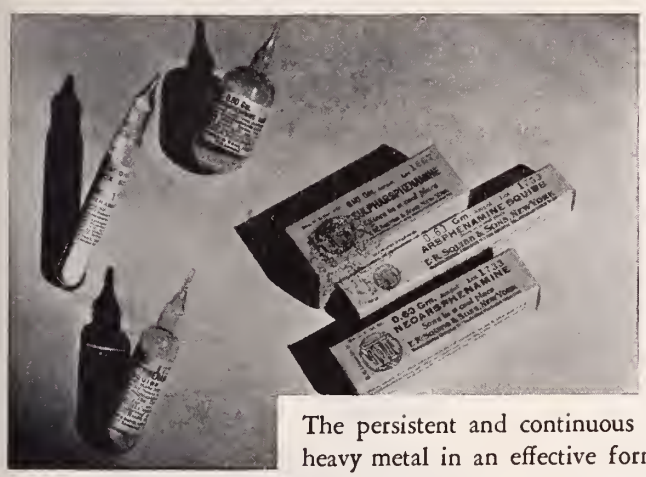

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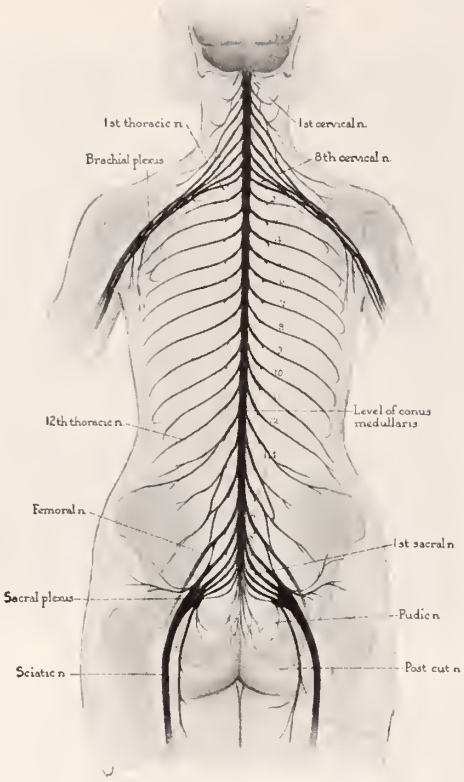

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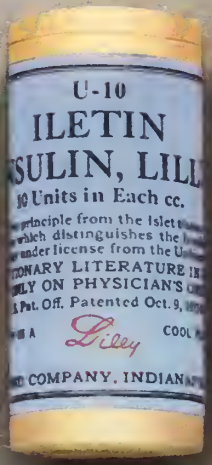

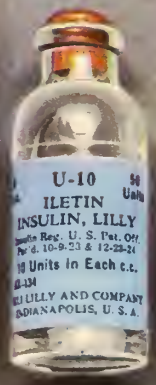

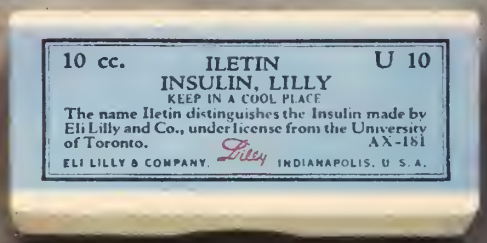

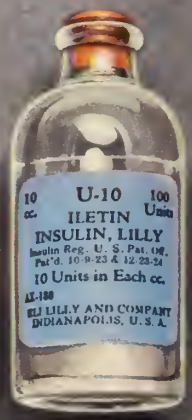

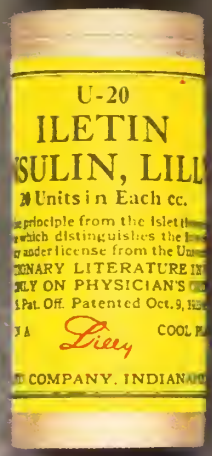

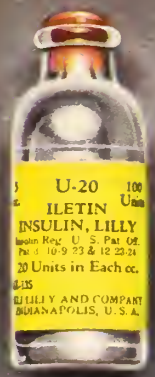

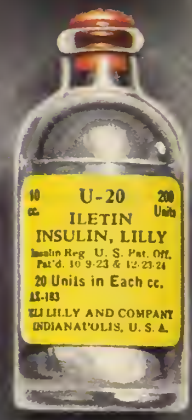

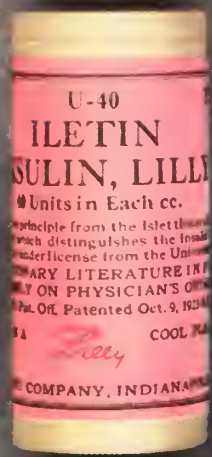

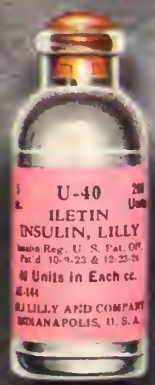

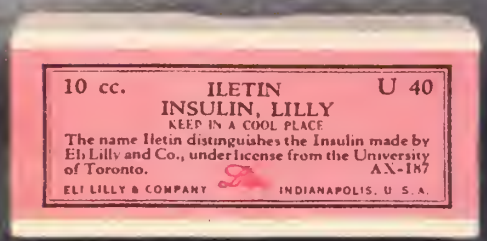

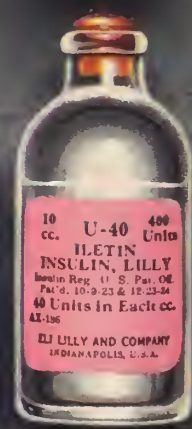

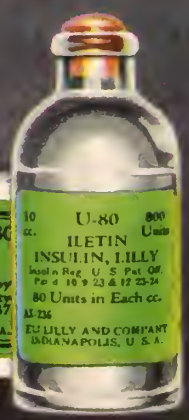

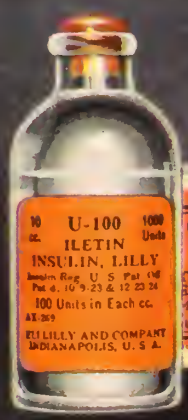

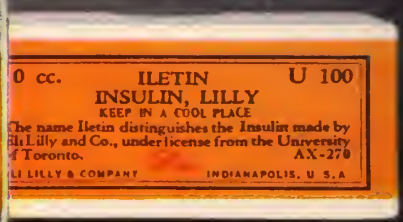

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THE WISCONSIN MEDICAL JOURNAL

Volume XXXIII MARCH, 1934 Number 3

Differential Diagnosis of Hyperthyroidism and Neurosis*

By A. L. MAYFIELD, M. D.
Kenosha Clinic, Kenosha

FEW diseases are more frequently mistaken for one another than hyperthyroidism and the so-called functional nervous disorders or neuroses. Often patients with hyperthyroidism are said to be suffering from some type of functional complaint and more often neurotic patients are called cases of hyperthyroidism. The greatest mistake is made in diagnosing hyperthyroidism when it does not exist. It is most important to distinguish between these two diseases in order to avoid unnecessary surgery, and because successful treatment of either depends upon correct diagnosis. If thyroidectomy is performed upon a neurotic patient, improvement may follow for a time due to the psychic influence of the attending surgeon, the hospital environment, and the attentions of relatives and friends. However, within a few months after the patient returns to his home surroundings and the cares and responsibilities of life, the old complaints recur. Then in addition to the pre-existing functional disability, the patient has the disappointment of having been subjected to operative treatment without relief. The only way in which operation can help this type of patient is by removing a state of anxiety which is dependent upon the belief that a goiter is present. It can not, and does not remove the underlying basic disturbance which exists in the constitutional make-up of the patient and not in the thyroid gland. Operative treatment of hyperthyroidism results in prompt and striking clinical improvement. Marked improvement or complete relief of symptoms within three or four weeks following thyroidectomy in true cases of hyperthyroidism is practically constant. If improvement does not occur, or if it is temporary, or occurs only after months of continuous complaining, the diagnosis of hyperthyroidism is not justified.

Pathologic changes in goitrous enlargements of the thyroid gland result in a disturbance of metabolism, which gives rise to the symptoms of hyperthyroidism. Clinically, hyperthyroidism is characterized by an elevation of the basal metabolic rate and its secondary manifestations of nervousness, tachycardia, tremor, loss of weight and strength, associated with a good or increased appetite, a sensation of increased warmth and an excessive amount of sweating. Exophthalmos and an enlargement of the thyroid gland may or may not be present.

The neuroses sometimes classified as examples of autonomic imbalance, neuro-circulatory asthenia, psychoneurosis, neurasthenia, and the like, develop most readily in persons who have inherited a nervous constitutional make-up, but may also develop in a person without such a predisposition. Pathologic changes in the nervous system, if such exist, are so slight that they are not demonstrable. Abnormal mental attitudes and mental reactions or functional disturbances of the sympathetic nervous system, the endocrine system, or the inherent constitutional make-up of the individual apparently are the sources of the complaints. Clinically, the disease is characterized by symptoms of instability of the involuntary nervous system. In the absence of toxic goiter practically all of the symptoms of hyperthyroidism may occur in cases of neurosis. Nervousness, a rapid heart, weight loss and weakness with inability to stand exertion, large prominent eyes, sweating, tremor, and a thyroid enlargement may be found in a neurotic individual. In spite of the resem-

* Presented before 91st Anniversary Meeting, State Medical Society of Wisconsin, Milwaukee. Revised to date of publication.

blance of this clinical picture to that of exophthalmic goiter, careful analysis and proper evaluation of the clinical findings will practically always result in a correct diagnosis.

Patients with hyperthyroidism can usually give a definite account of the onset and course of their disease, while patients with neurosis present an indefinite, generalized description of theirs. A family history of nervous instability and evidence of a nervous temperament during childhood or in early adult life is frequently obtained in neurosis, while the background and past history of a patient with hyperthyroidism are usually normal unless hyperthyroidism has developed in a patient with a neuropathic make-up. The toxic goiter patient generally has a self-confident and optimistic attitude toward life, which is much in contrast to the lack of assurance and pessimistic attitude of the neurotic patient. Hyperthyroid patients tend to minimize the severity of their disease, while neurotic patients are apt to exaggerate the importance of theirs.

The nervousness of exophthalmic goiter is attended by an objective type of restlessness consisting of a succession of rapid, purposeless movements of the hands and feet that distinguish the disease with a remarkable degree of accuracy from neurosis. Subjective complaints without objective findings, such as choking spells, tightness or a lump in the throat, and difficulty in swallowing, which come and go and are directly related to emotional states of the individual are characteristic of neurosis. Obstructive dyspnea due to a substernal goiter pressing on the trachea may occur in hyperthyroidism, but this is persistent in character and is explained by the presence of the goiter. The appearance of the patient with exophthalmic goiter suggests the presence of the disease. The staring or bulging eyes, rapid speech, and frequent gestures are unusual and distinctive. In contrast to this, the nervousness of neurosis is largely subjective in character, consisting of many distressing complaints which are not in accord with the physical findings. The restlessness and unnecessary movements of patients with exophthalmic goiter are lacking.

IMPORTANCE OF HISTORY

A history of loss of weight and strength associated with a normal or increased food intake is one of the most valuable diagnostic signs of hyperthyroidism. In no other disease except diabetes does such a relationship exist between the food intake and the body weight. Unless on the verge of a crisis, these patients eat large quantities of food without digestive disturbances and with normal or increased bowel movements. In neurosis, the appetite is poor or irregular and accompanied by a stationary weight or a weight loss in keeping with the food intake. Often constipation and dyspeptic symptoms are present. The neurotic patient suffers from a state of chronic fatigue rather than from marked loss of strength. Energy production is low in these patients and endurance poor. Leg weakness in hyperthyroidism due to degenerative changes in the quadriceps muscle is a specific finding and so is used as a test for this disease. Often the hyperthyroid patient notices leg weakness when climbing stairs or when getting into an automobile. Occasionally a fall occurs as a result of weakness in the legs. In testing for quadriceps weakness a patient with hyperthyroidism is able to step onto a chair only with noticeable exertion, while the patient with neurosis is apt to feel unable to take the step but does so without evident effort.

Tachycardia in hyperthyroidism is continuous, while in neurosis it is intermittent and influenced by emotional states of the individual. The slightest excitement may be followed by increased heart action which is intermittent; the periods of remission being attended by a normal or nearly normal pulse rate. The blood pressure findings in hyperthyroidism are of diagnostic importance. The pulse pressure increases with the severity of the hyperthyroidism, consequently it is usually higher than normal. As hyperthyroidism progresses a gradual hypertension develops, in contrast to the normal blood pressure readings found in neurosis. The tachycardia of hyperthyroidism is the only form of tachycardia in which the blood pressure remains elevated. A persistent tachycardia, together with an increased pulse pressure in the absence of aortic regurgitation,

is very strong evidence of hyperthyroidism. The heart in long-standing cases of hyperthyroidism shows evidence of degenerative change. Cardiac hypertrophy and auricular fibrillation never occur as a part of the clinical picture of neurosis; however, various abnormalities of rate and rhythm, such as aberrant beats, paroxysmal tachycardia, and sinus arrhythmia, may be found. If dyspnea is present in neurosis it occurs after emotional excitement rather than physical exertion.

In some cases of hyperthyroidism a thyroid enlargement is not visible. However, a palpable goiter is present in such a high percentage of cases of hyperthyroidism that a diagnosis of hyperthyroidism is rarely justifiable in its absence. A diffusely enlarged goiter of firm consistency is usually toxic, while a diffuse soft thyroid enlargement rarely produces symptoms. Nodular goiter may or may not be associated with toxic symptoms. The presence of a thyroid enlargement does not mean that the patient's symptoms have their origin in the thyroid gland. If a non-toxic goiter is present in a neurotic individual, often the patient's attention is centered upon it and the neurotic symptoms are attributed to it. While it is rare to see a case of hyperthyroidism without some evidence of a thyroid enlargement, on the other hand many nervous patients are seen with thyroid enlargements without any evidence of hyperthyroidism.

Bilateral exophthalmos is so distinctive of exophthalmic goiter that it is almost pathognomonic. However, exophthalmos may be absent during the first few months of the disease. In the absence of definite exophthalmos often a stare alternating with rapid blinking of the eyelids is present, which is also quite distinctive of the disease. The stare is usually accentuated during conversation or periods of mental or physical exertion. Exposure of the sclera, either above or below the iris, is of no significance. In true exophthalmos the sclera appears equally above and below the iris. The various other eye signs usually occur only in very obvious cases and so are of little help in establishing the diagnosis. The large, prominent eyes of the familial type seen in some neurotic patients do not have a retraction of the eyelids, which gives rise to the characteristic staring appearance seen in patients with true exophthalmic goiter.

Patients with hyperthyroidism complain of intolerance to heat. Due to an increased heat production, these patients feel too warm and have an excessive amount of sweating. They require less clothing and less artificial heat to maintain their body temperature than normal individuals or neurotic patients. Neurotic patients are usually cold-blooded individuals who often require some type of artificial heat to keep them in comfort. Their hands and feet are apt to be cold and clammy and increased sweating occurs only during periods of excitement. Recession of the fingernail beds at the distal extremities in exophthalmic goiter gives rise to an irregular dipping down of the matrix which is a specific finding in this disease. Recession of the fingernail bed does not occur in neurosis, but fingernail biting is frequent. A fine tremor of the hands is nearly always, if not always, present in cases of hyperthyroidism. Many neurotic patients have tremor, some continuously and others under the stress of emotional factors. The tremor of neurosis is slower and coarser than that of hyperthyroidism. It corresponds with the pulse rate in that it is variable and inconstant.

The use of iodine as a therapeutic test is of value in differentiating these two diseases. The anxious, staring expression and the nervousness and restlessness of exophthalmic goiter begin to subside within a few days after the administration of iodine. Later, an improvement in the appetite and ability to sleep is noted. An appreciable gain in weight and strength and a drop in the pulse and basal metabolic rates occur. Following the use of iodine, clinical improvement is definite in cases of exophthalmic goiter and characteristically lacking in cases of neurosis.

While it is true that a normal basal metabolic rate, except for an occasional rare case, excludes the diagnosis of hyperthyroidism, it must be remembered that a truly basal rate is not easily obtained. Decisions should not be made on narrow margins of elevation above normal. Often patients are seen with reported basal metabolic readings of plus 20

to plus 30 who obviously do not have hyperthyroidism. The rates reported in such cases are metabolic rates, but not basal metabolic rates. Too often the basal metabolic rate is used as the basis for the diagnosis of hyperthyroidism rather than as a confirmatory piece of evidence for or against it. This is an unsound procedure for a number of reasons. An increased basal metabolic rate may occur in other diseases. It is not characteristic of hyperthyroidism alone. The first few metabolic readings may be elevated in neurotic patients due to apprehension. Therefore, single determinations should not be relied upon as a positive indication of hyperthyroidism. Also, it should be remembered that errors may be made by the technician in making readings and calculations and that defects in the apparatus may lead to inaccurate results. The basal metabolic rate is a reliable test when accurately made and properly interpreted, but the basal metabolic readings obtained in general practice may lead to many erroneous conclusions. No matter how mild the disease may be, hyperthyroidism is always accompanied by definite clinical signs and symptoms which are dependable in establishing the diagnosis. The basal metabolic readings should be used only as corroborative evidence.

Acknowledgment is made for having expressed freely the characteristic clinical features of hyperthyroidism described by Dr. H. S. Plummer.

The Pros and Cons of Biopsy*

By PAUL F. DOEGE, M. D.
Marshfield Clinic, Marshfield

I SHALL endeavor to present to you a thorough discussion on the "pros and cons of biopsy", though to start I must confess that I may unconsciously lean toward its favor, so eager am I for the support of this very exact method of scientific diagnosis.

What is biopsy? Biopsy is the diagnostic, microscopic examination of a piece of tissue removed from the living body.

(a) I shall first touch upon the necessity of co-operation between our departments of surgery and pathology, and point out to you the handicaps that the former may present to the latter if care is not observed in several of the formalities of excision, preservation, etc., of the material in question. As surgeon and pathologist, I feel qualified to acclaim the value of a close connection between the two. They should go hand in hand: the one is vital to the other. The microscope may guide, stimulate or restrain the knife of the surgeon.

(b) I shall stress the importance of the pathologist's findings and ultimate conclusions. For this reason well trained men are indispensable, capable men, fully equipped with machinery to pass judgment on these excised bits of tumor tissue which hold the secret of the future for the patient. I shall emphasize the value of a pathologist in situ and hope that the coming years will find each clinic and hospital provided with a resident pathologist.

(c) I shall give some time to the voiced opinions of our opponents and proceed to outweigh their objections with manifold compensations to be derived through biopsy.

Whenever the pathologist and surgeon meet in joint discussion the mutual acclaim seems to be for more concentrated cooperation—that the one may not unknowingly act as a handicap to the other. Why is it so often difficult for the pathologist to make a clear and definite diagnosis of the material sent to him?

Perhaps the technique used in the excision of the specimen is erroneous, the surgeon having failed to penetrate to the base of the growth. On the other hand, the chances for exact diagnosis may be hampered by a lack of sufficient material for examination or a technician may have neglected to use the proper preservative fluid.

This piece of tissue which some years ago would have been relegated to the refuse tin has suddenly assumed a role of importance

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and only if intelligently cared for, can yield the desired information. To insure the success of biopsy the surgeon must abide by the laws set down by the pathologist.

Furthermore, these specimens should be accompanied by surrounding tissue, indicating their anatomical position to the pathologist. They must carry with them their own atmosphere and so help the diagnostician to correlate his ideas in relation to and in consideration of the adjacent normal tissue, exact location of tumor, age, sex and general physical condition of the patient. For example, a specimen for biopsy is removed from the border region of an assumed tumor; differentiation between a possible connective tissue tumor with leucocytic infiltration and an inflammatory tumor is difficult—even impossible.

During the 32nd convention of the Association of Surgeons of Northwestern Germany, Fischer undertook the comparison of the relative accuracy of diagnosis between surgeons and pathologists. The macroscopic diagnosis was compared with the histological study of the specimen. Nine hundred cases were cited. The following table shows a constant disparity between macroscopic and microscopic diagnosis and, therefore, unquestionably proves the importance of biopsy.

Diagnosis	Clinical %	Pathologist's %
Correct	63	86
Incorrect	11	--
Malignancy assumed	7	2
Malignancy questioned	7½	2
Malignancy not recognized	2½	2
Incorrect	10	3
Questionable	--	7

SURGICAL TECHNIQUE

Let us now consider the general surgical technique used in the making of biopsy. The present day medicine supplied us with varied means of reaching our conclusions in identifying disease: still diagnosis is not always evident, but more frequently enshrouded in doubt. The physician of today has allowed himself to become dependent on the numerous methods for diagnosis at his disposal and has in this way surrendered to some degree that keen sense of observation for which his predecessors were so loudly appraised. The modern physician finds indispensable that instrument for analysing the chemistry of the blood, of the urine and of the pathological fluids of the body. Then there is the x-ray, the cystoscope, endoscope and gastroscope. However, biopsy reigns supreme as our most valued means for correct diagnosis. Through the medium of our microscope we can ascertain the specific changes occurring in the tissues. Our therapeutic action cannot be determined by simple inspection and palpation of the part. There may be invisible pathology, slight changes in the continuity of the skin, of the mucous membrane, enlarged thoracic glands or there may be a diseased condition of the internal organs, indicated only by a secondary condition, such as anemia.

We must have available some one trained to examine and interpret tumor tissues. He must be equipped to bear this major responsibility of diagnosis through his knowledge of correct procedure in the field of biopsy, if it is to spell success, for it is from his deductions that the physician directs his course to cancer therapy or the more radical method of excision. The work of biopsy is greatly facilitated where there is present adequate laboratory equipment. Most of the hospitals in our state are lacking here. For data concerning this subject I refer to the survey of the American Society for the Control of Cancer carried out in Wisconsin, which reports that out of the forty-nine hospitals included in this survey there were eight without any laboratory equipment for the study of tissues and six with the apparatus but without the services of a pathologist, and in a majority of the hospitals the laboratory is run by a technician.

Let us now realize that out of the forty-nine hospitals which represent the largest and best in the state thirty per cent are without pathologists, a serious handicap to hospital efficiency. In Wisconsin, in particular, where the majority of our physicians and surgeons are from the rural districts, direct contact with the pathologist is rendered difficult. This is discouraging to the man who is eager for a diagnosis—he will avoid biopsy if possible and rather rely on his judgment, observation, experience or what have you. One guess is about as good as another

in many cases. The fate of the patient hangs on a thread of chance.

Only the larger institutions, organized on a sound financial basis, can possibly afford to have a pathologist at the side of the surgeon. How ideal it would be if every surgeon could boast of a micro-histological knowledge. The question of *when* or *how* to take a specimen for biopsy would no longer be a disconcerting problem to our suburban doctor. He may encounter small tumors of the skin, evidence of outer changes in the genitals of women, or growths in the larnyx. Should these be removed for biopsy? What are the dangers entailed, etc.? And so I come to our last and most important division—the "cons" of biopsy.

Until very recently the taking of a specimen for biopsy has been deemed harmless, inconsequential and even advisable in view of the compensations derived therefrom.

Of course, specimens should not be excised for microscopic study wherever true aseptic measures cannot be carried through. In this way we avoid infections—the primary objection of those opposed to biopsy. There are cases where aseptic measures are difficult, to begin with as for example, biopsies of the mucous membrane such as in the female genital tract.

Heynemann cites a case of three different women with insipient portio-carcinoma who developed septicaemia and died as a result of biopsy. Koenig accounts for a condition of infection in consequence of a biopsy from the mammary gland.

Another point frequently used by our opponents to biopsy is that the removal of a specimen often tends to irritate and stimulate the natural growth of a tumor. This does not include such tumors or irregularities caused by tubercular or syphilitic processes. We are all aware that wounding of tissue means subsequent regeneration, the success of which is largely influenced by the location of the injury. Furthermore, granulating tissues offer obstacles to this natural tendency of regeneration that healthy and normal structures do not present. Heidler observed that as a result of biopsy from the cervix there was a rapid spreading of uterine carcinoma and numerous metastases with resultant inoperability of the patient.

Holfelder in 1922 wrote that the members of his clinical staff had denied themselves the privilege of taking biopsies of cases of sarcoma because the prognosis in the healing of the wounds in these cases would be hampered by the excision of the part. Today this same writer has revised his opinion, so far as to say that experience has taught him in the meantime that in the majority of cases the taking of a specimen from a sarcomatous tumor can be effected without any ill result—providing, of course, that all acknowledged precautions are observed.

He emphasizes the importance, however, of immediate radical operation for removal of the part and regional lymph glands if the diagnosis of the pathologist indicates the necessity of such an operation.

I do not give credence to the assumption by some individuals that metastases may occur in other parts of the body dissociated with the tumorous region excised for biopsy. It is true that in every operation vessels are opened but as a general thing these are soon closed by thrombosis. Even if one or more tumor cells are carried into the blood stream they are not sufficient to establish a metastasis eleswhere in the body. It seems certain that other conditions must be fulfilled before metastases can occur. Simon maintains that an embolism transporting a tumor particle is too imperfect in its hypothetical make-up to start a new growth in a distant part of the body. Indeed, we will find an increased activity of growth in the given tumor after biopsy, for no excision can be performed without some injury. For this reason I wish to stress the absolute and paramount importance of warning the patient that a radical operation may be necessary when the diagnostic report is received. In this way the surgeon prepares his patient for drastic procedure and avoids delay. Quick procedure is our best assurance of success in the case of a necessary radical operation.

For the sake of completeness I must not fail to mention the experiments of Francis Carter Wood, conducted to prove the absolute harmlessness of biopsy. He vaccinated four hundred rats with Flexner Carcinoma,

which, as you may recall, is a type conspicuous for its tendency to create numerous metastases of the lung. Wood then took biopsies of the vaccinated tumor from one-half of the animals. They were killed several months later. He found no more metastases in the animals that had been subjected to biopsy than in the lungs of the control animals. In my opinion this experiment merely proves that rats with Flexner Carcinoma are immune to metastases as a result of biopsy. Wood also conducted an investigation for the determination of the effect of digital palpation of the Flexner Carcinoma in the rats. He massaged these tumors for two or three consecutive days and by this method produced twice as many metastases in the lungs as in those of the control animals.

He also found burning with a thermocautery to be extremely irritating and dangerous as the heat destroyed more tissue, leaving behind a condition of dilated capillaries and arteries.

These experiments do not necessarily prove that biopsy does not act as an agent for the embolic spreading of a tumor. The fact still remains that a certain category of tumors and specific granulations are stimulated to increased proliferation through biopsy.

The injurious results of biopsy can be appreciably diminished, if not entirely eliminated, by the timely performance of an operation. So I may repeat that biopsy should not be performed where a radical removal of the part with regional glands is not possible as soon as positive diagnosis is established by the pathologist. Bear in mind that biopsy supplants that tired feeling of uncertainty with definite knowledge.

The surgeon and the pathologist: *so* closely are they linked! For my training in both fields I am deeply grateful and may I take a moment of your time, gentlemen, to humbly express my deep gratitude for this education, made possible to me by my father, the late K. W. Doege. He foresaw the value of a pathological knowledge to the surgeon of today.

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Treatment of Intestinal Obstruction*

Involving Problems in Abnormal Physiology and Chemistry

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CASES of intestinal obstruction are commonly classified into simple mechanical obstruction, strangulation and "paralytic" or inhibition ileus. One must not forget that a simple mechanical obstruction can as the result of increasing intra-intestinal pressure produce in time as grave circulatory damage to the gut as does strangulation. One should also remember that a "paralytic" ileus may complicate the other forms of obstruction.

Until recently the symptoms of ileus were ascribed to a "toxemia" and for years almost all research was devoted to isolating "toxins". Only recently have we studied the disturbed mechanics of the bowel, the abnormal splanchnic circulation, and altered chemistry. As a result we have learned that symptoms are due to numerous factors such as: (a) Dehydration. (b) Demineralization. (c) Gut distention. (d) Nervous re-

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flexes. (e) Disturbances of the splanchnic circulation. (f) Disturbances of intestinal secretion and absorption. (g) Diminution of effective blood-volume. (h) Starvation. (i) Toxaemia. (j) Peritonitis.

Six to eight litres of digestive juices are normally secreted by the upper intestinal tract in 24 hours and are reabsorbed in the lower ileum and first portion of colon. Obstruction of the small bowel causes a considerable increase in secretion above the normal. When the obstruction is high these juices are lost because of vomiting and inability to reabsorb them below the obstruction. In obstructions of the lower ileum, where a considerable absorption occurs normally, this process is not materially interfered with until the intra-intestinal pressure has increased considerably. In other words, the loss of juices in lower obstructions from failure of reabsorption is not great during the first 48 hours.

The continued loss of secretions from vomiting and failure to be reabsorbed causes a depletion of electrolytes, particularly of Cl ions, with the result that demineralization, dehydration, blood concentration and alkalosis occur. It furthermore entails the loss of substances which normally are reabsorbed and which play a role in the physiology of various organs. For example, the pancreas secretes a substance by way of the duodenum which affects fat metabolism in the liver.

Meek has shown that distention of the gut stimulates a marked secretion of juices rich in NaCl. Both Ivy and Meek have shown that nausea, vomiting, anorexia and general depression which occur when a closed loop is distended, are due to afferent sensations mediated by the vagi. When this vagus influence is eliminated by denervation of the distended loop, the animals eat and remain well despite the distended loop, especially when given plenty of H_2O and NaCl. This experiment proves quite conclusively that the nausea, anorexia and general depression are of a reflex nature and that they are not due to the absorption of toxins as was formerly believed.

Gas usually collects nearest the obstruction and fluids collect to excess higher up. Gas-pressure plays an important role in producing circulatory damage to the gut. The small veins in the wall of the intestine are the first to be compressed. When the gas-pressure reaches a certain height complete circulatory stasis results.

Animals with simple obstructions live indefinitely when the circulatory damage from increased intra-intestinal pressure is prevented and the reflex effects of distention are avoided and inanition and fluid loss are compensated.

Intestinal movements, despite a certain autonomy of the intestinal musculature, are controlled by the Auerbach plexus, which in turn is influenced by excitatory impulses from the vagi and inhibitory impulses from the splanchnic nerves. It is these splanchnic nerve inhibitions that play such an important role in producing the inhibition or "paralytic" ileus which complicates cases of simple or strangulation obstruction, as well as peritonitis.

The irritation of the intestinal neuro-muscular mechanism caused by an obstruction results in hypermotility and intensive hyperaemia of the intestines. The active contractions of the circular layer of muscle favor the venous return of this increased amount of blood. As the distention increases and motility lessens the blood-flow in the intestines is retarded and splanchnic stasis results.

We have seen how intestinal motility influences blood-flow but we must not forget that blood-flow markedly influences motility. Circulatory damage from distention causes first a cessation of rhythmic movements and tonus contractions and last of all a fading out of the peristaltic waves.

Distention and lessened motility cause interference with the absorption of intestinal fluids. Disturbance of motility likewise affects the propulsion of gas, which is propelled with difficulty even normally. In addition to swallowed air, gas collects to excess because putrefaction and fermentation occur in an obstructed gut and because of interference with the diffusion process that normally goes on between the gases of the intestinal lumen and those contained in the venous radicles of the intestinal

wall. That relaxation of the circular layer of muscle occurs as a result of distention is quite apparent, but that considerable stretching of the longitudinal layer occurs with a resulting lengthening of the gut, is not sufficiently recognized. *The distended, lengthened gut being tightly packed in the abdomen, numerous kinks occur in the gas-filled portion of the gut nearest the obstruction.* These multiple obstructions or gas-traps complicate surgical treatment, especially when an enterostomy is done too close to the obstruction.

Because of the disturbances in the mechanics of the bowel, one should avoid every procedure that is likely to flatten or reverse the intestinal gradient, such as manipulation of distended gut, purgation, pituitrin, irritating enemas and ether anaesthesia.

The first portion of the jejunum fights harder against an obstruction than does the lower ileum, hence, this is one of the reasons why there is an earlier rise of intra-intestinal pressure in high obstructions. This early rise in intra-intestinal pressure in high obstructions is somewhat compensated by the decompressive effect of vomiting and by dilatation of the stomach.

Shock-Syndrome. Reduction in circulating blood-volume occurs as the result of splanchnic engorgement, dehydration and loss of blood plasma into the gut and peritoneal cavity. The loss of plasma proteins (colloids) causes a lowering of the osmotic tension in the capillaries; there occurs an escape of fluid from the blood into the tissues and capillary stasis results.

The first indication of diminished blood-volume is a fall in diastolic pressure, followed by a fall in systolic pressure. Cannon has emphasized the importance of keeping the blood pressure above the critical level. Fortunately the shock-syndrome is a comparatively late manifestation excepting in strangulation, because of the factors that tend to compensate for a diminishing blood-volume. A sudden break-down of this compensating mechanism may be the explanation for the severe aggravation of symptoms that sometimes follows some minor procedure and it is particularly apt to occur when the distended intestine is unduly manipulated. The hazards of diminishing blood-volume should be kept constantly in mind, and one should not assume that a falling blood-pressure and an increasing pulse rate necessarily indicate that the patient is "becoming toxic."

Starvation. In advanced cases, lack of nourishment, blood-concentration and capillary stasis produce pronounced metabolic changes.

Toxaemia. Some absorption of toxic substances probably occurs from the gangrenous gut of strangulation, but it is becoming more and more apparent that toxaemia ordinarily does not occur until peritonitis has set in. If any absorption of toxins occurs before peritonitis has started it probably is the result of the passage of toxic material directly through the gangrenous bowel-wall into the peritoneal lymph spaces.

Even though toxaemia does not cause symptoms in the non-strangulated cases until the terminal stages, one must bear in mind that peritonitis can result from perforation of gangrenous patches in advanced simple obstructions. Such gangrenous areas are the result of excessively high intra-intestinal pressure or the pressure of a tight constricting band.

TREATMENT

If the foregoing factors dealing with distention, disturbances of the splanchnic circulation and disturbances of intestinal secretion and absorption are accepted, then it is plain to see that our ileus cases will "slowly drown in their own excessive intestinal secretions" or they will "slowly bleed to death into their dilated splanchnic vessels" or they will succumb to peritonitis, unless vigorous and early supportive and surgical treatment are instituted.

The dehydration and demineralization are treated by means of normal saline and Ringer's solutions intravenously and by hypodermoclysis. In some cases these solutions may also be given through the decompression enterostomy. (Robertson and Bock have performed experiments which indicate that water absorbed through the digestive tract is more effective in restoring diminshed blood-volume than is normal saline solution given intra-venously).

The amount of saline solution to be given is determined by the extent of the hypochloraemia. It is to be administered until the blood chlorides approach the normal. Often a patient will require as high as 6 liters of normal saline solution during the first 24 hours. Such amounts do no harm unless there are either impending pulmonary edema due to cardiac decompensation or nephritis. Other guides to the amount to give are the patient's thirst, and the amount of urine excreted.

Large amounts of normal saline solution will increase the secretion of digestive juices, and for that reason one should accomplish decompression early.

The distention is treated by decompression, followed by the intravenous introduction of 15 to 50 cc. of a 20% hypertonic saline solution to stimulate propulsive motility. By stimulating the motility of the gut one improves the splanchnic circulation and hastens the absorption of retained intestinal fluids.

We possess in hypertonic saline solution a powerful therapeutic measure to overcome disturbed functions of the bowel that result from distention and splanchnic nerve inhibition.

It is the rush-waves that produce propulsive motility, and when they are absent or feeble, they are stimulated by hypertonic saline solution. (Read and Ivy) Physostigmine, and pituitrin affect the other types of intestinal contractions and are of no benefit in stimulating propulsive motility. Because of its effect upon motility, hypertonic saline solution is not to be administered until decompression has been obtained.

Hypertonic saline solution increases the osmotic tension in the capillaries and raises the capillary pressure by attracting H_2O from the tissues.

Starvation is treated by giving glucose intravenously. In neglected cases the basal heat production must be maintained by giving as high as 75 gms. of glucose every 1½ hours.

Treatment of toxaemia implies the prevention of peritonitis and avoiding the possible passage of toxins through gangrenous gut-wall into peritoneal lymph spaces. This is done by exteriorizing the damaged loop, excising it with a cautery and producing a complete fistula which can be closed at a later time. Excision followed immediately by an entero-anastomosis is rarely indicated because of its tremendous mortality.

In non-strangulated cases the obstruction should be removed if it does not involve much manipulation of gut. In many cases the augmented intra-intestinal pressure should be lowered by means of a Witzel enterostomy even though the obstruction has been removed. Only in very early cases does removal of the obstruction suffice to overcome the circulatory damage of distention. In complicated cases an enterostomy is the only procedure indicated. After the distention is relieved an obstructed gut will often right itself. Never should extensive suturing be done in a distended, oedematous gut,

In order to avoid handling of diseased bowel as much as possible, it is advisable to locate the collapsed gut first and to trace it upwards towards the obstruction.

Because airswallowing is an important factor in producing upper abdominal distention and because frequently there are excessive amounts of fluid in the distended stomach, a Levin duodenal tube is to be introduced through the nose and it can often be left in place for days despite any other surgical treatment that may have been instituted for the relief of obstruction.

The postoperative matting of intestinal loops as well as partial mechanical obstructions which occasionally follow a laparotomy on the 5th to 10th day are often satisfactorily relieved by non-surgical means, namely by suction through an indwelling duodenal tube.

Effort should be made to prevent the excessive loss of intestinal fluids through enterostomies. Wilkie noted that patients who had intestinal contents from above an obstruction introduced into the collapsed bowel got along better than those who lost their digestive juices through an enterostomy. It is an experimental fact that excessive loss of digestive juices over a period of days proves fatal even though fluid and chloride loss are supplanted, which implies that valuable substances besides water and salts are lost.

Provision can be made to save the intestinal fluids by doing an enterostomy of the collapsed gut. This is done by sewing a loop of collapsed gut into the lower end of the laparotomy wound and opening it in 48 hours by means of a trocar. The contents from the decompression-enterostomy can be transported into the collapsed gut by means of a syringe or pump. In cases of exteriorization fistula the efferent and afferent loops can be connected by means of a curved glass tube.

The choice of anaesthetic is important. The extensive manipulation of diseased bowel which results when ethylene and nitrous oxide are used is deleterious. Both Ivy and Blalock have produced a shock-syndrome by manipulating the intestines.

Ether is contraindicated because it does not permit of surgical intervention without considerable manipulation. It is a dangerous anaesthetic in shock and every case of ileus is a potential case of shock. The swallowing of air that occurs during its induction and from retching is a disadvantage. The danger of aspiration of gastric contents and the tendency of ether to reverse the intestinal gradient are also disadvantageous.

Spinal anaesthesia possesses many advantages. It produces considerable relaxation, and by paralyzing the inhibitory splanchnic nerves it stimulates propulsive motility. Its greatest drawback, namely, the fall in bloodpressure, is overcome by the administration of normal saline solution intravenously and ephedrine. The improvement of the splanchnic circulation effected by ephedrine probably plays a more important role in promoting gut motility than any direct inhibitory action of ephedrine on motility. The drop in bloodpressure which can occur with spinal anaesthesia is due to a decrease in vasomotor tone unassociated with an early decrease in cardiac output or bloodvolume. The marked relaxation of abdominal muscles that occurs with spinal anaesthesia lessens the intra-abdominal pressure and thus retards the splanchnic venous return. This objection to spinal anesthesia is over-shadowed by its many benefits, particularly the exposure it affords without abuse to distended coils of intestine.

Amebiasis: Its Clinical Aspects and Control*

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FOR several years in lectures to medical students, and in the Wisconsin Medical Journal (Relapsing Fever: Its Occurrence in a Non-Tropical Area—1931), the writer has emphasized the coming of tropical diseases to this section of the country through the following agencies:

(a) Airplane travel between the tropics and northern United States.

(b) Automobile travel of northerners to the South with much camping.

(c) Immigration of southern negroes, West Indians and tropical Americans to the northern states.

(d) Insufficient medical examinations of food handlers in public places. Such examinations should include a study of feces for amebae, typhoid bacilli and helminths.

(e) Modern refrigeration renders possible the bringing of vegetables from the tropics and subtropics, where they are not infrequently grown by fertilization with human excrement.

As director for several years of the medical service of a large industrial corporation in the heart of the South American jungle (Colombia), a region where amebic dysentery is a veritable sword of Damocles over the head of every person there, the writer had an unusual opportunity for studying the disease. An experience with over five hundred cases, including 17 cases personally studied in the Milwaukee area, is here epitomized for the benefit of those physicians in whom the recent dramatic epidemic has stimulated a new interest in parasitic diseases.

* Delivered before the Racine County Medical Society, December 21, 1933.

Etiology. Amebic dysentery is acquired by the ingestion of cysts of Entameba histolytica present in food or drink contaminated by persons in the active stage of the disease or by carriers showing no signs of the disease. These cysts pass through the upper intestinal tract and upon reaching the colon each develops into eight motile vegetative forms of amebae (trophozoites). White males, 20 to 35 years of age, show the highest incidence.

Pathology. Within 9 to 100 days after infestation the motile amebae invade the glands of Lieberkühn of the colon, multiply by direct fission and elaborate cytolytic enzymes which cause infiltration, edema and excavation of the submucosa with necrosis of the overlying mucosa. The latter may hang in shreds in the lumen of the gut or be cast off in the discharges. The small elevated openings of the undermined ulcers are usually plugged with a blood clot which is seen through the proctoscope to be surrounded by a reddened hemorrhagic or petechial areola corresponding to the extension of the undermined area. Healing is by granulation and fibrosis of the wall of the ulcers, often with marked thickening of the gut and occasional partial obstruction.

Symptoms. Acute dysentery—The patient who is usually an adult rather suddenly develops a dysentery with 5 to 40 bloody mucoid stools, colicky pains and abdominal tenderness. The stool contains more fecal material than does that of bacillary dysentery, in which the stool contains more mucus, water and pus. There is much tenesmus, the patient often wishing to remain on the bed pan continuously. The appetite is usually good and there is rarely much nausea. Fever up to 103° F and a leucocytosis of 8,000 to 20,000 with eosinophilia (10 to 20 per cent) are common.

With proper treatment about 30 per cent of cases recover. The remaining 70 per cent pass on into the chronic state and not infrequently become lifelong invalids.

Chronic Amebiasis. This is characterized by intermittent attacks of dysentery which resemble acute dysentery but are less severe. These exacerbations or relapses are usually brought on by chilling of the body, over-exertion, alcohol or errors of diet. Extreme emaciation and cachexia are seen in cases of long duration. Tenderness of the colon is often present between the attacks.

Masked Type. Many infested persons never show acute dysenteric symptoms but may complain of chronic, indefinite gastrointestinal sensations. In the tropics such a history is always suspected as being due to amebiasis. These patients usually constitute the "carriers" of the disease and are a great menace to the community.

Such individuals are very liable to be operated upon for supposed appendicitis or cholecystitis due to the localized spasm and tenderness of the abdominal wall over the ulcerated portions of the colon.

LABORATORY DIAGNOSIS

Acute stage. It is preferable to have the patient report at the laboratory, although feces passed within an hour and kept warm can be used.

A small portion of grayish or bloody mucoid or purulent material is picked out of the soft warm stool, placed in a drop of warm water on a warm slide and a cover glass applied. Typical actively motile vegetative forms of Entameba histolytica are 20 to 40 microns in diameter and show a clear hyaline ectosarc at the periphery, clear pseudopodia, a nucleus, contain various phagocyted erythrocytes, and practically all the ameba of a given specimen are of the same size.

Sometimes amebae are not readily found, even with several examinations, and it is then advisable to give the patient a saline cathartic to cleanse the plugs from the mouths of the ulcers so that the amebae may gain access to the lumen of the gut and appear in the stools. A proctoscope is very useful in obtaining material direct from the depths of ulcers in the lower bowel. No case should be pronounced negative until at least four examinations of the stools have been made.

The Entameba histolytica should not be confused with the Entameba coli, a common inhabitant of the human colon, which is sluggishly motile, presents a prominent nucleus, large numbers of engulfed bacteria

but practically never contains red blood cells or exhibits a clear ectosarc.

Chronic Stage. In the formed or solid stools motile amebae are practically never seen. Diagnosis now depends upon finding the cysts. Ordinarily it suffices to emulsify a very small particle of the feces in a drop of water on a slide, apply a coverslip and locate the cysts with low power of the microscope and subdued light and then study them with the high dry lens. A drop of iodine solution mixed with the feces before applying the coverslip will stain the glycogen granules of the cysts and make them easier to study.

In cases of a negative examination with the above method the cysts may be concentrated. The hard stool is emulsified in 15 parts of water, strained through two layers of gauze, diluted with ten parts of water and centrifugalized for 20 seconds. The supernatant fluid is poured off, an equal amount of water added and centrifugalized again, and this is repeated until the fluid comes off clear. A small amount of sediment is placed upon a slide and studied as above.

Cysts of Entameba histolytica are 7 to 15 microns in diameter, do not show a double hyaline peripheral ring, and four nuclei can be seen at different depths of the cyst by fine focusing of the high dry lens. Entameba coli cysts are larger, 15 to 20 microns in diameter, have a double ring at the periphery and contain eight nuclei.

The cysts of Iodameba are the same size as those of Entameba histolytica and contain but a single nucleus.

Repeated examinations may be necessary to demonstrate cysts as a single examination will reveal only 30 per cent of cases where cysts are actually present.

The pre-encystic forms of amebae, the cysts of Giardia, Chilomastix and other flagellates may be confused with cysts of amebae. Their identification is the work of an experienced protozoologist.

Staining Methods. The iron hematoxylon method may be used to stain smears for permanent preparations and for study of minute details. Its satisfactory use requires much experience.

Complement Fixation Test. This method has been described by Craig and is useful when carried out by workers specially trained in its application.

Cultures. In the hands of very experienced workers cultures of material taken from the colon, abscesses of the liver and other organs, sputum, etc., may be useful in diagnosis. It is not a method for the occasional worker. A nutrient agar to which an infusion of liver is added and the top overlaid with dilute inactivated blood serum may be employed. Cultures rarely produce a positive growth of amebae in cases where the stool examination is negative.

Inoculation of the suspected material into the rectum of a kitten is practicable where other methods of diagnosis fail. The animal develops diarrhea in a few days in positive cases.

X-ray Examination. In amebiasis of the ascending colon the caecum may be shortened and raised up out of the iliac fossa due to spasticity, diffuse inflammatory infiltration and fibrosis. There may be narrowing of the lumen as a result of marked inflammatory thickening of the wall. Irregular diffuse filling defects may be observed in sites where there is considerable damage to the mucosa, especially in the ascending colon, hepatic and splenic flexures, sigmoid and rectum. The ileocaecal valve remains open due to the inflammatory thickening of the colon around it. Amebiasis must be differentiated from chronic hyperplastic tuberculosis of the caecum and colon.

Differential Diagnosis. Amebic dysentery is most often confused with bacillary dysentery, with which it sometimes coexists. The bacillary type is more acute, self-limiting, febrile (105° F), markedly toxic, with an incubation period of 2 to 7 days. Leucocytosis is around 12,000. Five to ten or more abundant daily stools contain much mucus, water and pus (chiefly polynuclear leucocytes) and dysentery bacilli, but little fecal material. Bright red blood is seldom seen due to laking of the erythrocytes. Large monocytes containing phagocyted red blood corpuscles should not be mistaken for Entameba histolytica! The mucous membrane of the colon is diffusely inflamed, a fibrinous

pseudo-membrane forms which is cast off in pieces leaving shallow, "clear-cut", transverse, serpiginous raw ulcers. In amebic colitis the entire mucosal surface is not involved there being islands of normal mucosa among the ulcers. Complications in the bacillary type are rare (arthritis, neuritis, stenosis of colon). The disease is spread like typhoid, chronic carriers being rare, and is more common in younger individuals.

COMPLICATIONS

Liver Abscess—Entameba histolytica not infrequently enters the portal circulation and sets up abscesses in the liver, usually within two months but sometimes years after the dysenteric attack, and even in cases without a history of dysentery. Such abscesses are more often single ("solitary abscess") in the right lobe and sometimes reach the size of a cocoanut. Multiple abscesses may occur. The x-ray seldom shows them up very well but the fluoroscope is useful in studying fixation of the diaphragm. On aspiration the pus rarely contains amebae as they are only found in the ragged granulating wall of the abscess where they can obtain oxygen from the living tissue.

In small abscesses aspiration with a needle with injection of dilute solutions of emetine into the abscess may be tried. While it is possible that these may be cured by repeated courses of emetine intramuscularly over a long period such a method of treatment can not be relied upon. Insertion of a drainage tube is usually necessary. After drainage the new pus from the abscess contains amebae in large numbers. Only motile amebae are found in these abscesses, never cysts. The surgical mortality of high abscesses pointing under the diaphragm is around 30 per cent.

Emetine may be useful in stopping an incipient abscess and should be used in all such cases. Liquefaction of the contents of an abscess may be long delayed so that aspiration fails to diagnose them. Amebic abscesses are usually symptomless but mixed infection may cause chills and fever.

A liver abscess may rupture into the portal and hepatic veins or vena cava, peritoneal cavity, stomach, intestines, pericardium, pleural cavity or lungs.

Lung Abscess. These usually arise by direct extension through diaphragm of an amebic abscess of the dome of the liver or through invasion of the inferior vena cava by amebae from the liver abscess. The amebae may also enter the general circulation directly from an ulcer of the rectum and be filtered out in the lungs. When lung abscesses discharge their contents into a bronchus the typical "anchovy sauce" sputum contains motile amebae. Lung abscesses may occasionally be made to close up with repeated courses of anti-amebic treatment but surgical drainage is usually necessary.

Primary abscesses may occur in the brain, spleen, joints, testes, bladder, kidney, skin and many other situations.

Perforation of the Bowel. This is not infrequent in amebic dysentery and carries a high mortality. The tropical practitioner constantly watches for it in all cases of amebiasis, acute or chronic. Perforation may occur during the first few days of the disease or years afterwards. Laparotomy is indicated.

Hemorrhoids. The rectum is a common site of amebic localization, chronic cases usually being attended by a marked inflammatory thickening of the gut and development of granulomata grossly resembling carcinomas, being sometimes operated upon by mistake. The interference with the venous return flow often produces luxuriant hemorrhoids, which promptly recur after operation. Treatment of the amebiasis previous to surgery is very essential.

Hygiene. Same as for typhoid. The water supply must be pure, even boiled in doubtful instances. Ordinary chlorination of water kills the vegetative forms of amebae but not the cysts. As city water supplies are almost always free from fecal contamination amebic dysentery is rarely conveyed in this way, but should always be investigated. The Chicago epidemic is now thought to have been water-borne. Early and thorough disinfection of fecal matter in 1:200 cresol solution is required. Prevention of infection of flood by flies is important. Vegetables fertilized with human manure often transmit the cysts, so that all suspicious veg-

etables should be thoroughly cleansed and well cooked.

Carriers must not be allowed to act as food handlers ever! They should be thoroughly treated and reëxamined once a month for four months, and every six months thereafter for life. The same holds for persons who have had amebic dysentery. Craig estimated that 1,200,000 persons in the U. S. are infested with Entameba histolytica, i. e., approximately 10 per cent of the population!

Strict sanitary regulation of all public places where food is prepared, with provision of adequate toilets and wash bowls and enforcement of regulations concerning personal hygiene on the part of the kitchen personnel. When a case appears in a family every member of the household should be examined.

TREATMENT

Acute Dysentery—Rest in bed is imperative during the acute stage. Emetine hydrochloride, ½ grain twice daily by intramuscular injection, will usually relieve the severe pain, tenesmus and bloody discharge within four to six days. It should be continued in ½ grain doses daily until a total of 10 grains have been administered. It must now be stopped and over an interval of ten days 4 grains of chiniofon (iodoxyquinolinesulfonic acid, yatren, anayodin) or vioform administered thrice daily. Emetine-bismuth idodide, 1 grain, or alcresta ipecac (enteric), 5 grains, twice daily after food, may now be given over the third period of ten days, after which it is discontinued and another course of emetine and of chiniofon carried out as above.

After the courses of treatment outlined above are carried out stovarsol (acetarsone) or carbarsone, 5 grains, three times daily for seven days, or two intravenous injections of neoarsphenamine, 0.6 gram, seven days apart are given. These courses of arsenicals may need to be repeated various times.

If the tenesmus and pain are unusually severe, opium (paregoric) and large doses of bismuth subcarbonate may be administered until relief of symptoms is obtained.

Diet. The same as for typhoid during the acute attack of dysentery. Proteins should be stressed and carbohydrates kept at a minimum. Keep down the roughage. Milk (2,500 cc. daily), lime water, egg white, beef juice, milk toast are useful. After the acute attack is over, a soft diet with a gradual return to full diet. Alcoholics and foods difficult of digestion or which do not agree with the patient are forbidden. Overeating will often cause a relapse!

Warning: By following the above routine of treatment, symptoms of emetine poisoning will usually be avoided. However, some individuals are susceptible to even small amounts. During administration of emetine one should watch for diarrhea, peripheral neuritis, rapid pulse and loss of weight. As emetine is cumulative the patient should not sit up suddenly in bed or be allowed to exert himself except gradually when permitted out of bed. Cardiovascular disease is usually a contraindication to the use of emetine.

During pregnancy only one-half the daily amount of emetine recommended above should be given but continued until a total of 10 grains are taken. It is also advisable to use smaller doses of all drugs.

The treatment of acute amebic dysentery is usually so spectacularly successful that it is often difficult to secure the continuous cooperation of the patient in carrying out a full course of treatment, which is essential to prevent relapses and the development of the chronic state.

If the patient becomes "needle shy" because of painful indurated areas at the sites of injections, the emetine may then be slowly given intravenously in dilute solution.

Patients with acute amebiasis stand surgical operations poorly!

Chronic Amebiasis. The course of treatment outlined for acute dysentery may be repeated at intervals.

Enemas of chiniofon, 300 cc. of a 3 per cent solution, retained 5 to 8 hours, may be given daily. Enemas should always be preceded by saline catharsis or by a cleansing enema of 2 per cent sodium bicarbonate to cleanse the plugs from the mouths of the ulcers so that the medicament may gain access to the depths of the ulcers. The hips should be elevated so that the enema may reach all parts of the colon. Quinine bisul-

fate, 1000 cc. of a 1/5000 to 1/1000 solution, is probably as effective as chiniofon. It should only be retained 30 minutes. Enemas are specially indicated if an extensive chronic bacterial infection has become superimposed upon the amebic colitis and interferes with healing of the lesions.

Carriers. In treating carriers oil of chenopodium, 2 grams in castor oil 30 cc. is given at a single dose, and may be repeated at intervals of three weeks. A course of enemas of chiniofon is useful as this drug acts specifically on the cysts. Occasional courses of treatment as outlined for acute dysentery should be administered. Alcohol is interdicted. Carriers are usually very difficult to "sterilize".

Appendicostomy is sometimes indicated in chronic dysentery where the amebae have become emetine-fast or when the patient fails to respond to other treatment. The colon may thus be cleansed and local medication (chiniofon) injected through the appendiceal opening. This will often clear up the infestation in the caecum when it can not be reached well with enemas.

Caecostomy is at times required to give the colon complete physiological rest in cases where all other treatment has been unavailing. It has cured many cases, especially those with hemorrhoids and amebic granulomas in the lower bowel.

No particular blame should be placed upon northern physicians for failing to diagnose cases of amebiasis in the past, because tropical medicine has not been adequately emphasized in the medical schools. However, all physicians should now familiarize themselves with the exotic diseases that are being increasingly brought to these latitudes in order to check their spread by early diagnoses in incipient cases. The control of such diseases is largely in the hands of the general practitioner since he is the man who will see them first. To paraphrase a popular expression, physicians generally should become more "tropical disease minded".

Prophylaxis of Birth Trauma

Some Commonly Neglected Factors

By JAMES W. McGILL, M. D.
Superior

THE adage that "familiarity breeds contempt" is pretty generally applicable, even in the realm of obstetric procedures. It seems advisable to stress, from time to time, some of the things that are or should be classed as familiar in order that their importance should not be lost sight of. Neither originality nor novelty are claimed for this presentation; it is merely a re-introduction of well known but not always well heeded practice.

Nor can the entire field of birth trauma be covered in so short a discussion. It is the purpose of this writing to set forth but three factors that are contributory to maternal injury in delivery.

The introduction of the forceps into the armamentarium of the obstetrician was little less than a godsend; and it has unquestionably been the means by which many lives, both fetal and maternal, were saved. But it is not by any means a harmless instrument; and while we are alive to its many advantages, we must not be blind to its very evident dangers, to both mother and baby.

It is not the purpose of the writer to discuss the effects of forceps delivery on the fetus; that is a study in itself. It is my intention to do little more than to indicate some of the serious injuries done to the maternal organism by the incorrect exhibition of forceps, first by means of faulty application, and second, by their incorrect use after application has been made.

A brief discussion of correct forceps application will not be out of place. The blades of most of the common types of obstetrical forceps, exclusive of the Kielland, have two distinctive curves; one, the cephalic curve, is elliptical in shape and is designed to conform to the contour of the fetal head. When the two blades of the forceps are locked to-

gether, their cephalic curves form the limits of the elliptical space that lies between them. The other curve, in a plane transverse to the cephalic curve, conforms to the concavity of the sacrum.

In an ideal application of forceps to fetal head, the blades lie, one on either side of the skull, in contact with, from tip back toward the shank, the malar bones, the ears and that portion of the side of the face immediately anterior to the ears, the "temple", so-called, and the parietal bones, with the head well flexed. In this position, the smallest transverse diameter of the head is included between the blades, and the forceps lie so that the pressure of the blades will be exerted where it will do the least harm to the fetal head. This will effect not only a minimal amount of side to side compression of the fetal skull, but more important for our present discussion, will permit a closer approximation of the blades. As a result of the latter fact, a smaller transverse diameter of the forceps will be drawn through the birth canal.

Any other type of forceps application, unless it be merely for rotation of the head, will bring through the pelvic canal a wider diameter of the head, will cause a wider separation of the blades, and will therefore be responsible for more stretching, bruising or tearing of the maternal soft parts.

The immediate result of such faulty application will be apparent. Traction on the blades will cause greater stretching of the cervix with resultant cervical tearing, contusions of the vaginal mucosa, and most important, overstretching of the fascial supports of both bladder and rectum, contributing to the formation of subsequent cystocele, rectocele, or enterocele. This is undoubtedly one of the very important factors operative in the causation of conditions that require plastic repair in middle and later life.

Without question, difficult forceps deliveries, even under the most favorable circumstances, are attended by some traumatism to the maternal soft parts; and this damage should be reduced to a minimum by every available means.

It is a general principle of forceps manipulation that, given a birth canal of normal dimensions and no disproportion between the size of the head and that of the pelvis, if fairly strong traction fails to advance the head, the forceps had best be removed and re-applied because the application is faulty; I believe general experience bears this out. Granted then, that correct forceps application will tend to reduce traumatism to the maternal soft parts in delivery, how is that ideal application to be secured?

Long practice in vaginal examination in labor can develop a sense of touch acute enough to palpate and identify suture lines and fontanelles. If one fontanelle can be definitely recognized, the actual position of the head may be visualized at once. If one becomes particularly adept, recognition of the fontanelles is possible by rectal examination. But unless one is skilled in these types of examination, palpation of the fontanelles is frequently uncertain. Under some circumstances, such as when a large caput succedaneum has developed, it may be impossible. This means of diagnosis, then, is not always accurate.

When there is well founded doubt about the position of the head, insertion of the hand into the vagina and palpation of an ear is not difficult and is practicable. This will permit of an accurate diagnosis of position and make possible a correct application of the forceps blades to the head. Once assured of this, the remainder of the delivery is greatly simplified.

In other terminology, for the sake of preventing injury to both mother and baby, a correct cephalic application of the blades is most desirable. When for any reason, such as incomplete rotation of the head, that type of application cannot be secured, the attendant should know accurately just where the blades lie so as to prevent damage to both mother and baby by unduly strong traction on badly applied blades. A pelvic application of the blades, without reference to the position of the fetal head, is mentioned only to be condemned.

A second factor in the causation of maternal traumatism is the incorrect use of the forceps after application has been made. One must constantly bear in mind the direction of the birth canal. From within out-

ward, with the patient in the lithotomy position or "in stirrups", the direction is first downward and backward; i.e., caudad and posterior; then downward, and finally downward and anteriorly. Therefore the direction of traction should be determined by the station of the head at the time that the blades are applied.

If the forceps are applied to the head at the pelvic inlet, the direction of pull must be in the axis of the inlet or downward and posteriorly. If the head is just emerging from under the pubic arch, the traction is mainly downward, or in the axis of the mother's trunk; if the head is distending the perineum, the pull is downward and anteriorly.

The above is undoubtedly common knowledge; but how often is it overlooked or ignored! If the head is high and traction, instead of being downward and posterior, is merely downward, it means that most of the force is being expended in pulling the fetal head directly against the symphysis pubis; or as De Lee so aptly puts it: ". . . like trying to pull an object around a corner—both the corner and the object suffer." And it is the fact that the "corner" suffers that mainly concerns us here. In the example just given, if the head is being pulled strongly against the symphysis, what intervenes between head and pubis, namely the vagina and vesico-vaginal fascia and perhaps the cervix, can scarcely be expected to escape injury. And similar injury may be done to the vaginal mucosa and its supporting fascia or the perineum by mis-directed traction further along the birth canal.

If one bears in mind, the principle of "axis traction" many of these injuries will be avoided. And axis traction does not necessarily imply the use of axis traction forceps; it can be obtained by proper employment of the ordinary obstetric forceps, by Pajot's maneuver, etc.

While attention to the two principles so far enunciated will decrease the amount of trauma to the pelvic structures, it will not entirely prevent it. The size of the fetal head, especially in primipara, is usually out of proportion to the size of the vulvar outlet. Therefore in attempting to bring a large head through a smaller opening, there must be some resultant stretching or tearing of the perineum unless something is done to preserve the integrity of the pelvic supports.

Occasionally, if a patient labors for a long time with the head on the pelvic floor, the long-continued pressure may so thin out the perineum that eventually the head can be born without a discoverable tear. But this over-stretching is not essentially different from a tear, as far as the patient's ultimate condition is concerned.

One of the positive prophylactic measures that may be instituted under these circumstances is episiotomy together with the so-called "prophylactic forceps." By means of the incision into the perineum, the vulvar outlet is actually enlarged and the forceps on the advancing head can prevent too rapid or too sudden an emersion of the head, thus limiting the incision to its original depth.

By virtue of this maneuver the pelvic floor has not been unduly stretched, therefore its tone is good. With immediate repair of the episiotomy wound, the perineum is again rendered intact and so has not been made to sacrifice its all important supporting function without which prolapse of the uterus and relaxation of both anterior and posterior vaginal walls are such common sequels.

What has been said of the stretching force exerted by long continued pressure of the head on the pelvic floor applies, at least to some extent, to the practice of "ironing out" the perineum preparatory to doing a version or a forceps extraction.

The recto-vaginal fascia is primarily fibrous in structure; therefore when this fascia is overstretched, either by the fetal head or the "ironing" hand, it recovers its tone slowly if at all, thus prolonging the process of involution. And it is quite likely that some degree of relaxation will persist.

It would seem to be a much better practice to incise the floor, deliver the head, and then do a surgical repair, thus preserving the support that the pelvic floor should give to the pelvic viscera.

SUMMARY

1. Proper application of forceps will avoid a lot of maternal as well as fetal traumatism.

2. Proper use of the forceps following a correct application will further minimize injury to the maternal soft parts.
3. "Prophylactic forceps" with episiotomy will prevent, to a large extent, postpartum relaxation of the vaginal outlet and perineum.
4. Episiotomy, rather than stretching of the outlet, is in the interest of the preservation of the perineal support of the pelvic viscera.
5. While not all of the maternal injuries peculiar to child-birth can be avoided, they can be materially lessened; and any means available should be employed in order to reduce to a minimum the invalidism that is now such a common inheritance of the mothers of the human family.

Double Intussusception of the Bowel*

By S. M. WELSH, M. D. and A. R. COYNE, M. D.
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MEDICINE cannot give immortality, but it should enable us all to live out our full lives. This statement is probably more true in the early diagnosis and proper treatment of intussusception in infancy than in any other condition of early childhood.

Intussusception is by far the most frequent form of acute intestinal obstruction in infancy. Its prompt recognition and operation are essential to life. It is the chief cause of acute mechanical obstruction under five years of age; 50 to 75 per cent occurring under one year of age. However, this condition is not exclusively confined to infancy and childhood.

Intussusception is an invagination of one portion of the bowel into another portion, sometimes described as telescoping or prolapse of one part of the intestine into another. The intussusception is nearly always descending but the ascending or retrograde variety is occasionally seen, also double and triple invaginations at the same portion of the bowel or one ascending and one descending at different portions of the bowel. It may occur in any part of the intestinal tract but by far the most common portion involved is the ileo-cecal region in 80 per cent of the cases with the ileo-cecal valve at the head of the mass. Twenty to 30 per cent occur through the ileo-cecal valve. Other types are colic, involving only the colon, the enteric type involving only the small bowel. These types may be double, multiple or compound. In the small bowel the jejunum is involved four times as frequently as the ileum.

In addition to age which has been mentioned, other etiological factors are the frequency of other intestinal disturbances, indigestion, colic, diarrhoea and constipation. Some authorities state that some attacks of colic may be the effect instead of the cause of temporary invagination of the bowel. Indigestion often appears as a cause. Constipation is said to act as a cause by inducing peristalsis or by the adhesion of a scybalous mass to the intestinal wall which is thereby drawn upon, or the mass may be irritating and thus produces irregular peristalsis.

The case which we have to present is an example of a form rare enough to seem worthy of record: On July 12, 1932, about 1.30 P. M., the patient, a white female child seven months of age suddenly screamed in pain. This pain recurred every few minutes the first half hour and was associated with marked restlessness and irritability. After one-half hour a suppository was introduced into the rectum but no results were obtained. The attacks of severe pain occurred at less frequent intervals throughout the next hour but each attack was quite severe and lasted for approximately one to two minutes. About 3:30 P. M., the same afternoon, a high soap suds enema was given which produced a copious normal appearing stool. At the time the enema was given the child had a severe vomiting spell with some relief following evacuation of the stomach contents. Following this the child slept for short intervals but was disturbed by intermediate attacks of restlessness. At 4:30 P. M. a physician was called but on doctor's arrival the child cried so incessantly that it interfered with all attempts at examination. However, at that time abdominal palpation and rectal examination revealed no abdominal mass. Aspirin, grains one and paregoric, minims seven were administered; both seemed to

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give very little relief. At 6:00 P. M. the child vomited again and there were intermittent crying spells with restlessness and tossing about until 9:00 P. M. when a profuse bloody mucous stool was passed. Following this the child was immediately taken to the hospital where a diagnosis of intussusception was made and immediate operation advised.

Previous Medical History: The child had been perfectly well and healthy since birth until the present illness. Family history was essentially negative, both parents living and well—mother age 27, father age 29. There was no history of miscarriages. The child was a second pregnancy, having one sister who died of pneumonia at four months. Birth history: Normal vertex delivery, birth weight seven and one-fourth pounds, full term, normal development. Feeding history: Breast fed for the first three months with severe attacks of colic during the second and third months of life. After the third month when buttermilk and lactic acid milk was introduced into the diet the colic was considerably relieved. Cereals and vegetables were introduced into the diet at the fifth month and the child gained normally in growth and development. For the past two days prior to present illness the child had a tendency toward constipation and was passing hard-formed, pellet-like stools.

Physical Examination: At 9:00 P. M. July 12, 1932, examination revealed an apparently normal, well developed, and well nourished female child, seven months of age, who appeared very tired and sleepy, doubling up spasmodically as if in pain. The countenance bore an expression of pain even when the child was not crying. The eyes rolled upward, lids partially closed, lips dry and parched, and on moving the child for examination the head fell listlessly according to the position to which she was changed. The lungs were apparently normal. The heart beat was very rapid and respirations increased. The pulse rate was 170; respirations 40. The abdomen was distended and the muscles were tense. There was no vomiting while the child was under observation. She was obviously in a partially exhausted state and allowed palpation without much resistance or without appearing to suffer much pain. Rectal temperature 100.2°. Abdominal palpation revealed two isolated, firm, rounded masses, one localized in the lower right quadrant of the abdomen, definitely palpable, and the other a soft, less well defined mass, mainly in the left umbilical region. The firm rounded mass in the lower right quadrant could be more definitely detected by bimanual examination. The rectum itself as far as the finger could reach was empty, but after withdrawing the examining finger a half ounce or more of black clotted blood was expelled.

Operative Notes: The child's body was completely wrapped in cotton except the abdomen which was exposed and ether anesthesia was administered. The surgical field was prepared with ether, alcohol and metaphen in the routine manner. On opening the abdomen about 300 cc. of light amber-colored free fluid was encountered. The first viscus presenting itself in the wound was a large tumor of intussuscepted ileum about five inches in length. This was delivered through the abdominal incision and easily reduced by gentle traction and the "milking" maneuver. There was very little oedema or hemorrhage into the submucous connective tissue layer and a very weak fibrinous exudate between the apposed peritoneal coats of the entering and returning layers of invagination. The bowel was not badly discolored and there was apparently no trauma to either mesentery or bowel. The telescoping was in the distal 24-36 inches of the ileum. After reduction of this invagination gas in the distended bowel failed to pass freely from the small intestines into the colon and further search revealed a mass back up under the cecal region extending to the liver; this mass was larger than the first mass encountered being about two inches in diameter and about eight inches in length. The distal ileum was found to be packed into the cecum in a very firm invagination. The appendix was congested and discolored, its distal portion remaining outside the intussusception. During the "milking" maneuver it required considerable effort to reduce this invagination. After reduction there was no evidence of gangrene of the bowel, as the normal color was rapidly restored, and the gas in the distended bowel could be made to pass freely from one portion of the intestines to another.

After reduction of the second invagination of the bowel an appendicostomy was done. This maneuver firmly anchored the cecum and at the same time provided an outlet for gas. The operation required thirty minutes. At the completion of the operation the condition of the patient was good: Pulse 160; respirations 45; temperature 104.2° R.

Postoperative Course: Immediately after operation the child passed some gas per rectum and through the appendicostomy tube. The temperature remained around 104° throughout the remainder of the night dropping gradually to normal by the fourth day. On the evening of July 13th, 1932, the pulse was 120, respirations 30, and the child apparently appeared to be free from pain. The first defecation postoperatively showed small streaks of old blood, dark colored and mixed with the stool. During the following day she had two greyish soft defecations and expelled considerable mucus and flatus with enema of warm soap suds. The recovery from then on was uneventful. On July 18th the appendicostomy tube was removed and the greater portion of the appendix had sloughed away so that it was impossible to tie off the appendix after the tube had been removed. However, the appendicostomy wound healed well and very little drainage occurred after removal of the tube. The abdomen continued to be soft, the bowels moved once or twice daily with very little distention and the child was discharged from the hospital nine days after operation on July 21, 1932, in good condition

with the wound and the appendicostomy opening both very well healed.

Postoperative Treatment Following Operation: Child was given caffeine sodium benzoate, minims three p.r.n. for stimulant and codeine, grains 1/12 for pain by hypo every four hours if necessary. Sterile normal saline solution was instilled into the appendicostomy tube every four hours until the removal of the tube on the sixth day. On July 13th feedings of condensed milk, ounces one to eight of water were started giving one-half ounce every half hour for the first twelve hours, then one ounce every hour for the next twenty-four hours, then two ounces every two hours for the next forty-eight hours. Following this the amount of milk was gradually increased and on the sixth postoperative day cereal was added in small feedings and gradually increased as postoperative recovery proceeded. Vegetables were added on the eighth day in small quantities and increased in amount daily until the normal diet was apparently reached on the ninth postoperative day. At the time of discharge from the hospital regular feeding routine had been established. Child was apparently in normal health, bowels were moving regularly and the child was resting throughout the day and at night without the aid of sedatives.

SUMMARY AND COMMENT

In cases of intussusception, an early diagnosis is a very important part of the treatment since a relatively simple operation following early diagnosis finds the patient in good condition and the results are generally successful. The treatment for intussusception is primarily surgical and the surgical procedure involved is determined by the condition of the bowel as found at the time of operation. The diagnosis once made, the shortest possible time should elapse before the operation.

In the diagnosis of intussusception there are two procedures of decided value. If, from the history, intussusception is suspected but not felt, either because of abdominal distention or because of the child's lack of co-operation, the following procedure will often result in a positive diagnosis. The index finger of the examiner's right hand is placed in the child's rectum and his left hand placed on the abdomen or vice versa. The assistant then holds the child in a sitting posture with its face towards the examiner. Such a procedure will usually cause the tumor to drop down between the examiner's palpating hands.

If a diagnosis cannot be made by this procedure or if the diagnosis is made or suspected and the position of the tumor or lesion not located, roentgen examination is advisable. If the condition of the patient calls for as little loss of time as possible, a roentgenogram of the abdomen made without any preparation will often show the distended loops of bowel above the lesion and indicate the position of the intussusception by the difference in the shadow of the large and small intestines. A barium enema under fluoroscopic control with or without films may also be used for making a diagnosis if it will not cause too long a delay.

Nonsurgical reductions of intussusception are often accomplished by the use of pressure, enemas or air insufflation but as a general rule there is always a question whether the intussusception has or has not been reduced and thus abdominal exploration should follow the procedure to make certain that reduction is complete and that there is no gangrene, perforation or tumor present.

The small type of intussusception which is diagnosed early is generally very easily reduced surgically and many of the larger, later and more edematous types may be easily reduced by gently stripping, rolling and milking back of the telescoped bowel while constant but gentle backward pressure is maintained on the apex of the intussusception.

An occasional case of intussusception will be found where reduction cannot be accomplished. In such cases resection of the bowel and anastomosis should be performed. If the pressure on the invaginated blood vessels has been great enough and has existed long enough for the intestinal wall to become gangrenous, the logical method of treatment is resection of the bowel followed by lateral or end to end anastomosis.

At all times the quickest procedure that will remove the damaged intestine, relieve the obstruction and care for the soiled peritoneum is the type of procedure which should be used. The procedure in all operations for intussusception must include careful palpation for a tumor or tumors in the intestines as a possible cause for the condition. Such tumors have been reported as multiple, in some cases even causing a later second intussusception.

As to an anesthetic, ether will usually be found best suited to the needs. The required manipulations are very difficult to do on an infant or even a child, under local anesthesia.

Preoperative preparation should include the administration of water, salt and dextrose by hypodermoclysis or infusion. If indicated, the stomach should be lavaged. A patient in poor condition may be carried through the operation by a preoperative blood transfusion.

Immediately after operation treatment for shock by the intravenous injection of a saline solution, by blood transfusion or by both is often indicated and will save many lives. Later, attention should be given to the maintenance of the fluid and salt balance and of nutrition, as indicated by the continuation of these measures plus hypodermoclysis.

When an enterostomy or appendicostomy has been done the catheter is irrigated with physiologic solution of sodium chloride or sodium bicarbonate solution every one or two hours and allowed to drain the remainder of the time. This prevents stoppage and possibly adds to the patient's fluid intake.

The skin about the enterostomy or appendicostomy should be protected by the use of beeswax or by the use of one-tenth normal hydrochloric acid and ten per cent peptone solution. Whatever excoriation does occur will be found to clear up rapidly as soon as the lumina of the enterostomy or appendicostomy become closed or united.

If the patient is an infant, particular emphasis should be placed on every possible effort being made toward getting the child out of the hospital at the earliest possible moment and by so doing preventing upper respiratory infection and pneumonia, so common to any infant ward.

Endothelioma of the Pleura; Case Report

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THE following case came under observation at the Clinic November 13, 1931. Patient, J. B., a male, age 61, divorced, laborer. Family history: negative. Previous illness: states that he has enjoyed good health all his life but for a brief period of rheumatic trouble years ago and chancre twenty-five years ago for which he was treated at the time. Operations: none. Marital history: had seven children, five living and well. Habits: Appetite: poor for several months; Digestion: fair; Urination: nocturnal occasionally; Bowels: constipation present; Sleep: poor on account of pain in chest. Incessant smoker.

Chief Complaint. 1. Pain in left chest. 2. Dyspnoea. 3. Loss of weight and strength. 4. Cough. Clinical History: The outstanding symptom in this case was pain in left back and axilla during the past five months, the pain being rather constant and at times during each day of such a sudden, severe, stab-like, lancinating type, as to cause the patient to cry out aloud. During the course of the disease this pain became so severe at times that morphine grains 1 hypodermically gave the patient but slight relief. The dyspnoea was rather marked and had become progressively worse during the past six weeks. Loss of weight and strength had been progressive during the past six to eight weeks, having lost about thirty pounds during that period. Cough moderate with slight expectoration during the past three months.

Physical Examination. Man appeared ill. Dyspnoeic, pale. Height 5 feet, 5½ inches. Weight 165 pounds. Pulse 78. Temperature normal. Blood pressure: systolic 170, diastolic 80. Mucous membrane of mouth negative; tongue, teeth, throat, neck and glandular system negative. No evidence of enlarged glands of neck, axillae, or groin.

Respiratory System. Inspection: marked retraction of left side of chest. Litten's diaphragmatic shadow diminished. Respiratory excursion diminished on left. Cog-wheel breathing at times. Right chest voluminous and free excursion of chest wall and diaphragm. Palpation: vocal fremitus absent over lower two-thirds of left chest. Percussion: flatness over lower two-thirds of left chest. Hyperresonance over entire right chest. Auscultation: absence of breath sound over lower two-thirds of left chest. Hypervesicular breathing over right lung.

Cardiovascular system. Heart pushed fully two inches to right. Embarrassed heart action; no evidence of valvular regurgitation or stenosis, but evidence of roughening over aortic area.

Physical examination of the abdomen and extremities revealed nothing abnormal.

Neurological examination was negative.

It was apparent from the symptoms and findings that we were dealing evidently with an effusion in the left chest cavity. In view of the history, symptomatology, and physical findings, the problem presenting itself for consideration was: Are we dealing with a case of pleurisy with effusion probably secondary to tuberculosis of the lungs, or are we confronted with a case of syphilis of the lung, or perhaps tumor or primary malignancy of the lung or pleura?

On the following day, November 14, the left chest was aspirated and three-fourths gallon of straw-colored fluid withdrawn. During the succeeding six months the chest was aspirated five times, the amount of fluid being successively somewhat less in amount, with amelioration of pain and dyspnoea. At no time was the fluid other than straw colored, the classical haemorrhagic fluid not having been encountered in any of the tappings.

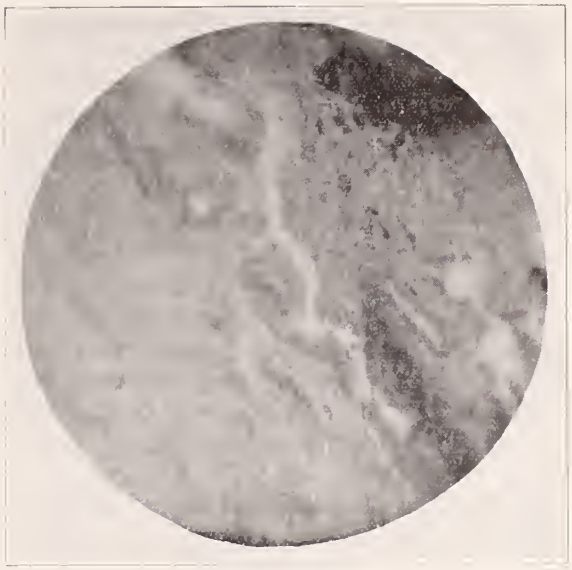
X-ray examination made November, 1931, threw no light on the lung or pleural condition.

Urinary findings, negative. Blood: erythrocytes 4,210,000, leucocytes 14,700. Hemoglobin: 80%. Color Index: 0.9. Polymorphonuclears: neutroph: 63 segmented, 15 staff. Metamyelocytes 3. Myelocytes 2. Lymphocytes, small 17. Blood picture: marked regenerative shift. Meinicke and Wassermann four plus in both extracts. No spirochetes found. Sputum negative for tuberculosis.

Pleural fluid, about 75% lymphocytes, 20–25 polymorphonuclears, a few endothelial cells, a few red blood cells, no micro-organisms, and no cells with stigmata or malignancy found. Meinicke two plus.

Vigorous antiluetic treatment appeared to be of such benefit in the beginning that a tentative diagnosis of lues seemed to be justified. Prompt return of severe symptoms disproved same and it was concluded also that partial disappearance of pleural fluid due to the antiluetic treatment accounted for some of the benefits derived. Pain continued to be the outstanding symptom during the whole course of the disease. A diagnosis of primary malignancy of the lung or pleura seemed most plausible. It must be conceded that a positive diagnosis before autopsy is always difficult and in most cases impossible. Patient died June 13, 1932, exactly seven months after first examination.

Autopsy by Dr. F. Eigenberger of the Clinic staff: Right lung and pleura normal. Left lung rather collapsed, firmly adherent to thorax and diaphragm. Pleura thickened, forming flattened, opaque masses of somewhat nodular character, the interlobar septum being similarly involved. A small quantity of serous exudate is found in the left thoracic cavity, very little in the pericardial space, and some in the abdominal cavity. The pericardium participates in the process to a lesser degree, showing the same whitish, opaque, thickened areas. The peritoneum is free from the above changes. Both lungs are remarkably free from tuberculous lesions and moderately anthracotic. Tracheo-bronchial and broncho-



pulmonary lymph glands normal in size, and anthracotic.

The heart shows moderate right-sided dilatation with some hypertrophy, the muscle being brownish degenerated. Valves free from changes aside from a marked atheromatous degeneration in the aortic part. No sign of syphilitic mesaortitis.

Spleen mildly enlarged and congested. Liver fatty, infiltrated, chronic congestion with some adhesive perihepatitis. No changes found in the intestinal tract. Kidneys and suprarenals normal.

Microscopic examination of pleural section shows masses of fibrous connective tissue with some hyaline degeneration, inclosing scattered small areas of glandular appearing tissue, or more solid nests of cylindrical or cuboidal cells disclosing some invasive character toward the lung (See microphotograph). Diagnosis: Endothelioma of the left pleura involving lung.

SUMMARY

1. Robertson discussed the subject very thoroughly and cites numerous writers on the subject. He draws the conclusion that only the sarcomas ought to be classified as primary tumors of the pleura.

2. Keilty found nine cases among 5000 in the records of the McManes Laboratory of Pathology, University of Pennsylvania, and quotes Clarkson as stating that there were only two in 10,000 autopsies at the Pathological Institute of Munich. However, since Keilty's publication on the subject, other observers have written on the subject reporting cases of primary endothelioma of the pleura.

3. Freeman reports a very interesting case

of endothelioma of the pleura simulating spinal cord tumor.

4. Gaarde and Sutherland report the case of a woman, aged forty-seven, in which a tentative diagnosis of malignancy of the lung with thickened pleura was made. Postmortem and microscopic examination revealed a condition of endothelioma of the pleura.

5. Tobias cites the case of a man in which extensive involvement of the diaphragmatic pleura was found. A diagnosis of primary endothelioma of the right pleura was made by means of postmortem and microscopic examination. The same writer likewise cites Cossio's case of primary endothelioma of the pleura.

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Idiopathic Torsion of the Omentum

Report of a Case

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IDIOPATHIC torsion of the omentum is a comparatively rare condition, but we are presenting this case from our service because we believe it to be of considerable importance in the differential diagnosis of the acute abdomen.

The first case of idiopathic torsion of the omentum was reported by Eitel in 1899. McWhorter, in 1928, collected twenty-four of these cases to which he added two of his own. We find that in the past five years eighteen more cases have been added to the literature, which inclines one to assume that the condition is more common than it was formerly.

The etiology of omental torsion unassociated with hernia or other intra-abdominal disease is still a matter of conjecture. There seems to be no sign of syndrome of sufficient distinction to warrant its use as a diagnostic agent and consequently the condition is rarely recognized preoperatively. Fortunately, however, the treatment parallels that for acute appendicitis, so that the majority of patients are operated upon with that diagnosis. Resection of the pathologic portion of the omentum is the rule and the prognosis is generally good.

Summary: 1. Idiopathic torsion of the omentum is a definite clinical entity and must be kept in mind in the differential diagnosis of the acute abdomen.

2. Preoperative diagnosis of this condition is extremely difficult.

3. Resection of the pathologic portion is the treatment of choice.

4. Prognosis is good.

CASE REPORT

H. K., a man of thirty-seven, a meat-cutter, who had previously been in good health, entered St. Elizabeth Hospital complaining of vague, cramp-like pains in the lower abdomen of six days duration, which two days before had suddenly become acute over the entire abdomen. Following the acute attack the patient vomited twice and several hours later the pain localized in the lower right abdominal quadrant. After the localization of the pain the patient was constipated. The patient had had mumps at eight years and measles at ten years. He drank and smoked moderately. On entrance the temperature was 99 F., pulse 100, and respirations 20. W. B. C. 11,000 polys 66%, lymphs 34%. On examination the abdomen was flat and generally tender, especially over the right lower quadrant. There was no rigidity and no mass. The patient did not have a hernia. A diagnosis of acute appendicitis was made.

With the patient under ether anaesthesia, a gridiron incision was made. On incising the peritoneum a moderate amount of serosanguineous fluid was noted in the abdominal cavity. A portion of the greater omentum was noted in the iliac fossa. On lifting this out of the wound it was found that a terminal portion approximately ten cm. in length was twisted clock-wise about five times completely inhibiting the blood supply. The pedicle with a portion of the healthy omentum was ligated and removed between clamps. A continuous catgut suture

was placed in the free end of the healthy omentum covering all raw surfaces. The appendix was removed coincidently. The convalescence was uneventful and the patient left the hospital on the eighth day, in good condition.

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Primary Carcinoma of the Lung*

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IN GENERAL, text-books of medicine present primary carcinoma of the lung as a rare disease. However, even a cursory review of the literature of the last fifteen years reveals its position as one of the common forms of cancer and a not infrequent cause of death, at least among hospital inhabitants. In addition, these reports would indicate a definite increase in the frequency of its occurrence. Moise[1], for instance, writing in 1921 states that from composite statistics of the literature prior to 1917 primary malignant tumors of the lung occurred in one per cent of all carcinomas and in thirty-six hundreds per cent of all necropsies. Roshan[2], likewise, in a tabulation of the statistics from the world's literature found that up to 1899 primary pulmonary neoplasams occurred in only fourteen hundreds per cent of all autopsies and in one and forty-five hundreds per cent of all cancers. In contrast, the same tabulation shows that in the period 1925 to 1928 the ratio of primary pulmonary cancers to total autopsies had jumped to one and thirty-six hundreds per cent while its relation to total cancers had increased to eight and seventy-nine hundreds per cent. Roshan[2] in the period 1910 to 1928 found at the Boston City Hospital primary pulmonary cancer in seven-tenths per cent of all autopsies and in nearly seven per cent of all cancers. Grove and Kramer[3] found primary pulmonary neoplasms in fifty-seven hundreds per cent of three thousand five hundred and sixty-nine autopsies performed at the Cook County Hospital from January 1917 to September, 1924. Rogers[4] found fifty cases in two thousand two hundred and nine autopsies made on persons over thirty years of age, at the University of Vienna, in the period October, 1929, to November, 1930, an incidence of two and twenty-six hundreds per cent. Fried[5], while agreeing as to its frequency, maintains that the increase noted is more apparent than real, explaining it on the basis of better clinical and pathological technique and a greater alertness to its occurrence.

This paper is based on a study of ten cases from the records of the Milwaukee County Hospital. Of these ten, nine were proven by autopsy and one by bronchoscopic examination. Eight of the ten occurred in the three and one-half year period, January 1929 to July 1932. During the same era there were eight hundred and fifty-seven autopsies, with carcinoma occurring in one hundred and eight. Hence the percentage relation in this series is ninety-five hundreds per cent of all adult autopsies and eight per cent of all cancers.

The cause of pulmonary cancer is obviously unknown. Various inciting causes have been mentioned, without, however, any definite confirmatory evidence. Thus tuberculosis was frequently given as a cause but recent statistics would indicate that its relationship is, at most, only casual. In only one case of this group was tuberculosis present and in only one was a definite history of influenza obtained. This disease has been

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shown to produce considerable metaplasia of the bronchial epithelium, and, consequently, has been suspected of causing the more advanced changes characteristic of malignancy. Chemical irritants, such as the cobalt mined by the Schneeberg miners, who are said to suffer considerably from cancer of the lung; tar on highways, gasoline fumes, even cigarette smoking are mentioned. It occurs more frequently in men than in women, the ratio being about three to one. In this series only one of the ten was a woman. The average age of these patients was fifty-five years—the youngest twenty-seven and the oldest seventy. Our findings as regards location were those generally given, that is seven on the right side and three on the left. Fishberg[6], however, found 56.6% involving the left lung in a large series and Adler[7] in a review of three hundred and seventy-four cases found it about equally divided between the two sides.

By far the greater majority of primary pulmonary neoplasms originate from the bronchial epithelium. The undifferentiated cells found in clumps along the basement membrane are believed to be their source of origin. Occasional cases are reported which apparently have originated from the cells of the mucous glands of the bronchi. That they do not arise from the cells lining the alveoli is indicated by the work of Fried[5] who experimentally demonstrated the phagocytic power of these cells, and consequently their non-epithelial nature.

Macroscopically the tumors have been divided into three classes, the nodular, infiltrative and miliary. These are probably not different types so much as they are evidence of the different stages in the growth and dissemination of the original nodular form. Microscopically they are most commonly found to be adeno-carcinomas, although medullary carcinomas and basal and squamous cell epitheliomas are found. Fried[5] wisely divides primary pulmonary cancers into two types, the far advanced and the early. In the far advanced, there is a solid mass in the parenchyma of the lung, at times showing central necrosis and abscess formation. It is usually accompanied by metastases to the regional lymph glands and distant organs and frequently complicated by hydro or hemothorax. In the early form a mass is found nearer the hilum, usually in a primary bronchus or its first division and extending along the lumen of the tube, frequently obstructing or constricting it. These are usually accompanied by atelectasis of the lobe of the lung fed by the bronchus involved. Of the nine cases here reported eight were of the far advanced type and one of the early type. Microscopically two basal cell epitheliomas, two medullary carcinomas, one adeno-carcinoma and one squamous cell epithelioma were found. One case was described as being a small celled tumor of the alveolar type and in one no definite diagnosis was made, the tissue being classified as of mixed nature.

Primary pulmonary cancer has a strong tendency to metastasize. Metastases occur especially to the tributary lymph glands, the remaining lobes of the lungs, the skeleton, liver, brain, suprarenals and kidneys. Attention must be called to the frequency with which it metastasizes to the brain and skeleton. In a recent study by Dunlap[8] of metastatic malignant tumors of the brain occurring at the Mayo Clinic, eighty-two and six-tenths per cent of the autopsies showed either primary or secondary involvement of the lungs. The lungs apparently act as a sieve for the great many cellular emboli which arise from cancers in other parts of the body. From the lungs, however, these cellular emboli pass directly to the peripheral circulation and are frequently carried to the brain and skeleton as well as other organs. One of the cases from the County Hospital strikingly shows the necessity of bearing this fact in mind.

"The patient, a white male, age fifty-three, entered the hospital on October 19, 1925, with a fracture of the left femur and the left leg encased in a cast. The patient was a foreigner and no definite history could be obtained except, that the fracture occurred when he fell. He complained a good deal of pain in the injured leg and as his general physical examination was entirely negative, a persistent slight cough and an unexplainable irregular fever aroused no suspicion. The cast had to be removed because of its failure to include the hip joint and extension was applied. His cough gradually increased in severity and he complained of pain in the right side of his chest. Physical examination now revealed some impairment of resonance in the right upper

with distant breath sounds in the same area. A roentgenogram of the femur showed, in addition to the fracture, considerable rarefication of the bone and what the roentgenologist considered to be periostitis of both upper and lower fragments. Cyanosis gradually developed, the dyspnoea became more marked without, however, any definite evidence of pulmonary disease being found on physical examination. On the twenty-fourth of November the patient died. An autopsy revealed carcinoma of the right upper lobe of the lung completely surrounding the second main bronchus and obstructing it. The vena cava superior was involved in the mass. The eighth left rib was infiltrated by a metastatic nodule and at the site of the pathological fracture in the left femur a large metastatic tumor measuring 10 x 15 centimeters was found."

Fried[5] emphasizes the similarity of signs produced by central nervous system metastases to those produced by primary tumors of the brain and the need for alertness to its possible occurrence, as his experience indicates that the removal of these metastatic growths frequently prolongs life and relieves the patient of the distressing increased intracranial pressure symptoms.

DIAGNOSIS

The course of this disease has usually been described as rapidly fatal. An increased appreciation of the significance of certain symptoms in the history and a greater skill in detecting minor changes in the clinical examination of the lung has led in the last decade to the conclusion that the disease may be of a number of years standing, prior to death. The greater number of cases, much like those of other hidden cancers, are, however, in an advanced stage before medical aid is sought.

The onset in most instances is insidious, the earliest symptom, frequently mistaken as an evidence of chronic bronchitis, being a slight and non-productive cough. Occasionally, however, cases occur in which cough, pain in the chest and dyspnoea come on suddenly. Again, as in the case just reported, the symptoms produced by metastatic growths are so pronounced that those due to the primary growth are entirely overlooked. In a few, the first evidence of serious pulmonary mischief is an acute pneumonic consolidation of the lung. One of the group of cases forming the basis of this study was of such a type. At autopsy a tumor mass was found nearly occluding the right main bronchus with a bilateral pneumonia, that on the right side being of a longer duration than that on the left.

In nine of the ten cases studied cough was an early and persistent symptom. In four it was productive of either a purulent or blood streaked sputum. Though Fishberg[6] found hemoptysis in sixty per cent of his cases, it occurred in only two of the ten here studied, one of these dying from pulmonary hemorrhage. Considerable emphasis has been placed on a bloody sputum especially the dark brown "prune juice" sputum of the textbooks in the diagnosis of primary pulmonary neoplasms. Its absence as here shown does not, however, eliminate the disease from the probabilities.

Pain in the chest is another prime symptom of the disease. It is usually lancinating, often intermittent in character, frequently limited to one side and at times radiating into the shoulders and occasionally down the arms. Because of its stabbing lightning-like nature, it is frequently mistaken for intercostal neuralgia. At times it may closely simulate angina pectoris. In the later stages of the disease it becomes severe, distressing and even agonizing in spite of the use of opiates. Fishberg[6] emphasizes, in contrast, the usual absence of pain in secondary metastatic carcinoma of the lung.

Dyspnoea was present in eight of our ten cases. It probably results from compression or obstruction of the bronchi and blood vessels. Pleural effusion, a frequent complication in primary pulmonary cancer, must also be a cause. The most common causes of dyspnoea are heart disease, emphysema of the lungs, asthma, miliary tuberculosis or tuberculosis complicated by a pleural effusion. In the absence of evidence of these, especially in an individual beyond thirty-five and complaining of pain in the chest, suspicion of the presence of primary pulmonary cancer should be aroused.

Loss of weight is usually not a marked symptom, neither is loss of strength. When they do occur it is generally late in the disease. Of pressure symptoms, cyanosis localized to the head and arms may result, when the tumor occurs on the right side and involves or compresses the superior vena cava.

Cyanosis occurred in three of our cases. Clubbing of the fingers occurred in one. Dysphagia was complained of by two and hoarseness by one.

Physical examination seldom reveals the emaciation and anemia of advanced cancer in other organs. Most of the patients are fairly well nourished and as Fishberg[6] points out they may even gain in weight while in the hospital.

On inspection there is frequently evident an asymmetry of the chest, especially noticeable during forced respiratory movement. The great difficulty, in the clinical recognition of primary carcinoma of the lung, lies in the ambiguous picture obtained by physical examination of the chest. With the knowledge, that these tumors frequently produce an atelectasis of a large portion of the lung about the actual solid mass, the interpretation of the findings is considerably easier. The absence of air from the affected portion of the lung produces not only a dull but a flat percussion note, a fact of considerable importance in the differential diagnosis of tuberculosis as pointed out by Fishberg[6]. The breath sounds and voice sounds are diminished or absent and there are usually no rales. In addition, these findings are pratically always unilateral. In tuberculosis, most often mistakenly diagnosed, especially if an upper lobe is involved by the tumor, the breath sounds in the area of dullness are usually increased, broncho-vesicular, accompanied by rales, and frequently by similar findings in the apex of the opposite lung.

Pleural effusion occurred in five of our ten cases. In three it was sanguineous and in one each it was serous or purulent. Fishberg[6] reports its occurrence in thirty-one of his sixty cases. He calls attention to the fact that in the differential diagnosis of pleural effusion of tuberculous, metapneumonic or rheumatic origin, there is an area of tympany in the chest, anteriorly, above the flatness, due to the effusion. In tumors this area of tympany is absent giving one the impression that the fluid rises much higher in the chest than is actually the case. The presence of a bloody effusion usually indicates malignancy and it is surprising how frequently clumps of cancer cells can be found in the stained sediment of a malignant effusion.

Bronchoscopic examination is of great assistance in the recognition especially of the cancers arising near the bifurcation of the trachea or in the main bronchi. The following case report illustrates the confirmatory value of a bronchoscopic examination.

"F. S., a white male, age forty-six, entered the hospital September 11, 1931, with a complaint of pain in the chest and shortness of breath of ten months' duration. The onset of the pain followed an attack of influenza. The pain was substernal, radiating to the right and left chest, aggravated by cough and deep inspiration. In April 1931, he began to expectorate blood streaked sputum. His appetite was poor for a month previous to hospital entrance and he had lost about twenty pounds in the ten months of his illness. On physical examination dyspnoea and cyanosis were noted. The expansion of the chest was limited on the left side and the percussion note was dull to flat from the third rib down. The breath and voice sounds were diminished to absent in the same area. The right lung appeared normal. The heart was displaced to the right and the heart rate was very rapid. There was no clubbing of the fingers. Aspiration of the chest was performed, on two occasions, with the withdrawal of large amounts of sanguineous fluid each time. A tentative diagnosis of primary carcinoma of the lung was made. Repeated roentgenograms of the chest showed a persistent density in the lower left side. The roentgenologist was unable to say definitely whether this was due to fluid or to consolidation of the left lower lobe, although removal of a large amount of fluid just previous to one of the roentgenograms, indicated its intrapulmonary nature. Toward the end of December he began to complain of difficulty in swallowing his food, and an esophagoscopic examination revealed a narrowing of the lower one-third of the esophagus, apparently from external pressure. A bronchoscopic examination was made at the same time. The trachea and right bronchus were negative. The left main bronchus, however, was much reduced in size, and the walls were thickened and covered with a bloody, purulent exudate. The patient's condition gradually became worse. He expectorated at times bloody, foul smelling fluid. On the twelfth of January he died. No postmortem examination was obtained. A roentgenogram taken on the tenth of January showed a definite tumor mass on the right side extending out from the mediastinum in the area from the fourth to the seventh intercostal space. On the left side an area of dense infiltration occupied the greater portion of the lower lobe."

The far advanced carcinomas with central necrosis and abscess formation are the most difficult to diagnose. On physical examina-

tion it is frequently impossible to distinguish them from pyogenic abscesses of the lung. The history of onset differs materially, however. The pyogenic type, usually follows acute infections of the upper respiratory tract and lungs, or operations on the mouth or pharynx and the aspiration of foreign bodies.

In addition to tuberculosis and abscess of the lung, the disease must at times be differentiated from mediastinal tumors, especially Hodgkin's disease, and from aneurysm of the aorta.

The value of the roentgen ray in the diagnosis of cancer of the lung has occasioned considerable discussion. Fishberg[6] states that physical examination is of more value in the localization of tumors of the lung in the early stages than the roentgen ray and he has repeatedly localized tumors by percussion and auscultation when the roentgenograms were entirely negative or inconclusive. Rogers[4] says: "Roentgenography was found to be the most valuable laboratory aid in making a correct diagnosis. The presence of a neoplasm was suspected in seventy-two and five-tenths per cent of the cases, if not from the first film, then from a series of films taken at intervals".

The great difficulty in the interpretation of the roentgenogram arises, as it does in the physical examination, from the concomitant changes produced in the surrounding lung by atelectasis and by pleural effusion. An atelectatic lobe resulting from occlusion or compression of a bronchus may be present before the tumor itself is large enough or dense enough to be visible on the x-ray film. Such a finding is difficult to differentiate from the consolidation of a pneumonia. Likewise a pleural effusion may so obscure the lung fields that the presence of a tumor may not be suspected. It is important in cases of pleural effusion to remove a considerable amount of fluid just previous to roentgenography. B. R. Kirklin and R. Paterson[9] divide primary tumors of the lung from the roentgenologic appearance into two classes, the hilar and parenchymal. The parenchymal type is further divided into two stages—the early nodular form consisting of an irregularly rounded infiltrating nodule lying completely in the pulmonary fields usually not involving the periphery and the lobar type of homogenous density occupying an anatomic lobe and having an infiltrating edge. The hilar type they describe as one showing a unilateral density occupying the entire hilum, perceptibly separated from the mediastinum and ramifying into the parenchyma. Rogers[4] calls attention to the retraction upward of the diaphragm and the paradoxical respiration resulting from phrenic nerve paralysis seen in a fair number of cases on fluoroscopy.

CONCLUSIONS

1. Primary carcinoma of the lung is not a rare disease. About one in every hundred autopsies reveals it as the cause of death.

2. It has a marked tendency to metastasize. It should always be remembered in cases presenting signs of tumor of the brain or pathological fractures of the bones.

3. Though difficult to diagnose, it is not impossible when the disease is kept in mind and the history, physical and laboratory findings are properly correlated.

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The Physician of Yesterday, Today, and Tomorrow*

By JOHN F. BENNETT, M. D.
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FOR making a comparison between the doctor of yesterday and the doctor of today there is, perhaps, no better dividing line than the World war. Doctors went into army service and returned from camp imbued with the idea that specialism carried more earmarks of mysticism and solved the problem of economics. In 1910, ten per cent of the physicians were specialists, today we find that 51% of the students have chosen specialties before graduation and, mind you, I am not decrying specialization in the abstract. With the advance of medical knowledge and science, more intensive study of various organs and diseases has been necessary. Neither am I upholding the general practitioner, for I feel that many of them have missed valuable opportunities for advancement and have fallen into ruts from which they are unable to extricate themselves or do not endeavor to do so. In the years of adjustment since the war, the general practitioner has felt more and more the stress and strain of change—economic and professional.

We are concerned here chiefly with the doctor of the present, but first a word about the type of man he supplanted,—the doctor of a few decades ago. Here was a man who attended lectures for two or three terms of six months each, a man whose equipment was meager, indeed, whose methods of transportation compared sadly with our high-powered cars; a man who endured all the hardships and handicaps but with a depth of sympathy and understanding that made up for many professional limitations.

He had no vaccine to combat typhoid or diphtheria. He had no insulin or liver preparations. Blood transfusion was unknown. There was no x-ray. Radium had not been discovered. There were no local anaesthetics and most of the present general anaesthetics had not been tried. Pathological and clinical microscopy were in their infancy. A doctor not only had to be a versatile individual; he had to be informed in all branches for he lived in an era of curative medicine which has been supplanted largely by the preventive type. Verily the old order changeth and with it passes the family doctor, the keen psychologist as well as physician. No patient ever came to him just a case. He was a past master of personal medicine, certainly an important angle of the profession—an element doomed to disappear almost entirely if the machine age makes inroads into the field of medicine in the near future as it now threatens to do.

The old type of doctor made his diagnosis at the bedside and it is not my purpose to speak disparagingly of scientific training but I am convinced that the pendulum has swung too far to the scientific side and too little attention is paid the practical art. The true clinician must develop the talent of observation trained only by experience. His trained fingers should tell him more than many of the laboratory tests available.

Those who emphasize the mechanical side, the physical mechanism of the patient, leaving out more and more the personal angle, have lost ground in one phase of medicine that is mighty important. The histories of the old type of doctor were not a trite form of questions and answers. He knew the ancestral deficiencies and past complaints from the time of the patient's first birthday and he enjoyed a confidence and trust that a modern doctor might well envy.

With the evolution of social and economic conditions and with the increase of scientific discovery he has given way to the modern practitioner who is now in turn, threatened with eclipse if he does not avail himself of every means within his grasp in the struggle with a host of problems, which his predecessors were never forced to meet. Will he survive, and, if so, under what circumstances? Will clinics meet the needs of the public? It is true that there is much that

* Presented before 91st Anniversary Meeting, State Medical Society of Wisconsin, Milwaukee, September 1932. Revised to publication date.

the doctor who has been out of school 10 to 15 years or more has to learn in the way of laboratory diagnosis, and some of the latest anaesthetics. But he has a basis, he has the foundation upon which the newer knowledge can be built easily. He knows clinical symptoms from experience. He has a working knowledge of the human organism and its reaction to disease. It remains for him to make the adjustments that will enable him to better serve the public.

The general practitioner in medicine or surgery should be as much of a specialist in his line of work, within its limits, as the otolaryngologist. He needs to be broadly educated. He must be able to tell when a real specialist is needed in the case and he must become more and more a practitioner of preventive medicine. It seems to me that postgraduate work is the first step in increasing our sphere of usefulness. No matter how good the undergraduate course is, it is only a beginning.

New discoveries are being made every year in connection with the cause and treatment of disease, and many of the old methods must be discarded. He must get back into the dissecting laboratory and re-learn the relationship of the organs with which he is dealing every day. This is far ahead of listening to long, drawn-out lectures on the merits of a Bilroth No. 1 or a Bilroth No. 2, the technique of thoracoplasty or other types of highly specialized surgery that do not come within the scope of a general practitioner.

Again, instead of treating patients according to the instructions from a pharmaceutical house, would it not be far better for a physician to take a short course in modern therapeusis in some good medical school? A physician who does not attend clinics frequently, who does not attend medical meetings, and keep up his reading of medical literature cannot render proper service to his patients and as a result will find himself forever condemned to mediocrity.

The radio with statements whose credence is backed by the control of the radio commission has fostered more quackery than most of us ever imagined due to the direct personal appeal of the promoters of charlatanism.

ECONOMIC PHASES

Our press is daily dealing with the high cost of being sick and the public is being more and more educated to the feeling that the expense of medical care should be reduced or given free. Seldom however is the public informed through this channel that the average income of the physician should be considered in relation to the capital investment in medical education and the uncertainty of income as so profoundly apparent in our present financial depression.

In addition to the inroads made on the practice of the general man through the demands of an increasingly specialist-minded public who now call for the specialist nurses to drag them from the jaws of death by miracles with internal hydrotherapy, there is the matter of organized medical practice in the form of groups, free clinics in general, baby clinics, university clinics, and industrial medicine. These organized groups have a definite place in medical practice, but they should limit themselves to the fields for which they are fitted. For instance, they might, as in our state hospital, be held to the program presented to the legislature when they made their plea for funds.

Baby clinics, at first treating only the poor, now give free service without regard to the economic status of the parents, thereby encroaching on a field not their own. Until today not only do we find health stations scattered about every city but free preventive medicine is being delivered by busses to their very doors by over-enthusiastic salaried crusaders. Once a government paid crusader gets started, there is no end to this assumed benevolence. His department is so essential that his budget must not be cut even in times of panic.

The university clinics also have a place, but it is certainly unfair for them to enter into competition with the men they have trained. The function of the university is to teach and conduct research, and their clinics should be directed to that end.

Perhaps there is no one factor which has contributed more to the elimination of the family doctor than the so-called free or hos-

pital clinics. The patients who frequent these places are those who were once treated by their own doctor, who took care of them in time of sickness, and then waited for his fee until they felt able to pay. When these people saw others receiving free service, they too resorted to the clinics. In case of unemployment perhaps this is to be condoned, but the fact remains that any system that tends to pauperize and encourage dependence is essentially wrong in principle and is apt to foster the socialistic tendencies that are already rampant.

Regarding industrial medicine, while it is the prerogative of any industry to provide medical care in emergency cases and follow up care if necessary, their doctors should not adopt the attitude that "everything is fish that comes to their net".

The past three years have demonstrated that the captains of industry might have been better occupied with solving the problems of employment than dabbling in preventive medicine.

Industry is attempting to minimize waste through illness by trying out experiments that range all the way from emergency dressing stations to full-time care of the worker and his family. As many as 2,000,000 people receive part or all of their medical service through so-called industrial medical men. Not content with his narrow field of industrial surgery, he extends his domain, thus breaking in upon the work of a brother practitioner in whom he is not interested. As an extension of this paternalistic attitude of state and corporation, we have the widely established national hospitals for the care of veterans. Far be it from any American citizen to decry medical treatment for disability incurred in service, but in the congressional investigation a few weeks ago, it was discovered that more than 77% of all war veterans receiving treatment in government hospitals were suffering from ailments in no way related to their war service. In this treatment of non-service disabilities the national government is competing with the medical profession and with private hospitals — one ramification of government encroachment upon private business. The government is building new hospitals while private hospitals are standing half empty. General Hines says that the prospective increase in non-service connected hospital cases will require 100,000 additional hospital beds, at a peak cost of 140 millions a year. The government could well be better occupied in administrative problems than competing with its own constituents. It is high time to put a stop to this opening of veteran-hospital doors to ex-soldiers and their families for the treatment of civilian diseases. The recent investigation proves that this over paternalism on the part of Uncle Sam has resulted not only in a wholesale raid on the national treasury but also in an apparent approach to the public attitude generated by the English dole system. Furthermore, there has been built up an organization which will constantly grow at any cost.

Another agency savoring strongly of paternalism is social insurance which is the offspring of sentimentality and politics. Starting in Europe, the idea has spread to many nations and has now reached America. Included in this type of insurance are: Compulsory health insurance, old age pensions, widows' and orphans' pensions, and unemployment dole. Several of these types have been adopted by different states, but compulsory health insurance, one phase of social insurance, is not yet in force, for which we may be duly thankful. Every form of social insurance is contrary to the spirit of democracy because it destroys individual initiative and self-reliance. Practically every reform movement attracts to itself a considerable number of well-meaning, impractical, irresponsible, and vociferous individuals. Usually the very ones who manage the propaganda hope to get something out of it. Social insurance is no exception to this general rule.

STATE MEDICINE

As for state medicine it is not in the offing as is Health Insurance, it is already here, controlled by private corporation and organizations instead of by the central government. We are only a little way from the German Krankenkasse system, Germany's experiment in socialized medicine, their an-

swer to the question of care for the wage earner and his family in time of distress.

The underlying principle is altruistic but since human nature is what it is, there is a strong tendency to take advantage of loopholes.

If an individual is tired or dissatisfied with his job, he goes to his doctor with a request to be "written sick". If his request is granted, he can stay home and after three days receive half pay for as long as 26 weeks. If the doctor refuses the man's request, the patient becomes angry and changes to another doctor, who "writes people sick" on slight pretexts.

The Krankenkasse has destroyed the personal equation of physician and patient. There is no incentive for the medical man to improve his status. There have been no Kochs developed since the Krankenkasse. The only contributions from Germany since its establishment have come from the university clinics. If a physician is too old to devote several more years to training for a special field or cannot afford to take extensive postgraduate work, he becomes a mere automaton, writing reports and orders. He has little time for reading because of the great number of patients he must see daily. Millions have been invested in the German experiment but the salaries paid doctors are pitifully small due to the fact that there is such an immense overhead. In connection with the administration, as many lay workers as physicians are supported by the 6% taken from each worker's wage.

How about the treatment given patients under this system? The physician under this system must see 50 patients in his two hours of office in the afternoon in order to make a living wage for his family. They certainly have slower recoveries than patients under our system. Why shouldn't they prolong convalescence as long as they can? Do they receive good service? That depends on the character of the doctor in charge. Of course, competition enters in even under the Krankenkasse system and furthermore, German doctors are accustomed to low fees and a rather low standard of living, so there is efficiency even under adverse conditions. And beside the love of their profession in most cases is a deterrent to the rendering of poor service so fees or no fees they try to give their best.

It was but a short time ago that the physicians of Cuba struck because of the widened cheap service that the National Medical Federation of Cuba was giving.

Such are some of the outstanding problems of the physicians in private practice at the present time. In spite of attacks from every side, he will not disappear because only a personal physician can function efficiently in many cases. One thing is certain as a means of self-preservation, the physician must adopt up-to-date business methods. The doctor of tomorrow will be a better business man than his confreres of today.

And now just a word about the men who will succeed as I firmly believe that doctors are made, not born, and the process of making, it seems to me, could be improved on in many cases.

MEDICAL EDUCATION

Most young men at the end of one or two years of hospital training should be perfectly competent to do emergency and minor surgery. These are the first things they will be called on to do in their practice, and they should be allowed to do them often, under adequate supervision before they are on their own. I know, personally, young men who in their second year of practice are attempting prostatectomies and thyroidectomies, operations at which they have probably assisted a good man, only once or twice.

They forge ahead into the field of surgery and are encouraged to attempt more and more operations because the public seems to value this rashness more than they do conservatism.

Suppose the young doctor takes a different course, perhaps his first case is one of infected tonsils. In his year of internship he has been first assistant and has listened by the hour to some surgeon with a superiority complex discuss the pitfalls of surgery which it has been his good fortune to escape or he has been second assistant and has developed his biceps by steady pull on the retractor or he has possibly been allowed to do a few ton-

(Continued on page 237)

THE WISCONSIN MEDICAL JOURNAL

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« « « EDITORIALS » » »

"Keep Both Feet on Ground"

THE above phraseology is a common expression, and yet so to the point that dignified language will not improve its meaning. In these trying times when the doctor looks to his diminishing cash returns, let him not be led into by-paths by false prophets and philosophers. It is true that we are living in a changing social order, and yet, if one looks at the last few hundred years, it has been changing constantly, and will continue to do so in the years to come. The political mountebank among prospective laymen, exploiters of medicine, like to emphasize that the physician is out of step in the changing social order. He has the answer for you in some sort of state hook-up, whereby the doctor and the public will both profit. He, the third party of course, must get his slice too.

But this is not the only evidence of medical unrest. Right in our own societies in this country there are forces at work which are destructive rather than constructive. If we are to progress further in our organized medical program we must have unity. An essential of the code of that program must be unselfishness. If we have differences of opinion they must be ironed out at round-table discussion. That discussion must not become the property of the public if we are to avoid that chaos that comes from incomplete information. There are certain vicious elements who would like to see us split asunder. Public evidence of that gives them courage.

In conclusion, let us realize that we have fine medical societies, that there are many fine men in these societies, and that they are doing everything in their power to settle many of our distressing problems in the most honorable way. R. P. S.

The Tugwell-Copeland Bill

THE principles behind the proposed legislation prepared by the Assistant Secretary of Agriculture, R. G. Tugwell, and sponsored by Senator and Doctor Royal S. Copeland of New York deserves the active and energetic support of every physician in the United States. The Pure Food and Drugs Act as it exists today requires honesty on the labels of bottled, canned and packaged medicines but exercises no control over advertising through the medium of the press, by mail, or over the radio. In consequence of this our eyes and ears are insulted daily and hourly by the most fraudulent and dishonest claims on the part of those wishing to exploit the public and sell their wares.

The importance of eliminating this kind of advertising to the public can hardly be overestimated by the physicians of the coun-

try. The voice of no other organized group would carry as much weight as that of the medical profession, whose knowledge of the dangers and evils of such cheating and misrepresentation is second to none.

The basic principles of the proposed legislation allows the advertisement of specific cures as such. All medicinal preparations must carry honest labels. If useful palliatives the label can state the fact; if the preparation is like Josh Billing's vegetable bitters, merely a means of purveying a small quantity of liquor without medicinal value, the label must state the fact.

The opposition is said to be one of the most powerful lobbies seen in Washington since the original Pure Food & Drugs Act was passed.

The Pure Food and Drugs Act has been in fairly successful operation for nearly thirty years. This new legislation is only broadening the scope and not changing either the character or the spirit of the present law. It merely makes the Act more effective through the inclusion of other forms of advertising than the label on the package. It increases the protection to the people and is directed solely against quackery intended to rob and mislead the public. The amount of hopeless or advanced illness resulting from delay caused by self-medication in response to the glowing promises of quick relief are well known to us. The suffering and waste of millions of dollars annually is apparent to all physicians. The menace to health and actual loss of life to thousands from this untrammelled exploitation is not a fiction.

Let us get behind this legislation both individually and as a Society and exert all our influence for its passage at this session of Congress. H. P. G.

Changes in State Medical Periodicals

THE *Wisconsin Medical Journal* began 1934 with some modifications in its editorial policies. Hereafter all manuscripts read at the annual meeting of the state medical society will be considered by an editorial board with the understanding that only such papers will be published as are considered suitable by the board. Heretofore, practically all papers read at meetings of the society have been accepted. This has prevented the devotion of space to miscellaneous and volunteered contributions. The *Wisconsin Medical Journal* has also adopted a new cover without advertising and handsomely printed on an unusually fine quality of paper.

The *New York State Journal of Medicine* announces with the first issue of 1934 that it proposes henceforth to carry only clean advertising and to be free from announcements of questionable products. A new editorial board has been established. The periodical appears in a new size and with a new type face. The editorials, of which there are many, are signed by individual writers and apparently were prepared especially for the *New York State Journal of Medicine*. The addition of this periodical to those which follow established standards of advertising leaves but one of the state medical journals outside the pale.

The trend toward higher standards in state medical journalism has been consistently maintained for more than a quarter of a century. The progress here recorded is significant not only for the members of medical organizations in the states concerned but for all of American medicine. Perhaps the day may yet come when all medical periodicals, including the bulletins of county medical societies, will realize the importance of setting the highest possible ethical requirements, particularly in the advertising of foods and drugs, which come so intimately into relationship with the practice of medicine, and also in the announcements of medical institutions and other accessories to medical practice. *Editorial—J. A. M. A., Jan. 27, 1934.*

SUGGESTIONS APPRECIATED

The Editorial Board welcomes suggestions from the membership looking towards the constant improvement of The Journal. Address letters to the Chairman of the Board, Dr. Hugh P. Greeley, 905 University Ave., Madison.

. . . . THE PRESIDENT'S PAGE . . . .

The Physician and The Public Health

THE Council recently spent a day considering the feasibility of greater participation of the medical profession in preventive medicine and public health activities. The discussion which developed should be of interest to all county societies, and a few of the salient points are presented here.

The important services which physicians render are four: the conservation of health; the detection, and, when possible, the arrest of incipient disease; the restoration of the sick to health; and the relief of suffering. The relative importance of these functions is not generally recognized. Medical educators have failed to give the proper emphasis to the training of students in preventive medicine and public health activities although this might well constitute their most important contribution to the reduction of the cost of medical care.

Preventive medicine offers great and as yet undeveloped opportunities, and the direction of the activity of our membership into this field should help to maintain the position of the physician in a rapidly changing social framework. Physicians themselves have visualized the need for work of this kind. Through their organizations and their individual efforts they have been responsible for the development of the most important public health and preventive medical activities in our own state. They have not, however, been able to maintain these activities after their inception. Boards of health requiring police powers have received the whole hearted and continued support of physicians in the carrying out of their basic purposes. The growth of organizations with lay participation designed for preventive work in special fields has taken place outside the medical profession largely because of lack of proper and efficient organization on our part, and also because of lack of proper training of our physicians in this work.

No real effort to explore the feasibility of organizing practicing physicians for public health work and preventive medical activities has been made. Sporadic efforts by county societies have met with varying success. In a few instances these efforts have been moderately successful and have indicated the real possibilities. In others, the results have not been entirely to the credit of the physicians of the community. No attempt has been made to put into the hands of the general practitioner the instrumentalities of organization which are essential if he is to do this work.

Several questions present themselves. Is it feasible to organize about the county society, with its complex political nature, a successful unit for the carrying on of public health activities? If not, then what direction can and should be given the activities of physicians in an effort to develop and co-ordinate a successful program of work in this field? I have proposed to the Council that we investigate the possibilities in an attempt to give to physicians, through their own organizations, the opportunity to practice preventive medicine and engage in such public health activities as rightfully they should.

Society Proceedings

BARRON–WASHBURN–SAWYER–BURNETT

Dr. W. B. Rydell of Rice Lake was elected president of this Society and Dr. D. L. Dawson was chosen secretary at a meeting on January 17th at Barron. Dr. H. H. Ainsworth of Birchwood was elected vice-president.

"Tuberculosis of the Kidney" was the subject of an address by Dr. E. W. Exley of Minneapolis.

DODGE

The Dodge County Medical Society held its annual meeting on January 25th at Hotel Rogers, Beaver Dam. Dr. A. W. Rogers, Councilor of this district, was present and gave us an interesting talk.

The following officers were elected for 1934: W. G. Riopelle, Beaver Dam, President; E. S. Elliott, Fox Lake, Vice-President; A. W. Hammond, Beaver Dam, Secretary. A. W. H.

FOND DU LAC

A dinner meeting of the Fond du Lac County Medical Society was held at the Hotel Retlaw on February 14th. Speakers were Dr. Stanley J. Seeger, Milwaukee President, who spoke on "The Physician and Public Health" and Mr. George Crownhart, Madison, Secretary, who discussed "The Economic Status of Medicine."

Preceding the dinner, there was a meeting of presidents, secretaries and delegates of the medical societies in the sixth district of which Dr. S. E. Gavin of Fond du Lac is councilor.

LANGLADE

The annual meeting of the Langlade County Medical Society was held at the Memorial Hospital, Dec. 27, 1933.

An excellent turkey dinner was served through the courtesy of the Sisters, the Religious Hospitallers of St. Joseph.

The following officers for the ensuing year were elected, and committees appointed.

President, Dr. Jos. W. Lambert, Antigo; Vice-President, Dr. E. A. McKenna, Antigo; Secretary & Treasurer, Dr. J. C. Wright, Antigo; Delegate, Dr. J. C. Wright; Alternate, Dr. J. W. Lambert.

Committee to confer with Director of County Emergency Relief:

Dr. J. W. Lambert; Dr. L. A. Steffen, Antigo; Dr. C. E. Zellmer, Antigo.

Local committee on Cancer Control:

Dr. J. W. Lambert; Dr. E. F. Dorzeski, Antigo, Dr. C. E. Zellmer. J. C. W.

MANITOWOC

At the January meeting of the Manitowoc County Medical Society, the charge was made that hospitals and physicians at Manitowoc are paying from four to twenty-five times more for electric current used in x-ray current supplied by the municipally owned public utility at Manitowoc than are physicians who secure their current from privately owned public utilities elsewhere in the state. The Society was unanimous in their protest against the charges and appointed a committee to contact local agencies to secure a reduction in the local rate. One source of complaint was the reported attempt to place special meters for electrical apparatus in physicians' offices. It was said that such installation of a special meter brought a line charge or in other words, a minimum rate charge of as high as $8.00 per month, when the current used would amount to but a few cents. Cempeting communities reported a minimum rate charge of $1.00 and in some instances, no such charge at all. M P. A.

OUTAGAMIE

The Outagamie County Medical Society met January 18th, and the following officers were elected:

President, Dr. D. M. Gallaher, Appleton; Vice-President, Dr. G. M. La Croix, Shiocton; Sec'y. and Treas., Dr. Guy W. Carlson, Appleton. Censor, Dr. Albert Leigh (elected for 3 years), Kaukauna; Delegate, Dr. A. E. Rector, Appleton; Alternate, Dr. G. J. Flanagan, Kaukauna.

The feature of the evening was an address to the doctors, wives and guests, by Father Casey of Stevens Point, who emphasized the fact that religion plays a vital part in our personal as well as public life.

On February 1st a special business meeting of the Society was held.

On February 20th, the Society had as its speaker, Dr. Wm. S. Middleton, Madison, who spoke on "Oxygen Therapy in Cardio-Respiratory Conditions." G. W. C.

POLK

The regular meeting of the Society was held at Luck on Thursday evening, February 22, as the guests of Dr. T. O. Ries.

The Child Health Committee gave an outline of the proposed Child Health Survey under the C. W. S. After a short discussion the Society voted unanimously to assist in this health measure.

The scientific section of the meeting was given over to the subject of "Breech Extraction". A film from Mead Johnson and Company on this subject

was first shown and followed by discussion by Drs. W. B. Cornwall and J. D. Nicholson.

The question of the hospital costs of the County was brought up for discussion. The hospitals in the County had suffered from advertising of hospitals outside of the County and the Secretary was instructed to secure the details and take action with the State Society. The question of hospital costs for indigent patients was also discussed and a uniform price was adopted to be in effect throughout the County.

On motion made by the president and carried unanimously by the Society we are going to have a short talk by each member on "My Greatest Medical Boner" at the regular monthly meeting. The speakers are to go in alphabetical rotation, one talk each month.

After general round-table discussion the meeting adjourned. G. B. L.

RACINE

The February meeting of the Racine County Medical Society was held on the 15th at the Elks Club, Racine.

A splendid talk was given by Dr. Paul Magnuson of Chicago, on the subject of "Physical Aspects of the Treatment of Arthritis."

Lantern and x-ray pictures were shown to illustrate the address.

The attendance was good.

The Board of Directors of the Racine County Medical Society held a meeting February 21st at the Elks Club. It was decided that the Racine County Medical Society agree to care for all sick inmates at the Transient Home in the same manner as now exists by agreement with Racine County Relief Department as per fee schedule.

We further wish to state that the Racine County Medical Society is not in accord with the $250 per month or other propositions that have been noted.

It was also decided that we agree to make all complete physical examinations as required by the government agencies at the rate of $5.00 per hour. S. J.

ROCK

Dr. Hans Reese, Madison, gave an address on "Diagnosis and Treatment of Neurosyphilis" before a meeting of the Rock County Medical Society held in the Monterey Hotel, Janesville, on January 23rd.

SHEBOYGAN

The January meeting of the Sheboygan County Medical Society was held at the Foeste Hotel in Sheboygan on January 30th. Thirty-six members attended and listened to a talk on "Infant Feeding" by Dr. M. G. Peterman of Milwaukee.

After a short business meeting a buffet lunch and refreshments were served. A. C. R

WINNEBAGO

The Winnebago County Medical Society held its February meeting in the staff room at Mercy Hospital, Friday evening, February 16th, at 8:15 P. M.

Dr. George Williamson of Neenah read a paper entitled "Congenital Heart." M. C. H.

MILWAUKEE ACADEMY OF MEDICINE

The February meeting of the Milwaukee Academy of Medicine was held on the 20th.

Dr. Hans Reese of Madison was the speaker of the evening, his subject being "Clinical Signs, Considerations and Therapy of Brain Tumors."

MILWAUKEE ORTHOPAEDIC

The annual meeting of the Milwaukee Orthopaedic Club met at the home of Dr. C. C. Schneider.

Following a round table discussion of current topics the following officers were elected:

President, Dr. L. D. Smith; Secretary and Treasurer, Dr. C. C. Schneider. L. D. S.

MILWAUKEE OTO-OPHTHALMIC

The February meeting of the Milwaukee Oto-Ophthalmic Society was held at the University Club on Tuesday, the 27th. Clinical meeting with exhibition of patients took place at 6:00 P. M. Dinner was served at 6:30 P. M.

Scientific Program:

1. "Anatomy and Pathology of the Petrous Bone." Based on the study of fifty temporal bones. Lantern slides, by Dr. E. W. Hagens, Chicago, Ill.

2. "Local Treatment of Lesions of the Mouth in Granulocytopenia," by Dr. J. E. Mulsow. Discussion opened by Dr. F. W. Madison.

1934 DUES

Current year's assessments are due on March 31st. You have your statement. Prompt payment assures you of good standing in membership with its attendant malpractice protection if elected by you, and is essential for the maintenance of the Society's activities. Promptness in this matter is vital to you, as an individual member, and to the Society in maintaining its work.

PHYSICIANS EXEMPT

Physicians prescribing or using alcohol in their practice are specifically exempted from the necessity of either permits or licenses under the state liquor regulations specified in the Griswold bill, signed by the Governor. The amendment suggested by the State Medical Society was introduced by Assemblyman Robert Lynch, Green Bay, and was adopted in both houses of the Legislature.

The Woman's Auxiliary

Mrs. Eben J. Carey, Milwaukee, *President*
Mrs. Rock Sleyster, Wauwatosa, *President-elect*
Mrs. George H. Ewell, Madison, *Secretary*
Mrs. R. G. Arveson, Frederic, *Treasurer*
Mrs. Walter A. Ford, Sheboygan, *Press and Publicity Chairman*
Mrs. James Blake, Hopkins, Minn., *National President*

To The Public Relations Chairmen

Dear County Presidents and Chairmen of Public Relations:

At the beginning of our fiscal year I received two very helpful letters, one from Mrs. Arthur McGlothlan, National Chairman of the Health Education Committee, and the other from Mrs. David Long, National Chairman of the Public Relations committee. Both letters stressed the importance of the Public Relations committee in the life of every auxiliary, but the very first line of Mrs. Long's letter was nothing short of startling! She wrote, "Do you know that you are the most important person in your state auxiliary?" If this is true it is certainly my duty to pass on the same statement to you in your relation to your county auxiliary. It is a little startling at first, isn't it, but I believe its truth becomes more understandable when we realize that your auxiliary cannot build an effective program until it reaches out to touch the public through lay organizations and after all, that is your job as Public Relations Chairman.

The very first object of the Auxiliary as stated in the National Constitution is that "through its members it shall extend the aims of the medical profession to all organizations which look to the advancement of health and education". A program of such effective contacts is the thing with which you will be most concerned this year, and I as the State chairman hope very much that you will feel free to call upon me for any help that I can give you. I am listing below a few suggestions which I believe will be of general help to all county auxiliaries, but, of course, each county will find its own individual problems depending upon the size of the county, the number and size of towns in the county and the special health needs of each county.

1. Acquaint yourselves with the health laws of your county and ask for suggestions from your health official as to ways in which your auxiliary can assist the department. Be sure to present such suggestions to the Advisory Council of your County Society before acting upon them.

2. Promote periodic health examinations.

3. Include in your programs each month a brief review of the report of the Bureau of Investigation of the A. M. A. as given monthly in the Journal of the A. M. A.

4. Organize a committee to report monthly on national legislation pertaining to medical affairs such as the Copeland–Tugwell bill.

5. Urge auxiliary members to become active in such lay organizations as the Y. W. C. A., Federated Women's Clubs, Legion Auxiliaries, P. T. A., etc. Public health problems are often discussed in such groups and if properly directed that is just what we want; but often such programs are planned unwisely and are likely to fall into the exploitations of cults. The doctor finds himself powerless to change such a program but his wife, as a member of the board of that lay organization, can through her well-founded information direct such a program into a course of real health value.

6. Invite the leaders of lay organizations to attend at least one of your programs each year. Make it a very special day and be sure that the program is one of particular worth to your guests.

7. Help to develop a Speakers' Bureau in your County Medical Society and make one of your main projects the placing of these speakers on the programs of lay organizations. Your County Medical Society will gladly help in the organization of such a bureau in each county society where there is an auxiliary. *Your job is to put it to work.*

8. Material for study by lay groups is available through me.

You will note that I have suggested that you develop a Speakers' Bureau in your own County Medical Society. If you will get together a group of doctors willing to speak to lay organizations on medical subjects, the State Society will be happy to help in providing the material for the subjects requested. It is not only inconvenient but financially impossible for the state to send speakers every month to any corner of the state to address a small group of auxiliary members. If, however, for one meeting a year your County Auxiliary wishes to have an open meeting and invite the leaders of lay organizations for a program prepared especially for popular interest, the State Society will aid in finding a suitable speaker.

I am very happy to have the privilege of working with you this year, and I hope that you will keep me informed on the progress of your work, or on any problems which may seem difficult to solve. Later in the year, perhaps during the summer months, you will receive an outline of the annual report which I shall want from each County Public Relations chairman in order that such information may be included in my State report for the annual meeting in Green Bay next September.

This will include questions on the type of Public Relations work which your auxiliary has done and the cooperation you have received from your county health officials and the lay organizations in your community as well as what progress you have made in developing a Speakers' Bureau.

With best wishes for the success of your auxiliary, I am

Sincerely,

(Mrs James C) GENEVIEVE C. SARGENT,
State Chairman, Public Relations Committee.

EXECUTIVE BOARD MEETING

With Dr. Arthur W. Rogers, Chairman of the Council of the State Society and member of the Advisory Council of the Auxiliary, as honor guest, the luncheon meeting of the Executive Board was held at the Y. W. C. A., Milwaukee, on Wednesday noon, February seventh, with the President, Mrs. Eben J. Carey, presiding.

Eighteen members attended the meeting, representing nine county auxiliaries.

County Auxiliary News Items

DANE COUNTY

Professor Kimball Young, professor of Social Psychology at the University of Wisconsin, spoke on "The Psychology of Quackery" at a meeting of the Dane County Auxiliary at the College Club at 1 p. m. on Wednesday, February 21st. Approximately fifty ladies attended the meeting. The Public Relations Chairman presented topics which might prove of interest to lay audiences in Dane County. The Auxiliary intends to introduce Hygeia to representatives of the Parent-Teachers Associations.

MANITOWOC COUNTY

An address on "The Plague" was given by Dr. Eugene Gates at the January luncheon meeting of the Manitowoc County Auxiliary. The organization met at the Century tea room, Two Rivers. The February meeting was held at the Hotel Manitowoc.

MILWAUKEE COUNTY

One hundred ninety attended the luncheon meeting of the Woman's Auxiliary to the Medical Society of Milwaukee County held on February ninth at the Y. W. C. A. Dr. H. Douglass Singer, professor of Neuro-psychiatry at the University of Illinois, gave a very interesting talk on "Nervous Breakdowns".

Mrs. John Reuth, concert whistler, and Mrs. Florence Bettray Kelley, pianist, gave delightful musical numbers. Both of these artists are members of the auxiliary and both frequently appear on Milwaukee radio programs.

The Auxiliary was very happy to have as its guests five members of the Racine County Auxiliary and Mrs. James Persons Simonds, state press and publicity chairman for the Illinois Auxiliary. Many members of the mental hygiene groups attended besides faculty members from Downer College and the State Teachers College.

The committee reports were very inspiring: the membership committee reported eleven new members for February; the Hygeia committee, in beginning an every member canvass, reported thirteen new subscriptions to Hygeia; the Public Relations committee placed nine speakers in lay organizations during January and February; speaking for the Education committee, Mrs. Robert Fitzgerald gave a most comprehensive report of the Copeland–Tugwell Bill.

The program committee announced the speaker for the March meeting to be Dr. Carl Eberbach who will talk on his experiences in Labrador.

MEMBERSHIP

The 1933 membership of the Wisconsin Auxiliary increased approximately 55% over that of 1932.

RACINE COUNTY

The members of the Racine County Auxiliary were entertained at luncheon by the nurses of the County Home. Following the luncheon the ladies were conducted through the home, hospital and asylum. This being the first visit for many of the ladies, they were impressed with the cleanliness and comfort of the whole place.

In the near future the Auxiliary is planning to have an open meeting.

"The Auxiliary was started in a quiet, sane way, but has already accomplished a great deal in friendliness and interest."

SHEBOYGAN COUNTY

Varied entertainment, ranging in scope from the humorous to the serious, was enjoyed at the Benedict Heidelberg Club, following the dinner given by the Auxiliary for their husbands. Included among the features was a take-off on a stout woman going to a physician with the hope of reducing.

Mrs. Wesley Van Zanten, as president of the Woman's Auxiliary, gave a few words of welcome, and a greeting was also given by Dr. J. P. Zohlen, president of the Sheboygan County Medical Society. The evening's speaker was Lester Conger of Kohler. Mrs. Theodore Gunther was chairman for the affair.

WAUKESHA COUNTY

The Auxiliary to the Waukesha County Medical Society held its February meeting on February 7th at the home of Mrs. Leo W. Egloff, Pewaukee. Dr. John Hitz, Milwaukee, was most enlightening in his talk on "The Cross-Eyed Child". This was followed by questions and discussion.

At this meeting the members voted to send Hygeia subscriptions to five county schools, these subscriptions to be paid for with money received in the "change" box, a feature of each meeting.

COPELAND–TUGWELL BILL*

In line with the educational policies of the Auxiliary to the American Medical Association comes the study of Senate Bill 2800, referred to as the Tugwell Bill and more recently as the Copeland Bill. This successor to the Pure Food and Drugs Act of 1906 was drawn up by Dr. Rexford Tugwell, assistant secretary of agriculture, Walter Campbell, chief of the food and drug administration, and Dr. Royal Copeland, Senator from the state of New York.

California and Western Medicine states the high points of the bill as follows: (1) prevention of false advertising of foods, drugs, cosmetics; (2) prevention of traffic in poisonous cosmetics; (3) establishment of safe tolerance for added poisons in food; (4) establishment of legally binding definitions and standards for food; (5) power to require permits for the manufacture of potentially dangerous products when public health cannot otherwise be safeguarded; (6) prevention of curative claims for drugs when such claims are contrary to the general agreement of medical opinion; (7) requirement for definitely informative labels for foods and drugs; (8) power to protect the public health from future products and practices which may prove dangerous.

One objection to the bill which is being given great prominence by the manufacturers of certain patent medicines, is that the bill attempts to do away with self-medication. A study of the bill will show that on the contrary certain provisions dealing with definite labelling and so forth not only recognize self-medication but protect it.

A MESSAGE FROM OUR NATIONAL TREASURER

At the turn of the year, your national officers begin thinking of that last round-up, the annual convention. It is my very great pleasure to greet you and to say a word, thinking forward toward National Convention and Cleveland.

To have a highly successful meeting, we must needs have delegates in large numbers and to accomplish this there are several things to be done. *First,* we need to reinstate our delinquents. We need them and we are equally certain that they need us. *Second,* every eligible woman who has not yet joined should be given a chance to know the delightful social experiences and the important opportunities in becoming a unit in the ranks of this great reserve army that she is missing.

For those faithful and ever-loyal members who never fail to respond with time, effort and prompt payment of dues, may we suggest they plan a good old-fashioned get-to-gether where friendships are *made* and *renewed* and the membership is increased through sheer desire of *wanting* to belong.

Mississippi and Wisconsin have already gone over the top with an increase in the number of their delegates for 1934. Who will be next! How fine it would be if every state could add at least one over last year's representation. Our constitution provides that national dues shall be sent to the national treasurer at the close of each state's fiscal year. Also that sixty days before the annual meeting, state organizations shall be advised through the corresponding secretary of the necessity of sending delegates and alternates.

This means that we have the glorious springtime just ahead to enthuse and increase our membership toward this end. A quotation from California's State Treasurer, Mrs. F. N. Scatena, might here be apropos: "Pride in the knowledge of our usefulness and in the recognition of this by our local parent society should urge us to win the cooperation and whole-hearted support of every eligible woman".

May we *urge* each state president to stimulate and assist her officers and county auxiliaries to bring their organizations into line with the present great national movement of growth, progress and prosperity!

With best wishes to you all,

Again—Faithfully yours,

Mrs. James F. Percy.

EXCERPTS FROM THE NATIONAL NEWS LETTER

The Nobel Prize in Medicine has been awarded to Dr. Thomas Hunt Morgan of Pasadena. Dr. Morgan is director of the William G. Kerckhoff biological laboratories of the California Institute of Technology. Dr. Robert A. Millikan, himself a winner of the Nobel Prize, gives the following estimate of Dr. Morgan's researches:

"The discoveries that are grouped around the idea of chromosomes and genes—discoveries that enable us to connect hereditary qualities with actual minute objects observable in microscopes — represent probably as fundamental an advance in biology as has ever been made in history. It is altogether comparable with the discovery of the

* Summary of a report given by Mrs. Robert E. Fitzgerald at the meeting of the Woman's Auxiliary to the Medical Society of Milwaukee County, February 9, 1934.

circulation of the blood by Harvey or the germ theory of disease by Pasteur. This discovery and the whole group of developments that have been associated with it have been made by a group of Americans, of which Thomas Hunt Morgan has been universally recognized leader for the past twenty years."

The Richardson County (Nebraska) Medical Auxiliary is sponsoring a nursery school for children under kindergarten age. The C. W. A. allotment of $1,518 for this purpose will make it possible for the school to remain open for at least eight weeks. The committee of the Auxiliary which is in charge of the school is headed by Mrs. Henry R. Miner, who is also National Exhibits Chairman. The children are instructed in correct health habits, fed, given a nap, and in many cases, through the co-operation of the Red Cross, clothed. About forty-two children have been registered.

Some interesting programs have been enjoyed by the members of the auxiliary in California during the past month. At a meeting of the Contra Costa County Auxiliary, "100,000,000 Guinea Pigs" was reviewed by Mrs. H. L. Carpentar. At a Los Angeles County meeting Paul de Kruif's "Men Against Death" was reviewed by Mrs. Richard Bailey; the chairman, Mrs. Schiffbauer, talked on current events; and "New Developments in X-Ray and Radium" was the subject of an address by Dr. C. R. Dunleavy. Riverside County at its monthly meeting, heard Dr. Bon O. Adams on "Quacks and Quackery".

The Woman's Auxiliary to the State Medical Society of Colorado in conjunction with the Colorado Tuberculosis Association, sponsored a state wide essay and radio contest for high schools. The subject for the competing essays was "Tuberculosis —A Challenge to the youth of Colorado". Authors of the three essays ranking highest were given their expenses by the Colorado Tuberculosis Association to go to Denver to broadcast over station KOA. Cash prizes were given for the two essays ranking highest in the radio contest.

The semi-annual report of the Woman's Auxiliary to the Medical Association of Georgia is so full of interesting news that it is a pity there is not space enough to pass it all on to you. It proves conclusively that the "southern inertia" some northerners are apt to mention condescendingly, is a grand myth, for the energy which must have been expended by the auxiliary members in Georgia seems overwhelming. The state has 30 auxiliaries and 4 memberships at large representing 42 counties. The program for the state group, as it has been outlined by its Advisory Committee and the President of the Medical Association of Georgia, deals with Mother Welfare. This is being presented in all districts in the state and the auxiliary has been responsible for programs in 66 counties. The program was approved as a part of the co-operative health work of the Georgia Congress of Parents and Teachers, the Georgia Federation of Women's Clubs, the Georgia Federation of Business and Professional Women, the State League of Women Voters, the Director of Parental Education of the University of Georgia, the Public Health Nurses, the Red Cross, and others.

MRS. JAMES BLAKE,
President.
MRS. ROBERT E. FITZGERALD,
Press and Publicity Chairman.

NEWS ITEMS AND PERSONALS

Dr. E. S. Knox of Green Bay read a paper on "Gas Gangrene Infection" before a meeting of the Brown County Dental Society held on February 5th at the Beaumont Hotel.

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Formal opening of Darlington's new hospital was held on February 10th and 11th. The institution is conducted under the joint ownership of Drs. R. B. Quinn and E. D. McConnell of Darlington. It is a ten bed hospital.

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Dr. J. H. Hardgrove of Eden, Fond du Lac County, has announced that he will not be a candidate for re-election in the Assembly in 1935. Dr. Hardgrove was the sole physician member of the 1933 and 1934 legislative sessions.

Dr. D. B. Hamilton of Dodgeville is convalescing from a major operation which he underwent the latter part of January at Rochester.

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A booklet on a century of activity among physicians in Janesville has recently been completed by Dr. J. V. Stevens of Janesville. It contains historical data on the lives of physicians, surgeons, and hospitals that have contributed to the history of the profession in Janesville since 1833.

—△—

Dr. C. F. N. Schram, who for the past seventeen years has been associated with the Fairbanks, Morse & Company of Beloit, has accepted a position with the Eastman Kodak Company at Kingsport, Tennessee. He began his new duties on March first. Dr. Schram has charge of the med-

ical department of the Company and will also have charge of the new plant hospital which is to be built this summer.

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On February 20th residents of the village of Oostburg gave a banquet in honor of Dr. Edward Was, who has been serving their community for fifty years. Dr. Was came to Oostburg on February 20, 1884, following his graduation from Rush Medical College.

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Dr. Stephen Cahana, Milwaukee, was elected President of the State Board of Health at a meeting of the Board held on January 31st. Dr. Mina B. Glasier, Bloomington, was named president-elect; Dr. Joseph Dean, Madison, was chosen vice-president and Dr. C. A. Harper, Madison, was re-elected secretary.

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A reunion of alumni of Marquette University School of Medicine was held on February 16th. The program opened with inspection of the new medical school building and equipment. Speakers on the program which followed were Dr. Eben J. Carey, Dean of the Medical School; the Rev. William M. Magee, S. J., President of the University, and the Rev. Anthony Berens, S. J., regent of the medical school. Responses were made by Dr. L. J. Foley, president of the medical alumni association; and Dr. Millard Tufts of the medical alumni association.

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The Wisconsin State Board of Medical Examiners will held a special reciprocity meeting at Hotel Schroeder, Milwaukee, on Thursday, April 5, 1934. The purpose of this meeting is for the consideration of reciprocity applicants only.

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Dr. G. S. Darby of Brodhead resumed his practice on February 5th after having been ill with pneumonia for a number of weeks.

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Dr. William Allen Pusey of the University of Illinois College of Medicine spoke on "Medicine and Culture" on February 22nd at the first annual Marquette University memorial lecture at the Marquette Medical School. Members of the Milwaukee Academy of Medicine and the Medical Society of Milwaukee County were invited to attend.

This lecture was the first of a series of lectures to be sponsored by an undergraduate group of the Medical School which is interested in the advancement of specialized medicine.

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Mr. George Crownhart, Secretary of the State Medical Society of Wisconsin, addressed the Northwest Medical Conference at St. Paul on Sunday, February 25th, on the subject of "Medical Care of the Indigent." This conference is composed of officers from Nebraska, Illinois, Iowa, Minnesota, North and South Dakota, Montana, Wyoming and Wisconsin and is held annually for the discussion of problems common to the state societies.

DEATHS

Dr. Clark O. Decker, Crandon, died on January 20th of organic heart disease.

Dr. Decker was born in the year 1871 and was a graduate of Milwaukee Medical College in 1901. During the year 1932, Dr. Decker served as President of the Forest County Medical Society.

He was a member of the Forest County Medical Society, the State Medical Society, and the American Medical Association.

Dr. A. M. Farrell, Two Rivers, died in January in Hongkong, China, while on a world cruise with his sister, Miss Estelle Farrell. Death was caused by a heart ailment from which he had suffered during the past year.

He was born near Fort Dodge, Iowa, August 6, 1876. He was a graduate of the University of Iowa Medical School in the year 1898. Upon graduation he practiced for only a short time in Iowa and then came to Two Rivers in 1899.

During the World War, Dr. Farrell served as chief surgeon at Camp Riley, Kansas. For more than twenty-five years he was closely connected with the public affairs of Manitowoc and Two Rivers. He was a member of the municipal hospital board from the time it was organized and was on the staff of the Two Rivers hospital and of the Holy Family hospital at Manitowoc.

Dr. Farrell was a member of the Manitowoc County Medical Society, the State Medical Society, and of the American Medical Association. He was also a member of the American College of Surgeons.

He was buried with military honors in Calvary Cemetery at Two Rivers on February 13th.

He is survived by his sister.

Dr. R. E. Doern, Stockbridge, died on January 27th at the Veterans Hospital at Hines, Illinois, after a long illness.

Dr. Doern was born March 16, 1876 at Brothertown, Wisconsin, and was a graduate of the Milwaukee Medical College in 1909. Following graduation he began practice at Stockbridge. He served in the medical corps during the World War.

He is survived by his widow and one son.

Dr. F. A. Walters, 70, Stevens Point, died on January 30th at the Wisconsin Veterans Home, Waupaca.

Dr. Walters practiced in Stevens Point for nearly forty years and was a former staff member of the Wisconsin Memorial Hospital at Madison.

He is survived by his widow, one son and one daughter.

Dr. Emil S. Schoene, Milwaukee, died in his offices at 142 E. Wells Street, of heart disease.

Dr. Schoene, who was seventy-one years of age, had practiced in Milwaukee since 1906.

SOCIETY RECORDS

New Members

George O. Dunker, 536 W. Wis. Ave., Milwaukee.
R. M. Nichols, Sheboygan Falls.
Glen F. Denys, 231 Woodlawn Ave., Green Bay.
John G. Moss, Denmark.
W. H. Vosburgh, Denmark.
Walter Mauthe, Whitewater.
Clement F. Cheli, Columbus.
R. E. Campbell, Wisconsin General Hospital, Madison.
R. C. Montgomery, 119 E. Wash. Ave., Madison.
M. C. Rosekrans, Neillsville.
G. J. Gilbert, 2430 W. Wis. Ave., Milwaukee.
Beatrice O. Jones, 2021 Washington Ave., Racine.
H. M. Akey, Merrill.
Harold A. Bachhuber, Sauk City.
Edward Eisenberg, 1607 N. 12th St., Milwaukee.
S. A. Morton, 3321 N. Maryland Ave., Milwaukee.
S. L. Bornstein, 1345 N. Franklin Rd., Milwaukee.
F. A. Winneman, Merrill.
L. H. Baldwin, Gillett.
R. J. Rogers, Oconto.
C. H. Kingsburg, Gillett.
A. B. C. Bock, 925 N. 8th St., Sheboygan.
E. H. Federman, Montello.
H. W. Howe, 1418 Washington Ave., Racine.
A. L. Olson, Stoughton.
Henry H. Kleinpell, Prairie du Chien.

Change in Address

C. Kenneth Cook, Madison to 896 Payne Ave., St. Paul, Minn.

CORRESPONDENCE

SURVEY OF CRETINS

THE JACKSON CLINIC
16 South Henry Street
Madison, Wisconsin, February 10, 1934.

Mr. J. G. Crownhart, Sec'y,
Wisconsin State Medical Society,
Madison, Wisconsin.

Dear George:

I am making a survey on the incidence of cretinism in the United States, and would greatly appreciate it if you would insert a notice in your Journal to this effect and ask any of your readers who might have records of such cases to communicate with me. I am enclosing a form which contains the information desired.

No one has ever attempted to make a survey of this kind and it will only be through the cooperation of the medical journals and the profession that it will be possible to make such a survey. I will be especially interested to receive any photographs of these cases. I am asking that the names and addresses be given in order to eliminate the duplication of cases. When this data is compiled, I expect to turn it over to the American Medical Association where it may be filed for further reference and study.

Sincerely yours,
ARNOLD JACKSON, M. D.

Name _____ Address _____
Nativity _____ Age _____ Sex _____
Brief Physical Characteristics _____
_____
_____
Brief Clinical History _____
_____
_____
Goiter) { Present / Absent } _____ Mental Status _____
Results of Medication _____
Signed _____

IN MEMORIAM

Dear George:

No doubt you have the particulars of the death of Dr. Farrell. He, knowing that his days were numbered, chose to "sail west" on an ocean voyable. The doctor was a Lieutenant Colonel in the war, in charge at Camp Riley and came in contact with as many physicians during the war as perhaps any other medical officer. I am enclosing a little "In Memoriam" which was received with unexpected acclaim by his friends here, which might be appreciated by his wide circle of medical friends.

Respectfully,
M. P. ANDREWS, M. D.,
Manitowoc, Wis.

In Memoriam

To the passing of the late Dr. A. M. Farrell and to his service in the Holy Family Hospital.

From mists as mutely ominous
As of a sultry summer day,
He sailed away through the radiance
Of the western sunset way.

And the wake is desolation,
An aching void of fear,
A ripple of murmuring prayer
Too heart-contained to hear.

For pallid lips and abated breath
And features lined with pain
Will miss the rugged artistry
That could wreathe the smile again.
Some maiden's plight, some widow's mite,
Some colleague's grim despair
Will sense a desert loneliness
Where his sturdy help did bear
The crushing heavy burden
Till bleeding strength grew whole,
In the friendly restoration
Of the sick despondent soul.

He sailed away from the music
Of children-throated song;
He sailed away from the pine-clad hills
Where he'd labored hard and long.

His coat of arms, a serpent
On the Aesculapean rod,
He left burning on the altar
Of the dark-robed vestals' God.
But the shackles of his spirit
Will droop to languid mold
As the dross of its refining
Droops from its heart of gold.

On he sails into the sunset
To a far uncharted shore
Where the wind and tides keep moving
Onward—onward—evermore.

To the deeper silver waters
In a craft of the golden grail,
He will sail to bolder conquests
With loftier spread of sail.

This Knight of a Holy Order;
Wind and tide: Salute! Bend the knee!
For it is not every hour
That such a knight puts out to sea.

Sail on thou spirit echo
To the western sunset call;
'Tis no blast of mortal clarion,
'Tis the voice of the All-in-All.

'Tis the deep azure, the siren lure
Of aeons of mystery;
'Tis the surge of the sea and thy urge to be
ON,—on with eternity.

M. P. Andrews, M. D.

Council Holds Special Meeting to Consider Professional Participation in Public Health Effort

SUNDAY, February 11, was given over to a special one-day session of the Council at Milwaukee to consider in round table sessions the broad questions of professional participation and leadership in public health problems. The minutes of this meeting, necessarily very brief, follow.

1. The Council was called to order at 9:30 A. M. at the University Club, Milwaukee, Sunday, February 11, Chairman Rogers presiding.

2. Roll Call. Roll call showed the following present: Councilors A. W. Rogers, Frank W. Pope, C. A. Harper, Wilson Cunningham, A. H. Heidner, S. E. Gavin, S. D. Beebe, G. R. Duer, Joseph F. Smith, H. M. Stang, R. W. Blumenthal, and I. E. Schiek; President Stanley J. Seeger, President-Elect T. J. O'Leary, Past-President Reginald Jackson, Vice-Speaker Gunnar Gundersen, Treasurer Sleyster, and the Secretary. Members of the Committee on Child Health and Protection present were: Drs. J. B. Vedder, H. Sincock, F. Anderson, Frank Drew, and A. B. Schwartz. Other members of the State Society present included Dr. T. J. Redelings, Marinette, local Director C. W. S. Health Project; Dr. J. Newton Sisk, Correlator for Health Projects under the State Board of Health; Dr. W. D. Stovall, Madison, Chairman of the Committee on Cancer; and Mr. Theodore Wiprud, Executive Secretary of the Medical Society of Milwaukee County, Milwaukee. Present as invited guests of the Council were the following: Dr. G. M. Byington, Associate Medical Director of the Committee on Medical Participation in Public Health of the Kellogg Foundation, Battle Creek, Michigan; Dr. Henry Vaughan, Commissioner of Health of Detroit, and Director of the Committee on Medical Participation in Public Health of the Kellogg Foundation; Dr. LeRoy Wilkes, Executive Secretary of the Medical Society of New Jersey, formerly Field Secretary of the American Child Health Association; Dr. W. W. Bauer, formerly Health Commissioner of Racine, presently Director of the Bureau of Health and Public Instruction of the American Medical Association; Dr. Olin West, Secretary and General Manager of the American Medical Association.

3. The Chairman called upon President Seeger to open the conference by restating his position on Public Health Leadership presented at the January meeting of the Council. President Seeger stated the basic thought that medicine, if it wishes to discharge its fullest responsibilities to the public and to the profession, must now seek to formulate a comprehensive program for directing and correlating public health efforts through the medium of the County Medical Society. Expressing the thought that no plan should be formulated until funds had been made available to employ one competent to survey

the field and present findings and proposals to the September meeting of the House of Delegates, President Seeger advocated an appropriation from the surplus to carry forward this work.

4. Dr. Henry Vaughan, Commissioner of Health of Detroit, presented an illustrated address pointing out the accomplishments for the profession, public health, and the public in the so-called Detroit plan of professional participation in public health effort. He declared that each physician's office has become a health center through using the family physicians for diphtheria protection, smallpox vaccination, periodical health examination, and early discovery of tuberculosis programs under the auspices of the Health Department. Dr. Vaughan told of the preliminary program which had in mind the education of the physician to the end results desired and then recited the success of the program from the public viewpoint. Illustrating the advantages by reciting the results of the diphtheria immunization campaign, he said that during the past three years the physicians of Detroit have lost $60,000 because of the reduction in the diphtheria death-rate; but during these same three years they have been paid, either by parents or by the Health Department, $325,000 for their services.

"In other words," said Dr. Vaughan, "preventive medicine has paid the physician more than curative medicine in the ratio of 5 to 1. Furthermore, since the average cost of treating a case of diphtheria is $35.00, whereas the average cost of prevention is but $3.00, the parent has gained in the ratio of more than 10 to 1. The advantages to the Health Department and to the public must be obvious to all. The death-rate has been reduced until in Detroit the diphtheria death-rate in 1932 was but one-fifth of that which obtained before the plan was put into effect.

"The advantages which accrue to the public under the Detroit plan may be summarized briefly as (1) reduction of needless sickness; (2) reduction in the cost of medical care; (3) assurance of adequate medical care; (4) more equitable distribution of cost, and (5) the stimulation of parental responsibility.

"This program encourages and maintains the cordial personal relationship between the physician and client. The successful practice of medicine still depends upon intimate and sympathetic contact between the physician and the patient. To serve the individual to greatest advantage in case of illness the physician should be well acquainted with the physical and mental handicaps and attitudes of his client while in normal health."

5. Dr. Byington reported on the success of an identical program in three rural counties of Michigan, pointing out that medical participation and leadership in health efforts were not dependent upon applying the plan solely to urban areas. He also indicated that under the plan as adopted in rural Michigan the public health nurse was required to have a teacher's certificate and become a teacher of health prevention and preventive measures rather than losing herself as one nurse in a county taking care of sick people.

6. Dr. Wilkes suggested that the physician had a dual role: (1) in the practice of medicine as a profession and (2) in the business of furnishing medical service to a community by analyzing the community needs and instituting plans or programs to accomplish the filling of those needs. In this latter role Dr. Wilkes pointed out, the physician was a cooperative force working both between and in the interest of the individual and the state.

He related that New Jersey was intensely interested in the identical subject matter which presently engaged the attention of Wisconsin and told of the work presently in process looking towards the prevention of diphtheria and centering attention upon the office of the family physician by the use of health hours.

7. Dr. Olin West addressed the Council during the noon-day dinner stressing certain fundamental obligations of medicine and certain fundamental principles which carried within themselves the promise for the future of medicine as a profession.

8. Following the dinner Dr. W. W. Bauer presented by chart the public health efforts of each of the State Medical Societies. He advocated the necessity of professional participation in the field of public health and pointed out that by so doing the physician increased his usefulness to both the state and the public and as net result, became a directing force in the broad field of promoting the public good.

9. The hours from three to five were devoted to a round table discussion in which the following participated: Drs. Drew, Stovall, Harper, Smith, Redelings, Sincock, Anderson, Duer, Cunningham, Stang, and others. At the conclusion Dr. Seeger re-presented his thought that County Medical Societies look to the State Society for leadership in this effort and that an appropriation was essential to employ one who could make specific recommendations in the near future. The matter was left in the Executive Committee of the Council.

10. The Secretary discussed at some length the C. W. S. Health Projects and Medical Participation and Leadership therein. This was also discussed by Dr. J. Newton Sisk, Correlator of Health Projects for the State Board of Health. It was moved by Stang–Smith that the Executive Committee of the Council be empowered to act in the name of the Society in event that further conferences were essential in planning the program. Carried.

11. Organization of Auxiliary. The following communication was presented to the Council in the name of Helene M. Carey, President, Woman's Auxiliary to the State Medical Society of Wisconsin:

"The purpose of this letter is to enlist the interest and assistance of your members in organizing Woman's Auxiliaries to the County Medical Societies in their districts where such organizations are not present.

"The officers and chairmen of the Woman's Auxiliary to the State Medical Society this year are

particularly concerned with an intensive drive to sell Hygeia and the placing of subscriptions of this magazine where it will be used to the best advantage, and to spread authoritative health information to lay organizations.

"We are under the direction of an Advisory Council selected from your group and no project is undertaken without their advice and consultation.

"May we please, have your cooperation and interest in furthering the activities of the Woman's Auxiliary to the State Society of Wisconsin this year?

"Thanking you for past favors and assistance, I remain,"

12. The Council adjourned at 5:15 P. M.

J. G. Crownhart,
Secretary.

Approved:
Arthur W. Rogers, M. D.,
Chairman of the Council.

High Schools May Debate "Socialization of Medicine"

THAT the question of "Socialization of Medicine" may be the subject of debate in every High School in Wisconsin beginning next September, was the information obtained by the State Medical Society of Wisconsin late in February.

States having University Extension Divisions are members of the National University Extension Association. The Debate Committee of this Association is presently conducting the ballot among members of the N. U. E. A., State Debate League Directors, and other officials to ascertain the debate question for all high schools for the school year of 1934–1935. The questions submitted for selection are:

(1) Socialization of Medicine.

(2) Federal Aid for Education, or

(3) Government Control of Industry.

In Wisconsin members of the Board of the Wisconsin High School Forensic Association who have balloted upon the subject to be chosen are: G. J. Balzer, Chairman, Washington High School, Milwaukee; Almere Scott, Secretary, University Extension Division, Madison; O. H. Plenzke, Treasurer, Secretary, Wis. Teachers' Association, Madison; Professor A. T. Weaver, Adviser in Speech, University of Wisconsin; Ethel Theodora Rockwell, Adviser in Dramatics, University of Wisconsin; C. W. Dodge, Stanley, Wis.; E. J. McKean, Tomah; J. E. Kitowski, Menasha; M. A. Fischer, Dodgeville; H. C. Mason, River Falls; J. E. Rohr, Nekoosa; William R. Bruce, Park Falls; F. C. Bray, Fort Atkinson.

According to Miss Almere Scott, of the University Extension Division, who is also Secretary of the State High School Forensic Association, the debate subject selected for national participation (including Wisconsin) will not be announced until August 15th.

The Economic Status of Medicine*

By J. G. CROWNHART

Secretary State Medical Society of Wisconsin, The Wisconsin Hospital Association, Madison

THE CHALLENGE

1. Extract of press release of the Milbank Memorial Fund, 40 Wall Street, New York City, Oct. 10, 1933.

"Disappointment over the final report of the committee on the Costs of Medical Care, the chief financial supporter of which was the Milbank Memorial Fund, was expressed in that annual report of that foundation made public yesterday (Oct. 10, 1933). * * * 'It is a matter of extreme regret * * * ,' said John A. Kingsbury, secretary of the Fund, * * * 'that the Committee failed to propose a comprehensive program which would solve the basic problem which it uncovered.

"' * * * in all fairness, it should be said that much of the fault lay with obstructionists' tactics on the part of certain groups of physicians who generally control medical organizations and often are able to use the great prestige of these organizations to prevent, rather than to promote, the delivery of adequate medical services to all of the people.'

"The need for a national health plan is emphasized in the report 'which would embrace public health and preventive activities, private medical and voluntary social services, and properly directed

* Presented before the Second Councilor District Society, Eau Claire and Associated Counties, Dane County, Fond du Lac County, and other Wisconsin societies, 1933–34.

measures for strengthening economic security for the entire population.' "

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2. Extract—President Glenn Frank, University of Wisconsin, before the American Hospital Association, Milwaukee, September, 1933.

"There are innumerable services that innumerable Americans need but cannot personally finance, * * * ."

"Somewhere out of the medical profession, out of hospital leadership—somewhere the problem of bringing medical service into a rational relation to the buying power of the rank and file of Americans will have to be solved, and I say, although I have no interest whatever in any venture in state medicine, that unless statesmanship in the ranks of the medical profession and statesmanship in the ranks of the hospital executives solve that problem, political statesmanship will take hold of it and solve it. The whole field of medicine and hospitals is, in my judgment, today exactly in a situation parallel to the economic situation I described when I discussed the statesman's sector: it rests entirely in the hands of the doctors of this country and the hospital executives to say whether or not this whole problem of medical costs is solved inside the profession, upon the profession's initiative, or whether or not it shall be solved outside by ventures in state medicine. I would go any length to see to it that it was solved internally by the profession; but the moment it became clear that the profession, like the economic leadership of the country, had failed to meet that issue, then no man concerned in the real advance of medicine in this country could do other than back a leadership that was able to solve the problem."

THOSE who specialize in the field of history tell us today that history is more than a recording of past events,—that in fact it is a recording of past events that he who reads discerningly may prophesy probable future trends.

Recently it was my privilege to read and re-read the old minute books of our State Medical Society. These handwritten records, dating back into the 1840's, are of the greatest interest as records of historical worth. But these records are more than history for if we might have one with us tonight who had witnessed all the decades covered by these records, and who could translate them for us in terms of human values, I think we might well agree that history dictates our sound future.

Certain it is that he who reads of the past must be impressed with the fact that every decade since the establishment of our Society has seen our people take one step further away from individualism and one step closer to a period which he may be pleased to call a period of interdependence. It naturally follows that when we have a great many people in a chain with a relationship of interdependence, one with the other, there will be those who will require that their actions be regulated if their abuse of power is not to bring about actual harm to the many who make the chain. From regulation to a supervision that becomes in fact an actual control is an easy step.

So it is that we have seen with passing decades the drift from the so-caller "rugged individualism" to the partnership, the association, and then to the corporation. And then the drift from the establishment of a corporation as a legal entity whereby the many might do with impunity that which was not within the power of a single person, to the period where even the great corporation must bend to regulation and now to actual close supervision. We live in a period of growing social control.

While medicine has always been a distinctly peculiar type of the rendition of a personal service, yet this drift from individualism to interdependence has brought with it peculiar implications to the profession of medicine,—many of them of the greatest value and many of them wholly false leads in the search for the means of rendering the best quality of medical care.

While we have our regulation, and justly so, in the field of original licensing of physicians and disease control, there are those who would now go further through some new agency by actual control of the sale and rendition of medical service. There have been many to suggest this standard and that standard until we have worshipped in closely correlated fields a religion of standardization. This we have done without stopping to appreciate that while the immediate effect of setting a standard is to establish a level that the few have attained in hopes that it may inspire the many to rise to the same heights, at the same time its ultimate effect is to establish a level beyond which it

is not thought necessary to go. Such standards have no place in a profession such as medicine where any designated or so-called standard treatment of today is frequently the obsolescence of tomorrow.

Today, in a changing world, medicine is beset on every side by those who would give it the master voices of economics, organization, finance, and mass production. Financiers who have achieved a personal material success in life wish to become known to future generations as doctors of philanthropy and so they graciously would endow medicine with their materialism; some educators have been so concerned with public health that, neglecting the grave and immediate problem created by the surplus of their own professional output, they step afield to tell medicine where it shall go and the penalty if medicine itself fails to accept their brand of statesmanship; some industrialists have become so imbued with the field of organization and mass production that they see no reason why medicine should not bend its knees to their God that medicine forever may be "bought" at a cost within the means of underpaid employees to purchase.

With all these attacks from sources without, and a few within, consideration has been given to organization, to production, to economics, to insurance principles, to purchasing power of the individual, to sociology and social aspects of medicine, and in fact, to every other subject than that which has ever been the objective of the profession itself,—the actual delivery of a constantly improved and improving quality of service.

If we may return now to the history of medicine, let us recall with some fitting pride that no statistician brought the people of this country protection against smallpox. Let us remember that the great decline in infant deaths from diphtheria was the result of the theories of no sociologist. Typhoid fever has been wiped out of our homes, but the discovery of the causation of typhoid fever can be attributed to no educator. Hospitals have had no bank holidays. Physicians have declared no strikes.

HEALTH INTEREST OF PATIENT

I would bring you the thought that that which has been of greatest accomplishment in the field of medicine today has been brought to our people from within and not without the basic sciences and the art and science of medicine. So with the consideration of all that is suggested that medicine must do for the future welfare, attention of interested laymen has been given to everything except the question "Is this to the best *health interest* of the patient?"

There are those who use words so fluently that they would almost convince the physician that the personal relationship of patient and physician could continue under the plan of medicine as proposed by the majority report of the Committee on the Costs of Medical Care,—a plan that would give the sick man the benefits of a so-called service directed by a House Committee. Educators who met *their* problems in the depression by *raising fees* now tell us that you as physicians have failed to meet yours, even though the contributions of medicine through physician and hospital have equalled, if not in fact exceeded, all the tax monies raised in Wisconsin during these years of great stress.

We must and do recognize that there has been a constant trend during the last few decades looking towards a wholly proper better degree of economic security for all people. What is the Workmen's Compensation Act but one means of securing a degree of economic security theretofore not known for those maimed and injured in industry? The trend in many other fields of legislation all has the final thought of securing this economic independence. There are none here tonight who would say that this was not a wholly proper movement and yet some things can be purchased at too high a cost. If medicine is to so shape its services that they can only be given in so far and in such limits as they will not hinder, even temporarily, an economic independence, then they may be truly something else, but they will not be medicine.

If a standard is to be set for the delivery of what today seems to be adequate medical care, it may be one form of mass produc-

tion of service, but it will not be any form of a rendition of true medical service. Standardization is no master for medicine. We do not seek the means of giving some standardized service for the sick to a degree wholly governed by monetary solvency but rather the true physician constantly seeks newer means of giving all the service that the sick man needs to alleviate his particular ills. I cannot subscribe to a social theory that places wealth before health. Nor can I subscribe to a theory that in its application is more concerned that a man shall die solvent than in the preservation and prolongation of life itself.

HEALTH INSURANCE

It has been repeatedly said in the past year that while this plan may not be proper or that plan is not perfect, still it remains for medicine to develop some plan of its own unless it wishes to see "political medicine." It has been said that it is inevitable that we must accept the insurance principle for the payment of the costs of illness, and accepting such principle, it is better to inaugurate a voluntary payment plan rather than wait for a state controlled compulsory plan. Let me say with respect to that that I am told of a so-called plan on the Western coast that for $2.00 a month offers the subscriber complete medical and surgical service, including laboratory diagnosis and the services of the finest consultants of the community; that offers him six months of hospitalization if that be required, and in addition not only provides him with ambulance and emergency service, but also offers to pay the bills for three months of private duty nursing, if that be required. This plan, however, found itself in the peculiar position where after eight months of active solicitation, the solicitors were able to secure only one thousand subscribers out of two hundred thousand population.

I would suggest to the advocates of the insurance principle that few take issue with them on the basis of their principle. As so well stated by President Seeger, we would all favor a Utopia. Let us not blind our eyes to the fact that the very word "insurance" means spreading of a common risk over the many. And nowhere has it been found that presumably healthy people in the numbers required by sound insurance are ready voluntarily to spread this sickness cost risk. Secondly I would make the point that there is a vast difference in application between that insurance that pays a monetary return and that which purposes to render its return in medical service. The layman has means of ascertaining the value of the first. He has no means with respect to the second and particularly is this important if we will frankly admit that every so-called "good service" likely will be faced with a commercialized service that will seek to capitalize on the demand physicians themselves create, by offering more for less.

And now with reference to this same Western plan. I turn to the comments of a local hospital superintendent who has seen the plan in its operation and I quote now his observations: "I feel that it is the best substitute that has yet been put forth for the old established plan of the private practice of medicine. It is, however, a substitute, and in my opinion it will prove to be an *inferior* substitute to the medicine by the individual physician and surgeon. I believe that all such plans will in time result in a lowering of the quality of care which a patient receives. This, in my judgment, is inevitable in the very nature of things. The fundamental principle on which any insurance plan works is that the more services a patient receives, the worse it is for the insurance agency, and that is a dangerous principle where health and in some instances the life of the patient is at stake."

There is a statement that deserves to be "slept on" by every financier, educator or doctor of philanthropy who presumes to tell his fellowmen that health insurance is inevitable and that medicine should therefore lead the way with its own plan.

No plan of voluntary health insurance that has come to my attention has met with any degree of real success based upon the ideals of medicine, no matter what value it seemingly offered, even with a direct solicitation upon the public and frequently a solicitation that resulted in employers forcing their employees under the

plan. Let us face the implication of this fact. I think it truly may be said that while illness may be one of the inevitable consequences of life it is not a pleasant one, and presumably healthy people in numbers are no more willing to pay for it *before* the illness occurs than they are to pay for it *after* the service has been rendered. I shall admit at once that you can compel them to do so, but if medicine is to face compulsory health insurance then let us face it now and ask ourselves first of all who is requesting this compulsory health insurance. Certainly it cannot be said that the people themselves are asking that they be taxed for compulsory health insurance for if that were true they could have had it any time they had wanted it, whether we wished it to be so or not. Certainly the medical profession of this country is not asking for compulsory health insurance in the face of all that it knows of the evils of that system in every country where it has been adopted. I know full well that there are those who will tell you that the profession in such and such a country is well satisfied with it, but we must also appreciate, if we are to evaluate these statements clearly, that the standards of life in one country differ from those in another, and being satisfied with something may only mean that what you have is a little better than what you had previously.

COSTS OF ILLNESS

It has been said, and properly so, that in instances the costs of illnesses are catastrophic. I know by both observations and personal experience of the monetary cost of illness, but I am impressed that the greatest catastrophy would be to center our attention upon costs rather than upon the prevention and cure of illness itself. The real catastrophy is the too frequent neglect of the human machine and the cure is continued education and not a cheaper service that elsewhere has resulted in a cheapened service.

I am impressed that with our effort to solve all our ills by laws we may overlook the fact that we cannot repeal some of the laws of Mother Nature that have been working since life was created and promise to continue to work for all time to come. Great strides have been made in perfecting the adjustment of our lives with these laws of nature. More remains to be done. But urgency of the demand by the few is no occasion for acceding to plans that we cannot defend when their ill-working in the future will cause an accounting. If anything, social cures are deserving of more tests and weighing than cancer cures. We can ill afford to accept the reponsibility for experiments in health of the masses and it is a fact of more than passing interest that our so-called social leaders propose for others but do not seek the system of their own proposal for themselves.

One who is trained as a physician has a remarkable asset. That asset has been the training to hold his balance even in the emergency. So do I suggest that despite the cry of educators that medicine needs statesmanship; despite the cry of doctors of philanthropy that medicine needs House Committees; despite the cry of financiers that medicine needs industrial methods, let us view our problem in the light of a prophesying history and upon that basis determine here and now that the real future of medicine *as a profession* lies not in making medicine economics; lies not in making it sociology; lies not in making it insurance. The real future of medicine lies solely in providing it with such opportunities as will continue to attract to the profession of medicine the best minds of each succeeding generation who will give with that abandonment characteristic of every profession, the best service that they are capable of giving, relying upon the benefits of that service to render them in return a reasonable economic status in life.

In the past three years I have attended many meetings and have been swayed with a mass psychology by the appeals and beautifully worded statements of those who sought to solve your problem for you through hospital insurance, medical insurance, central clinics or what have you. And on each succeeding morning the thoughtful man awakes appreciative that away from the band, away from the applause, away from the magnetic personality, there is only one outstanding problem that faces medicine to-

day as it has faced it through every generation, and that is the problem of giving to each individual patient all that good medicine indicates as needful.

In the final analysis we dare not discount social trends. We must continue to provide well for the poor and indigent. But we must have the courage to insist that the unit for remuneration in medicine is the application of the trained mind of a physician to an individual problem. Let us recall that the needs of the purchaser are not capable of supply by mimeographed instructions. And it is my conviction that as physicians fight for the maintenance of those fundamentals of medicine that have endured hundreds of years, so will you gain and maintain for the profession itself that economic status that will provide for its and your future. There is no house of medical economics that will give a better future shelter if built upon the present shifting sands.

Only statisticians measure life in dollars. Let us not give the people such a yardstick for the valuation of services upon which depends life itself. Rather let physicians while giving of the best, patiently continue to educate the people to the true value of an honest, faithful, scientific service that is as deserving of a constant place in every family budget as food, clothing and shelter. Without closing our minds to any future proposals for the better adjustment of our lives, let us resolve that if you are to have unlimited opportunities for future service and economic reward we must not now establish empirical standards and limits that inevitably will prove inadequate to patient and physician as science marches forward and as general economic recovery is had.

In common with all men you seek to maintain and improve your economic condition at a time of stress and strain. Let not the times or the voices of self-appointed leaders beguile you into increasing your present income by selling an inheritance for, once sold, it can never be redeemed. In the plans that I have seen, the concealed price physicians are really asked to pay for present increase of income, is economic bondage in the future. That is neither in the interest of the people nor the profession.

CONCLUSION

In conclusion may I suggest the thought that in our social complexities of life there are a great many problems for which we have found no adequate answer. Financial institutions still fail virtually wrecking not only the commercial aspirations of the community but not infrequently the very lives of customers whose every assurity for future economic status rested in the firm belief in their financial integrity.

While presumably the state affords the equal opportunity for all of its citizens in the field of education, yet we know that lack of finances alone annually stands between thousands of our young people and education at our state tax-supported universities.

An educational leader who is quoted at the outset of this article as having declared that political statesmanship would solve the economic problems of medicine if medicine refused to solve them for themselves, declaring as late as April, 1933, *when discussing education*, that he, for one, protested "the current attempt to make educational leadership the scapegoat for the sins of economic leadership" and that he questioned "much of the budgetary jitters, a persistent propaganda has been stirring up."

On the day that I left New York early in the fall 50,000 men and women were on strike in the metropolitan area of that city. It suggests the thought that the great industrialists have not yet solved the intricacies of the problems of labor and industry.

I would point out that the most serious ill result that could grow out of all efforts to secure a better social adjustment with the laws of nature would be to have any one of the many proposals in the many fields considered as a "cure all." No one is more conscious than the physician himself of his sometime inability to stay the hand of disuse. No one is more conscious than the physician himself of the economic costs to the individual and nation of sickness but he is also conscious of the fact that when governments continue to license the uneducated to treat the sick of their communities, not much is promised that these very same governments will be able wisely and thoughtfully to devise and admin-

ister plans to treat the sick on a mass basis under government control.

Far from falling behind in your social obligations, the medical profession is actually at the forefront now and has been there for these many years. Medicine has the means of wiping smallpox forever from this land but governments will not make the means effective through compulsion. Medicine has the means to wipe out diphtheria but again we must resort to education and even free administration. Medicine, if it is to fill its greatest need, must continue first to provide the medical service that the individual needs both in disease prevention and in his illness, for the problem of the costs of illness is not a problem that can be divorced from all the others of the day, but is one that is inextricably a part of the whole pattern of our social life.

As we resolve with education not to permit our leadership to be the scapegoat for the sins of economic leadership, so do we pledge a continuation of the age old ideals of medicine,—a continuation of the studies that only physicians can make to solve ever present, ever new problems involved in the better distribution and application of medical service.

And now I quote our greatly beloved Secretary of the American Medical Association:

"It is at once our privilege and our duty to fight for the maintenance of the ideals and traditions of a profession, described by that revered poet, publicist and physician, Oliver Wendell Holmes, as 'the profession which for more than two thousand years has devoted itself to the pursuit of the best earthly interest of mankind, always assailed from without by such as are ignorant of its infinite perplexities and labors, waging an unequal contest with the hundred-armed monster that walks at noon and sleeps not at night, but toils on, nevertheless, not for itself or for the present moment, but for the race and the future.' "

Medical Problems of the Veterans*

By S. J. SEEGER, M. D.

President State Medical Society of Wisconsin, Milwaukee

POSSIBLY a third of the family physicians of Wisconsin are veterans of the World War. As one in that group, I am happy to appear before this conference today. I have the dual interest of a physician and veteran in discussing with you some of the problems that interest us all as veterans, and interest physicians as a group of men who are endeavoring under no few handicaps to render a high type of service in the communities in this state in which they reside.

That we may have no misunderstanding, permit me to say that in my discussion of the medical aspects of the veterans' problems, I am not concerning myself with the question of whether existing or proposed legislation is or is not in the public interest. At the present time there is certain State and Federal legislation that deals in part at least with medical problems of veterans. Other legislation has been proposed. Presumably more will be suggested in the years to come.

When we discuss the medical problems of the veteran we are, from a medical viewpoint, talking about the problems of restoring to health men who are sick or injured.

Certain of these sick and injured have medical problems that best can be met under present conditions by existing governmental hospitals and medical organizations. In this group we find certain of the neuropsychiatric cases arising out of the exposures of war. In this group we find the tuberculous whose health needs demand the care that best can be afforded in a centralized and specialized unit. In this class we find the war wounded whose care over long periods is rightly a governmental responsibility and for the discharge of which responsibility the government has organized hospitals and specialized staffs.

* Presented before Mid-Winter Conference, Wisconsin Department, American Legion, Fond du Lac, Jan. 21, 1934.

On the other hand, we have the veteran who requires medical attention either for relatively short periods of time or possibly for short periods at irregular and unpredictable intervals, the need for service in many instances being urgent. The physician is interested in these men for they are, of necessity, a part of the whole problem that he faces every day in his life—that of furnishing adequate care to those who need it. His interest, however, transcends even this. No one works more zealously than the physician to develop within himself by education, and within the community he serves by new projects, the means for furnishing an adequate medical service. This service must meet the reasonable demands of all people of the community for the treatment they need and can best secure at home.

Without belaboring the point, I have indicated to you that for the purposes of our discussion, we are here viewing the medical problems of the veteran from the following angles:

1. The veteran as a sick man, requiring a service that can best be rendered in a centralized hospital with a highly specialized medical staff. This needs no discussion.

2. The veteran as a sick man who requires either emergency service or medical service of a nature that comes at unpredictable intervals or for comparatively short periods of time or whose medical needs can be met best at home.

It is an adequate medical service for this latter group that is of most immediate interest to the physician, for the chances are that he and his local hospital will be called upon to render that service.

It is a trite saying that "man proposes and God disposes", but it is here apropos when we consider the planning of medical and hospital service for this latter class of veterans. You may have a highly organized service at Milwaukee or Chicago to supply all the medical and hospital needs of every veteran and you may supplement it with a state center at Madison. But all this is useless to the veteran outside these two centers who cannot predict when he is going to require the service and who, when he does require the service, finds that it must be given with the least possible delay and with the least possible transportation if some regard is given to his chances of recovery or lessening the handicap that inevitably must follow the particular illness or injury he has suffered.

I think I can make my point clear by citing two actual cases—both in our own state. A veteran entitled to Federal hospitalization received a skull fracture in his home town. He might have been moved to Milwaukee under the law but they dared not move him because his life was in the balance. Second, a veteran entitled to Federal hospitalization had a flare-up from an old wound. He was entitled to be moved to Milwaukee but it was nip and tuck to pull him through without adding the hazard of transportation which in this instance would certainly have caused his death.

Good medicine is more than giving medicine in bottles. Here is a veteran entitled to hospitalization at Chicago for diagnostic purposes. He goes to Chicago expecting to stay two days. He is there three weeks and returns to find himself so far behind in his work as to affect seriously his limited earnings. There was nothing in the examination, if conducted at home, that would not have permitted him to attend to most of his work during the required observation period.

The aid and encouragement of the family is frequently excellent medicine while homesickness may be very bad medicine. Confidence in the physician whom you have known for years is good medicine for the man who must have treatment for a serious condition. Wondering how things are at home and worrying about them because you are not sure may be poor medicine. Knowledge of security is an excellent tonic.

I have but attempted to suggest that for many conditions and under many conditions, good medicine comprehends more than distant government "setups."

I would impress upon you that whatever there is today of outstanding value in your local medical service and in your local hospitals is there because the need was present in the community for the service. May I suggest that the wholly proper development of your local medical service depends in no small part upon the demand.

May I suggest the thought that irrespective of existing or future legislation affecting the veteran, you and I and all of us in this state are dependent upon our local hospitalization and our local medical service whenever emergencies arise within our families. The veteran, when his need for service is not pressing, may have some election, but his wife and his children are dependent solely upon the service that exists in our state. I mention this only to bring home to you why it is that the medical profession as an organization has worked for these many years to accomplish what it calls the building of Wisconsin medicine. I mention it only to bring home to you why it is important that you and I and all of us lend a hand where we can towards the attainment of that goal.

As one who restricts his practice to surgery, I am a specialist. And yet no one is more willing than the specialist himself to tell you that you may have wholly adequate medical service at the hands of your family physician for probably eighty-five per cent of the ills that beset the average man. I would not leave you with the thought that services of a special nature are not required with some frequency for they are, but here, too, the family physician serves his people by referring them to the one whom he considers to be the proper man when such reference is indicated. And do not forget that it was largely the men who today are your family physicians who made up the backbone of what was our wartime medical service.

If I seem to be making a plea for the family physician and for the use of local hospitals and local facilities, I am doing so solely because I am referring to that type of case in which local service is not only good service, but actually for the best health interest of the patient. And the best health interest of the patient is the only solid ground upon which any physician may practice with success his time-honored profession. It is the corner-stone of sound medical practice.

Now that we have an understanding of this basic problem, I am glad to make an announcement to you. The State Medical Society of Wisconsin, embracing over 2,000 physicians in this state, stands just as ready to aid you as an organization as do the individual physicians who make up its membership. It has been my privilege to appoint a committee on medical problems of the veterans consisting of Dr. Otho Fiedler of Sheboygan, and two past commanders of your own State Department, Dr. J. E. Barrett of Sheboygan, and Dr. C. A. Dawson of River Falls. Each is a member of the Legion. Each is a good physician. Each served you overseas.

I proffer you this committee and commend its services. I do so wholeheartedly that you may have our professional advice not as citizens passing upon what may be good public policy, but as physicians offering the richness of science and experience that we may venture to suggest for your own determination, what is good medicine for those who need it.

Mr. Commander, it has indeed been a privilege to have had this opportunity of addressing you today in the name of a scientific organization that is now in its ninety-fourth year of effort to serve the best health needs of the people of our state,—The State Medical Society of Wisconsin.

C. W. A. HEALTH PROJECT

Fifty-five Wisconsin counties have had a health survey project approved under the Civil Works Administration and the correlated program will probably be in action as this issue appears. The project contemplates the health inspection of children from kindergarten through the eighth grade and will be completed by May first.

As an employment program, the state project will use the services of upwards of 500 registered nurses. Under the direction of county medical societies, the project calls for supervision of physicians and dentists with medical and dental examinations for children "spotted" after a rough screening process. Parents will be advised of defects found.

The state-wide project was planned by Dr. W. A. Werrell, Madison, director of service projects for C. W. A., and is under the immediate supervision of Dr. Werrell, Dr. L. W. Peterson, Sun Prairie, assistant director, and Dr. J. Newton Sisk, director and co-ordinator for the State Board of Health.

Recent Licentiates Announced by State Board of Medical Examiners

BY RECIPROCITY

Name	*School of Graduation*	*Year*	*Present Address*
Alcorn, Marshall W.	Illinois Medical	1930	Friendship, Wis.
Danforth, Herschel C.	Detroit College	1928	% Chevrolet Motors, Janesville, Wis.
Donke, Milton Judson	Illinois Medical	1932	1711 Madison St., Madison, Wis.
French, Bessie S.	Chicago P. & S.	1913	1135 Bryn Mawr Ave., Chicago.
Gilbert, Max	Northwestern Med.	1932	1100 W. LaSalle, Chicago.
Izner, Bernice	Loyola Medical	1932	Normandale, Madison, Wis.
Johnson, Barton W.	Barnes Medical	1894	St. Agnes Hospital, Fond du Lac, Wis.
Kleinhans, Joseph B.	Hahnemann Medical	1903	765 Oakwood Blvd., Chicago.
Kline, Clifford L.	Creighton Medical	1927	1439 Lincoln, Racine, Wis.
Littig, Elmer Henry	Iowa Medical	1930	Platteville, Wis.
Lochen, Everette Lee	Wisconsin Medical	1931	922 S. 29th St., Milwaukee, Wis.
Rodgers, Richard S.	Minnesota Medical	1930	Chippewa Falls, Wis.
Sherman, Royal V.	Minnesota Medical	1931	Knapp, Wis.
Thompson, LeRoy H.	Hahnemann, Med.	1928	30 N. Michigan Ave., Chicago.
(License being withheld pending receipt of Basic Science certificate)			
Virgin, Herbert W. Jr.	Northwestern Medical	1931	16 S. Henry St., Madison, Wis.

BY EXAMINATION

Beatty, Richard S.	Wisconsin Medical	1932	1522 Jefferson St., Madison, Wis.
Donovan, Anthony	Rush Medical	1933	Columbia Hospital, Milwaukee, Wis.
Gilbertsen, C. Rheinhart	Rush Medical	1933	Janesville, Wis.
Jensen, Fred'k. Geo.	New York University	1932	136 Main St., Menasha, Wis.
Horwitz, Emanuel	Marquette Medical	1933	3533 N. Fred'k. St., Milwaukee, Wis.
McCarter, John C.	Wisconsin Medical	1932	225 Clifford St., Madison, Wis.
McKittrick, Norval W.	Nebraska Medical	1932	Columbia Hospital, Milwaukee, Wis.
Moxon, James Arthur	Loyola Medical	1932	109 W. Wisconsin Ave., Neenah, Wis.
Reznichek, Cyrus G.	Northwestern Med.	1931	Antigo, Wis.
Schmitt, Alton Jos.	Wisconsin Medical	1932	615 Zimbal Ave., Sheboygan, Wis.
Shima, Raymond Thos.	Minnesota Medical	1932	Montgomery, Minn.
Thayer, Richard A.	Northwestern Medical	1933	Public Service Bldg., Beloit, Wis.

Ask Continuance of Wisconsin Memorial Hospital as Institution for Veterans

AFTER several months of deliberation, the Wisconsin Legislative Interim Committee, created to study the problem of the disposition of the Wisconsin Memorial Hospital, has reported that means exist whereby it may be continued for its original use and have petitioned Wisconsin representatives in Congress to secure assistance to this end. The resolution adopted by the Interim Committee which, in effect, constitutes its final report follows:

"WHEREAS, The deliberations of the Wisconsin Legislative Interim Committee on Disposition of the Wisconsin Memorial Hospital disclosed that one section of the Economy Act passed by the 73rd Congress in 1933, has resulted in the transfer of mentally incompetent Wisconsin veterans to federal hospitals in other states; and

"WHEREAS, This works a great hardship on the veterans' wives, children and friends, in the expense and time entailed in paying their beloved ones a visit, and in many cases it is of such prohibitive nature that it deprives them of that pleasure entirely; and

"WHEREAS, The Wisconsin Memorial Hospital was built solely in recognition of the services rendered by Wisconsin veterans, with facilities for the care of the mentally incompetent veterans second to none; and

"WHEREAS, This Committee has come to the conclusion that this institution should not be utilized for any other purpose than that to which it was dedicated; and

"WHEREAS, The desired results can only be accomplished by action of Congress; therefore, be it

"*Resolved,* That all Wisconsin's representatives at Washington, as a group and individually, be respectfully urged to have Section 17 of Public Act No. 2, of the 73rd Congress, so amended, at the ensuing session, that all Wisconsin incompetent veterans, whose mental disabilities are permanently and totally disabling and who are being institutionalized by the United States, will be returned to the Wisconsin Memorial Hospital, as federal beneficiaries, to be cared for there at the same per day basic expense as it is now costing in the federal hospitals. Be it further

"*Resolved,* That a properly attested copy of this resolution be sent to every Wisconsin U. S. Senator and Representative, together with a copy of the transcript of today's proceedings, which contains the vital foundation or starting point. Be it further

"*Resolved,* That said Wisconsin Representatives be apprised of the fact that this Committee stands ready and willing to supply anything further within its power."

Members of the special committee of the Wisconsin legislature were:

Senators W. S. Goodland, Racine, Chairman; Otto Mueller, Wausau; Philip E. Nelson, Maple.

Assemblymen Maurice Fitzsimons, Fond du Lac; Ray Novotny, Oshkosh. Chas. Perry, Wauwatosa; John Kaiser, Milwaukee; Jas. W. Higgins, Milwaukee.

THE PHYSICIAN

(Continued from page 213)

sillectomies with Sluder technique, which he knows will not show the most gratifying results, and, fearing a serious hemorrhage, he will refer the case to a specialist although in that year of hospital work he should have been taught how to suture a bleeding tonsil bed. So he finds himself referring most of his work to specialists, retaining for himself the more poorly paid calls and the office work. Since the fee in the main goes to the specialist and since there is no provision for the after care of the patient, he finds himself more or less a minus quantity.

Moreover his clientele, which are more surgically minded than a few years ago, will lose confidence in him and will cease to regard him even as a middleman. At the end of the first year he can sink to the fee-splitter status or become a pretender in surgery and instead of becoming a good clinician and diagnostician, both of which our profession is sadly in need of, he may become the type of surgeon, many of whom we all see, that species who operates on simple colloid goiters, normal gall-bladders and chronic appendices either through little diagnostic ability, greed for lucre, or a weather beaten conscience or a combination of all these characteristics.

The quality of medical service rendered depends, and will depend in a large measure, upon the quality of teaching which the rank and file of the profession receive and the amount of practical first hand work they are allowed to do while in training and the enthusiasm and the ideals which are instilled into them by their teachers. Wrong as it may be, many of these instructors have never been in active practice and the art of practice to them is an unknown quantity.

During the past 10 years medicine has become so highly organized that the general practitioner is told what to do and how to do it. Whenever local or county medical societies meet with a problem of any consequence a few of the members have already been advised or the society is advised just how it should act. There is no more opportunity for informal meetings to discuss local problems and to settle them for the best interests of the local man. Having become highly organized, our lobbyists in the legislature now compete with lobbyists of the chiropractors and other quacks. The legislators no longer hold us in respect, but consider us as competitors of all the quacks and cults and deal with us according to the number of votes available. If our ideals are so high and our motives so sincere it hardly seems necessary that we should need so much propaganda. I doubt also whether it

is necessary or even advisable for us to attempt to force our ideas on health and other medical subjects down the throats of the public, at least it does not seem that our efforts are being greatly appreciated. It might be better for us to go back to practicing medicine and minding our own business and letting our efforts stand on their merits. The more active we have become the greater has become our difficulty.

The membership fee in the State Society has now been increased so that the younger men feel unable to pay the dues and we have lost the support of a group which would be much more valuable than the added income.

Given character plus adequate training along practical lines these men will hold their own against any opposing forces.

While we are waiting for the report of the five-year investigation of the committee on medical cost let us as individuals endeavor to cut down the expense of sickness. Let us eliminate the pseudospecialist by some method of standardization in the way of special training before he assumes the role in some special field.

General practitioners are making a strong appeal to those in special fields of surgery to have a standard of fees adopted which would make it possible for the general man to collect for his services. These services include not only his diagnosis and valuable advice for surgery, but also include transportation of the patient, after care, and all services except those which go on in the operating room. Were such a standard adopted the general man would no longer be considered a mere on-looker in the case, for the patient would never lose sight of the importance of his position. Such a standardization would undoubtedly tend to do away with the evils of fee-splitting.

The time has come when our medical schools should select students with character qualifications, educated by teachers who have had ample experience in practical medicine. Graduates should be further trained in hospitals controlled by men of a high type, who can impress upon their students, in an unselfish manner the limitations of inexperience. Provision by these schools or by our medical associations for practical postgraduate courses should be arranged for the convenience and at a minimum expense to every medical man whether he be a general practitioner or a specialist. Unless we develop higher ideals among many of our licensed practitioners, eliminate racketeering on human lives, educate the public by our own honest endeavors, the physician of the not distant future will find his star hitched to the tail of the elephant or the donkey or to the soapbox dependent upon the political party in power in his community.

The Journal Book Shelf

BOOKS RECEIVED FOR REVIEW

Operating Room Procedure For Nurses and Internes. By Henry C. Falk, M. D., F. A. C. S., clinical professor of gynecology, New York University and Bellevue Hospital Medical College; gynecologist French Hospital; attending surgeon Harlem hospital. Price $3.00. G. P. Putnam's Sons, New York, 1934.

Treatment in General Practice. Second Edition. By Harry Beckman, M.D., professor of pharmacology at Marquette University, School of Medicine, Milwaukee. Cloth $10.00 net. W. B. Saunders Company, Philadelphia, 1934.

The Study of Anatomy. By S. E. Whitnall, M. A., M. D., Robert Reford Professor of Anatomy, McGill University, Montreal. Second Edition. William Wood & Company, Baltimore. Price $1.50.

The Biochemistry of Medicine. By A. T. Cameron, M. A., D. Sc., professor of biochemistry, Faculty of Medicine, University of Manitoba; biochemist, Winnipeg General Hospital, and G. R. Gilmour, M. D., C. M., professor of medicine and clinical medicine, University of Manitoba; physician, Winnipeg General Hospital. Price $6.00. William Wood & Co., Baltimore.

Nature, M. D. By Richard Kovacs, M. D., clinical professor of physical therapy, Polyclinic Medical School and Hospital, New York. Price $2.00. D. Appleton–Century Company, New York, 1934.

Man and Microbes. By Stanhope Bayne–Jones, M. D., professor of bacteriology, School of Medicine and Dentistry, University of Rochester, Rochester, N. Y. Price $1.00. The Williams and Wilkins Company, Baltimore.

*

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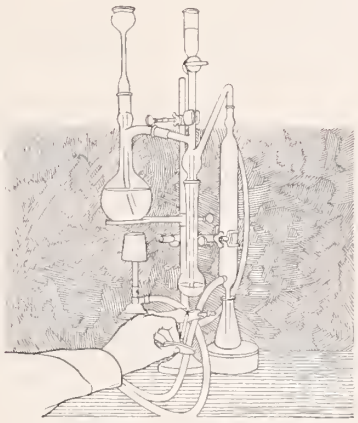

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Evolution Yesterday and Today. By Horatio Hackett Newman, Ph.D., professor of zoology, University of Chicago. Price $1.00. The Williams & Wilkins Company, Baltimore.

The 1933 Year Book of General Medicine. Edited by George F. Dick, M. D.; Lawrason Brown, M. D.; George R. Minot, M. D.; William B. Castle, M. D.; William D. Stroud, M. D.; George B. Eusterman, M. D. The Year Book Publishers, 304 South Dearborn St.. Chicago.

The 1933 Year Book of Obstetrics and Gynecology. Edited by Joseph B. DeLee, A. M., M. D., professor of obstetrics, University of Chicago Medical School and J. P. Greenhill, B. S., M. D., associate professor of gynecology, Loyola University Medical School; professor of gynecology, Cook County Graduate School of Medicine. The Year Book Publishers, 304 South Dearborn St., Chicago.

A Diabetic Manual. By Elliott P. Joslin, M. D., clinical professor of medicine, Harvard Medical School. Fifth edition thoroughly revised. Lea & Febiger, Philadelphia, 1934. Price $2.00.

The International Medical Annual. A Year book of treatment and practitioner's Index. William Wood & Company, Baltimore.

Human Embryology and Morphology. By Sir Arthur Keith., M. D., F. R. S., master of the Buckston Browne Research Farm; formerly conservator of the Museum and Hunterian professor at Royal College of Surgeons of England. Price $10.00. William Wood and Company, Baltimore.

BOOK REVIEWS

Any scientific publication reviewed in this column may be obtained for inspection. Orders for such inspection should be directed to the Medical Library Service, 424 N. Charter Street, Madison, Wis.

The Diseases of Infants and Children. By J. P. Crozer Griffith, M. D., Ph. D. Emeritus professor of pediatrics in the University of Pennsylvania; consulting physician to the Children's Hospital, Philadelphia; consulting physician to St. Christopher's Hospital for Children; consulting pediatrist to the Woman's, the Jewish, and the Misericordia Hospitals, etc., and A. Graeme Mitchell, M. D., B. K. Rachford Professor of Pediatrics, College of Medicine, University of Cincinnati. 1155 pages with 281 illustrations. Cloth $10.00 net. W. B. Saunders Company, Philadelphia.

In the past the two-volume edition of the highly respected text-book by Griffith and Mitchell has been used chiefly as a reference book by pediatric practitioners and teachers because the price of its ownership has precluded its more general use by medical students and general practitioners. In order to meet the demand for its wider use the new edition has been reduced in size to a one-volume work containing 1155 pages, and the price made less expensive. The reduction in space has been accomplished by abbreviation of many of the older references, elimination of unnecessary material, and condensation of sentences and material wherever possible without loss of clarity and completeness.

Although less lengthy this edition is just as comprehensive as the former editions. The whole sphere of pediatric practice is fully covered. In addition, an extensive bibliography is listed at the end of each chapter. The authors have admirably succeeded in their intention of maintaining the textbook as a work of reference for pediatric specialists and writers, and, at the same time, of fitting it for the needs of undergraduate students.

The general construction of the book remains the same as in previous editions. However, the material has been so greatly changed in bringing it up to date that in many places it appears to be almost completely rewritten. This is especially true of the chapters on infant feeding, vitamins, allergy, value of the tuberculin reaction, disturbances of acid-base balance of the body, diseases of the kidneys, and the treatment of secondary anemia. Many entirely new subjects have been included in this edition. They consist of: encephalography, anemia of the newborn, postvaccinal encephalitis, typhus fever, undulant fever, epituberculosis, osteitis fibrosa cystica, osseous dystrophy, cysts of bone, multiple myeloma, agranulocytosis, erythroblastic anemia, chronic thrombosis of the splenic vein, xanthomatosis, Niemann–Pick's disease and Schüller–Christian's disease.

Pathogenic Microorganisms. By Dr. William Hallock Park and Dr. Anna Wessels Williams, Bureau of Laboratories of the Department of Health, New York City. Price $7.00. Lea & Febiger, Washington Square, Philadelphia.

This excellent book is an outgrowth of Dr. Park's original book "Bacteriology in Medicine and Surgery" which appeared in 1899. During the interim of thirty-four years Dr. Park and his associates have kept alive their book by periodical revision to include the newer knowledge. In this tenth revision we find the older material revised in accordance with the most recent authoritative research. The authors are to be especially congratulated, as in their older volumes, on the logical sequence of presentation and their orderly arrangement of the enormous mass of subject matter. Particular attention should be called to the inclusion of much of Park's practical work on the control of diphtheria in New York City which has gradually filtered out to lower the mortality from diphtheria in every State in the Union. His newer work on the application of "toxoid", which is an outgrowth and extension of Ramon's "anatoxine" which is found in the tenth revision, is to be especially commended to the practitioner as well as to the student and scientific worker: Likewise attention should be called to the inclusion of the newer differentiation of

for sick as well as normal babies

Dextri-Maltose, Carbohydrate of Choice

"As to the kind of extra carbohydrate to be added, whether lactose or maltose, I believe dextri-maltose to be better in general in cases of fat indigestion (infantile atrophy)."—*C. H. Dunn: The Hygienic and Medical Treatment of Children, Southworth Co., Troy, New York, 1917, V. 1, p. 418.*

In discussing the treatment of decomposition, Feer says: "The period of repair may be shortened by giving suitable additional food; the best, probably, being buttermilk to which carefully regulated proportions of dextrin and maltose preparations or malt soup are added."—*E. Feer: Text-Book of Pediatrics, J. B. Lippincott Co., Phila., 1922, p. 284.*

In the treatment of infantile atrophy, Fischer recommends the following: "The carbohydrate should be increased by gradual addition of dextri-maltose.

"Malt soup or dextrimaltose (Mead's) should be added in teaspoonful or more doses to each feeding until the point of carbohydrate tolerance is reached."—*L. Fischer: Diseases of Infancy and Childhood, F. A. Davis Co., Phila., 1925, V. 1, p. 285.*

Concerning the treatment in the case of a premature infant, Fischer states: "Dried milk with water was given, which later was changed to whole milk, 14 ounces; water, seven ounces, and dextrimaltose No. 1, one and one-half ounces. Seven feedings of three ounces each every three hours was given. The above feeding was retained. The infant gained eight ounces at the end of the first week."—*L. Fischer: Clinical notes in a series of premature infants, Arch. Pediat. 44:227-231, April, 1927.*

Grulee, in discussing the treatment of decomposition, says: "As a rule it is best to start with 2 to 2½ or 3 ounces of albumin milk to the pound weight in 24 hours; the sugar to be added is in the form of a maltose-dextrin mixture. One should never delay too long in adding this."—*C. G. Grulee: Infant Feeding, W. B. Saunders Co., Phila., 1922, p. 265.*

Referring to the hypotrophic infant, Herrman writes: "In mild cases, the addition of dextrimaltose instead of cane or milk sugar may be sufficient to obtain a gain in weight."—*C. Herrman: The treatment of nutritional disorders in artificially-fed infants, New York M. J. 114:158-160, August, 1921.*

In discussing artificial feeding in athrepsia, Hess states: "The carbohydrates are usually added in a slowly fermentable form, such as the maltose and dextrin compounds, which are usually started by the addition of four grams per kilogram (1/15 ounce per pound) and increased until eight grams or more per kilogram (¼ ounce per pound) of body weight are added."—*J. H. Hess: Feeding and the Nutritional Disorders in Infancy and Childhood, F. A. Davis Co., Phila., 1928, p. 278.*

Concerning the treatment of marasmus, Hill says: "When the stools have become smooth and salve-like, carbohydrate, in the form of dextrimaltose, may be gradually added up to the limit of tolerance."—*L. W. Hill: Practical Infant Feeding, W. B. Saunders Co., Phila., 1922, p. 281.*

"A spasmophilic baby on bottle feeding should receive a limited amount of milk—a pint, or at the most 24 ounces in the 24 hours—to which cereal gruel and some form of sugar is added, preferably one of the malt dextrin preparations; also the early addition of other foods than milk to the baby's diet."—*M. Jampolis: Infantile spasmophilia, Interstate M. J. 25:652, Sept., 1918; abst. Arch. Pediat. 35:691, Nov. 1918.*

With reference to the treatment of diarrhea, Lust writes: "After several days, 2% to 3% of a maltose-dextrin preparation may be added (Dextri-Maltose). This is preferable to the easily fermentable lactose or cane sugar."—*F. Lust: The Treatment of Children's Diseases, J. P. Lippincott Co., Phila., 1930, p. 145.*

"The treatment of artificially fed children in the first of these groups consists in putting them on a low fat dietary, and giving them carbohydrate in the form of one of the less fermentable sugars—e.g., dextrimaltose."—*L. G. Parsons: Wasting disorders of early infancy, Lancet, 1:687-694, April 5, 1924.*

Pearson and Wyllie in discussing the treatment of milder cases of inanition says: "Regulation of this disturbed organismal balance is obtained by the addition of carbohydrates, while fat and casein are reduced. For this purpose dextrimaltose and flour are better than the ordinary sugars, since they are more slowly absorbed and have greater efficacy in their powers of controlling the flora in the large intestine."—*W. J. Pearson, and W. G. Wyllie: Recent Advances in Diseases of Children, P. Blakiston's Son & Co., Phila., 1930, p. 116.*

Regarding the treatment of the marantic infant, Raue states: "After the intolerance to sugar has been overcome a carbohydrate, preferably Dextri-maltose, may be added."—*C. S. Raue: Diseases of Children, Boericke & Tafel, Phila., 1922, p. 427.*

In discussing the treatment of atrophy, Thursfield and Paterson, state: "If the baby continues to improve, the next step in the treatment is to add to the milk one of the less fermentable carbohydrates, such as dextrimaltose . . . —*H. Thursfield and D. Paterson: Diseases of Children, William Wood & Co., 1929, p. 105.*

"I also find dextrin-maltose an excellent addition to albumin-milk when the first object of that food has been achieved and a gain in weight is desired; in this way I have succeeded in feeding albumin-milk far beyond the period usually advised, with highly gratifying results."—*F. L. Wachenheim: Infant-Feeding; Its Principles and Practice, Lea & Febiger, Phila., 1915, p. 158.*

"Dextri-maltose has been substituted for lactose not infrequently, when the tolerance for the latter continues low."—*L. H. West: Low fat, high starch evaporated milk feeding for the marasmic baby, Arch. Pediat. 48:189-193, March, 1931.*

"Malt sugar is indicated when others fail to produce a sufficient gain, or when malassimilation of fat is evident."—*O. H. Wilson: The role of carbohydrates in infant feeding, Southern M. J. 11:177, March, 1918; abst. Arch. Pediat. 35:447, July, 1918.*

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The Essential Psychoses and Their Fundamental Syndromes. Dom Thomas Verner Moore, Ph. D., M. D. — Studies in Psychology and Psychiatry from the Catholic University of America; Vol. 3, June, 1933.

This study attempts to arrive at a mathematical expression of related symptoms in the functional psychoses. Correlated symptoms are expressed in numerical terms, enabling Dr. Moore to group symptoms by a technic that is exact, is purely objective in application and allows for minimum error. By this mathematical method the author is also able to formulate descriptions of certain psychoses, detected by this method. One syndrome which has been introduced is particularly welcome for it classifies a number of cases for which we have had no definite category. These are patients whom we regarded as suspicious by nature, perverse in reaction, given to displays of violent behavior. Paranoia irritabilis (species nova) is the term introduced. These are individuals frequently encountered in social work. Domestic discord leads them to the court or family agency. Their children are brought to the juvenile agencies. We usually have labelled them psychopathic personalities although they seemed to just fall short of being classifiable as paranoias. The study reveals that this group tends to fall in the group of schizophrenic.

This study will not appeal to the average neuropsychiatrist for two reasons: (1) difficulty in following the mathematics involved and (2) the disinclination on the part of the average psychiatrist to think of abstract concepts in numerical terms. The descriptive data is excellent and the introduction of paranoia irritabilis noteworthy. M. G. M.

Obstetrical Nursing. Carolyn Conant Van Blascam R. N. Formerly assistant Superintendent and Instructor in obstetrical nursing and the care of infants and children at the Johns Hopkins' Hospital Training School for nurses. Author of "The Midwife in England" "Getting Ready to be a Mother". Third edition—revised. Illustrated with 251 engravings & 12 charts. The Macmillan Company, New York—1933.

This is an excellent book for nurses in that the author does not limit her text to the teachings of one institution or one doctor. The principles of obstetrical nursing all aim for the same standard, but there are many varied methods of obtaining the desired results; a point not often realized by student nurses, but clearly emphasized by the author.

The book is divided into seven parts. Part one, Anatomy and Physiology of the Female Generative Tract, is given brief but sufficient thought. The Development of the Baby and The Birth of the Baby, parts two and four, are discussed at great length.

Other things which are given a good deal of consideration, and justly so, are prenatal care, mental hygiene of the expectant mother, care during the puerperium and care of the new-born infant. One whole part is devoted to the maternity patient in the community.

The emphasis placed upon obstetrical nursing in the home, and the education of the family to its needs, makes this book valuable not only to student nurses, but to any nurse interested in community welfare. M. A. J.

Allergy and Immunity In Ophthalmology. Alan C. Woods, M. D., The Johns Hopkins Press, Baltimore, 1933, 176 pages.

This interesting and important volume is the first book devoted exclusively to this subject since the work by Von Szily, published in 1914. Considerable progress has been made in our knowledge of anaphylaxis, allergy, and immunity in general since that time, and, therefore, this work which "assembles the most important work on allergy and immunity in ophthalmology" is very timely.

The volume covers 176 pages and is divided into eight chapters. The first takes up General Considerations on Anaphylaxis, Allergy, and Immunity. The second is devoted to Experimental Studies on General Ocular Immunity. Chapter III concerns the Relationship of Allergy to Focal Reactions in the Eye, and Chapter IV covers Allergic Conjunctivitis, in which Vernal Catarrh and Trachoma are discussed. Chapter V is devoted to Antigenic Properties and Reactions of Lens Protein and Uveal Pigment. Chapters VI and VII discuss Syphilis and Tuberculosis, and the final chapter concerns Therapeutic Procedures.

An extensive bibliography follows each chapter which adds greatly to the value of the work, since the original sources, so freely quoted throughout the volume, are easily available to the reader.

F. A. D.

The Doctor Looks at Life and Death. By Joseph Collins, M. D., Garden City Publishing Company, Inc., Garden City, New York.

This volume has been written for popular appeal to the laity rather than to the medical profession. It properly belongs with the writings of such men as Judge Ben Lindsay and the books on free love, companionate marriage and other works on sex appeal which have been so profusely advertised the last few years. The first part of the volume is directed largely against the existing code of morality as established by christianity and our present civilization. It is the author's opinion that many of the neuroses are due to sexual inhibitions. To overcome these restraints he would do away with all the

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Christian teachings on morality. This theme reechoes throughout the book.

The second part consists of a series of case histories which he discusses to establish his argument. The third and fourth parts of his book are devoted to the author's ideas about the relationship of nurses and patients, medical ethics, the relationship of doctors and patients, sexual perversion and the inevitability of death.

In his initial statement the author states that his book is made up of what he has learned from "intimacy with burdened, blind and bigoted man" after 30 years of reconditioning human derelicts and that his book is not like other books in not being made from others written previously. There is, however, for the physician nothing new in it. The case histories include conditions with which any physician after a few years of practical experience, even though his speciality be not that of a neuropsychiatrist, is well acquainted. In his advice to patients to enable them to obtain adequate medical care he appeals to the use of common sense by a patient in selecting his physician.

The volume may be summarized as setting forth the personal ideas of an individual toward religion, and its effect upon illnesses of a mental nature. It cannot be looked upon as being representative of current medical thought. K. L.P.

Diet and Dental Health. By Milton T. Hanke. Price $1.00. The University of Chicago Press, Chicago, Ill.

This volume is a monographic report on the interesting and important research work done by the author and the Chicago Dental Research Club during several years past. The presentation is far more convincing as well as more conservative than the earlier papers in the journal literature of the dental profession, from the same group. The style is pleasing, the text well organized, the tables, graphs, and photographs are numerous and very helpful in the reading of the report. The volume contains the original data, thereby allowing critical study of the work by others in the field of nutrition.

The results of this work show that gingivitis may be eliminated from the mouths of most children by the use of large quantities of vitamin C as supplied by citrus fruit juice, without otherwise altering a fairly adequate diet. Also the incidence of carious lesions in the teeth of these children can be reduced to a striking extent by the same means. Evidence presented shows that there are other factors in the susceptibility to caries besides a deficit of vitamin C or even of citrus fruit juice. The nature of the other factors is not discovered.

The present stage of the problem is that three ounces of orange juice daily is inadequate for this protective work, whereas sixteen ounces provide a sufficient protection as well as curative action on the gingivitis. Because of the cost it is of practical importance that the minimum protective dose be determined. The extent to which other fruit and vegetable foods can be substituted remains to be determined. The individual variations in need for this protection are hinted at but no method of determining this variation is even suggested. The volume is therefore a most challenging progress report. It is by no means a text or complete dissertation on the subject of "Diet and Dental Health", for it omits the effects of other dietary constituents which the author recognizes as important. The book is commended to all who want to follow the progress of research in this field of real importance to American health. E. L. S.

The Pregnant Woman. By Porter Brown, M. D. Eugenics Publishing Co., Inc., New York, 1933.

This book of nine chapters and an appendix covering 174 pages is intended for the laywoman. In his introduction the author states that "the purpose of this book is to carry to every woman information about her physical welfare and her functions of reproduction.

To the reviewer it would seem that the author has exceeded his purpose. While the book is written for the most part in a simple direct style still the physiological and pathological descriptions are too detailed for the ordinary lay reader. Too much emphasis has been placed on the complications of pregnancy for such a small volume on this subject.

The illustrations are few and poor. M. J. T.

Great Men of Science. By Philipp Lenard, formerly professor of physics and director of the Radiological Institute in the University of Heidelberg. Translated from the Second German edition by Dr. H. Stafford Hatfield. The Macmillan Company, New York. 1933.

Through some sixty odd biographical sketches, Lenard has told a good story of the development of the "exact" sciences of physics, chemistry, astronomy and mathematics, yet it is difficult for a biologist or a geologist to agree with him that "in spite of the small number of names, we find the whole of our knowledge of Nature as far as it is of fundamental philosophical importance, is discussed". For, although he admits a science of living things, he finds no one worthy of mention before Harvey, and but few after him, and among those notably Linnaeus, Darwin and Mendel. The book would have been better had the author omitted this chapter on biological subjects and confined himself strictly to the men who had advanced science by discovering quantitative relationships in nature.

In that line one can have little quarrel with the author's selection of the "great". He may wonder, however, why among the ancients, Hipparchus is included for his measurements of heavenly bodies and their motions, by which he came to a geocentric theory of the universe, while Aristarchus, who attempted similar measurements and came to a heliocentric theory, is omitted.

The author is evidently much prejudiced against Aristotle who is "mentally distorted" and "an obvi-

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ous symptom of degeneration" in Greek thought. He is equally prejudiced against Southern and Oriental races, and considers "the North, the only home on earth of the seekers and bringers of light". Further prejudices concern college curricula with their stereotyped instruction and examinations.

His own most interesting contribution is a theory of spontaneous generation, to the effect that we must assume in the space about us many kinds of spirits of the dead, and that these have the property of uniting with molecules that suit them, whereby these become living things and develop in a suitable environment.

The translator has followed the Teutonic idiom too literally to produce a result that is pleasing or satisfactory and in several places has made actual blunders in his translation. C. H. B.

A Study of Rural Public Health Service. Edited by Allen W. Freeman, M. D., for the Committee on Administrative Practice of the American Public Health Association. The Commonwealth Fund, New York.

The inadequacy and inexpertness of rural health administration has been a topic of discussion for many years. The increase of the scope of our knowledge concerning the biology of disease and the lag in its application has widened the gap between practice and knowledge. This book gives the result of a survey of the practices in use in rural districts throughout the United States. A brief account is recited of the development of methods used to measure the effectiveness of public health practices in urban communities, and the methods employed in this study of public health administration in rural districts are described. Most of the book is taken up with tables and charts. The material as a whole is divided into two groups: (1) That dealing with the organization, budget and personnel of the different areas and related material in the form of indices of wealth, and population make-up. (2) Certain ratios of services and activities to the problem in the various fields.

The following are examples of the information upon which the charts and tables are based: The ratio of cases to deaths for the principal communicable diseases; the average number of visits to each such case by profession personnel; the percentage of cases hospitalized for each disease; the number of diphtheria and smallpox immunizations in relation to its need as expressed by births and school population. The first chapter is a general summary.

This work was undertaken by the Sub-Committee on Rural Health Work of the Committee on Administration Practice of the American Public Health Association, in order to develop some standard measuring stick for the study of rural health work such as has been developed for the rating of health practices in urban districts. This book has much of interest for the physician in private practice because it sets forth clearly how it has been possible to formulate out of medical science methods of action which are effective against the mass action of diseases and the public health worker because it will give him a view of rural public health problems. W. D. S.

Bacterial Infection. By J. L. T. Appleton, Jr., D. D. S., Professor of microbiology and bacteriopathology, The Thomas W. Evans Museum and Dental Institute School of Dentistry; University of Pa. Lea & Febiger, Philadelphia.

Dr. J. L. Appleton is well known to the dental profession through his books and articles in the American Dental Journal. He is professor of bacteriology at the University of Pennsylvania Dental School. His book "Bacterial Infection" is a second edition completely revised with special reference to the dental profession, it is an outgrowth of a series of lectures and has three purposes: (1) to give the reader an intelligent idea of infection, (2) to utilize the knowledge of his profession, (3) to promote a mutual understanding between the physician and dentist in the treatment of infections of the oral cavity. A complete understanding of the book would necessitate many laboratory tests and experiments. The author has introduced an abundance of references with the hope that the student reader will learn how and where to gather additional scientific knowledge.

The introductory chapter deals with the extent and limitations of bacteria on the earth including a generalized summary of all bacteria regarding, mobility, size, shape, reproduction, composition, and habitat. Bacteria have been found 5700 feet above the earth and 3000 feet below the earth's crust. The unit of microscopic measurement applicable to bacteria with specific size for the micron equivalent to 1/2500 of an inch. Bacteria like all forms of life are sensitive to environment. The hydrogen concentration of the medium is important for bacterial growth. Direct sunlight kills bacteria. They thrive best in the dark. A certain amount of moisture is necessary for bacterial growth. However, this varies widely with different types of bacteria. Temperature is also very important, depending on the type of organism.

The author describes in his second chapter the relation of bacterial growth to oxygen supply with special information regarding the history of the discovery of oxygen by Priestly in 1774. Special stress is placed on anaerobic bacteria of the mouth with data and clinical findings of the bacillus, fusiformis, and spirochete of Vincent's.

Anti-bacterial action of chemicals and the classifications of disinfectants, antiseptics, and germicides are included with laboratory data and clinical evidence to aid explanation. The author does not believe that an ideal classification of bacteria has been reached, but much progress has been made in the last few years.

In dealing with pyorrhea we learn that very little headway has been made in the past ten years. No specific organism has been isolated. Usually sev-

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eral types of pyogenic bacterial infection can be demonstrated. Although many theories have been advanced, the conclusion is drawn that pyorrhea alveolaris is probably the result of mixed infection and is a condition without specific cause. However, the theory is advanced that the initial infection of the tissue is attributed to the action of the spirochetes and fusiform bacilli. At this stage pus is not present, but the damage done permits the action of the pyogenic bacteria at a later date.

The chapter on focal infection lists the teeth along with tonsils as the two most important sources to be considered as foci of infection. Of the dental foci periapical are thought to be the most important. Even though other foci are known to be present in a particular patient the dentist should not be indifferent to mouth infection. In cases where there are several foci present they all may have something to do with the general condition of the patient. Oral infection by reason of its resulting toxemia may cause recurrence of diseases which might otherwise yield quickly to treatment.

Dr. Appleton has succeeded in writing a book which contains much valuable material for physician, dentist, and student. E. F. W.

The Wellcome Research Institution and the Affiliated Research Laboratories and Museums. Founded by Sir Henry Wellcome, LL. D., F. R. S., The Wellcome Foundation Ltd., London, England, 1933.

This little book of some sixty pages gives an account of the development of the Wellcome Foundation. Much of it is devoted to a description of buildings and the enumeration of the divisions under which scientific work is carried on. It was written to set forth the plan of The Wellcome Foundation's exhibit at the Chicago Exposition which was arranged to illustrate specific events in British medical and surgical history. W. D. S.

Life in the Making. By Alan Frank Guttmacher associate in obstetrics, Johns Hopkins University The Viking Press, New York, 1933.

This is a book on the processes of human reproduction which is intended for the adult layman. I gives the history of man's beliefs concerning his origin and birth and also the accurate scientific facts as they are known today. This book will be of interest not only to the layman but also to biologists and physicians.

There are chapters which deal with sex determination, sterility and fertility, sexual abnormalities twins and monsters. Variations and similarities in the behavior in lower animals and in primates is discussed.

The author has presented his subject matter in a fascinating and skillful manner which is entirely free from any sensationalism. This is a book which should be recommended to all laymen seeking the knowledge which it contains. M. J. T.

Thomas Young, F. R. S. By Frank Oldham, M A., B. Sc., formerly scholar of St. John's College Cambridge. Edward Arnold & Co., London, 1933 Price $2.40.

This is a concise, well written account of the life of Thomas Young (1773–1829). While he practiced medicine, he is more distinguished for his gifts as a brilliant experimental scientist and for his encyclopedic learning. He is best known for his work on the mechanism of the eye and for his contributions to physical optics and to "capillarity", yet he made important studies of Egyptian hieroglyphics and in other fields. The author has been quite successful in presenting the story of the life of a most exceptional man, one whose scientific ideas were frequently far ahead of his times and only subsequently appreciated. C. R. B.

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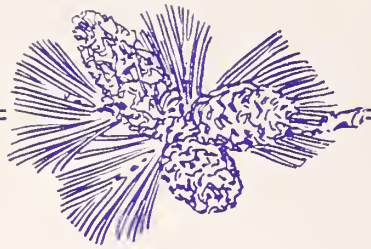

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In gastrointestinal disorders, "Dextri-maltose has been preferred to the other sugars as apparently less irritating."—*E. Cassie and U. Cox: The examination af the gastric contents in infants, with some consideratians as to the value of lactic acid milk in infant feeding, Lancet, 2:322-325, August 14, 1926.*

"As to the kind of extra carbohydrate to be added, whether lactose or maltose, I believe dextri-maltose to be better in general in cases of fat indigestion (infantile atrophy)."—*C. H. Dunn: The Hygienic and Medical Treatment af Children, Southworth Co., Troy, New York, 1917, V. 1, p. 418.*

In the treatment of decomposition, "The period of repair may be shortened by giving suitable additional food; the best, probably, being buttermilk to which carefully regulated proportions of dextrin and maltose preparations or malt soup are added."—*E. Feer: Text-Book of Pediatrics, J. B. Lippincott Ca., Phila., 1922, p. 284.*

In infantile atrophy, "The carbohydrate should be increased by gradual addition of dextrimaltose.

"Malt soup or dextrimaltose (Mead's) should be added in teaspoonful or more doses to each feeding until the point of carbohydrate tolerance is reached."—*L. Fischer: Diseases of Infancy and Childhood, F. A. Davis Co., Phila., 1925, V. 1, p. 285.*

In the case of a premature infant, "Dried milk with water was given, which later was changed to whole milk, 14 ounces; water, seven ounces, and dextri-maltose No. 1, one and one-half ounces. Seven feedings of three ounces each every three hours was given. The above feeding was retained. The infant gained eight ounces at the end of the first week."—*L. Fischer: Clinical notes in a series of premature infants, Arch. Pediat. 44:227-231, April, 1927.*

In the treatment of decomposition, "As a rule it is best to start with 2 to 2½ or 3 ounces of albumin milk to the pound weight in 24 hours; the sugar to be added is in the form of a maltose-dextrin mixture. One should never delay too long in adding this."—*C. G. Grulee: Infant Feeding, W. B. Saunders Co., Phila., 1922, p. 265.*

With reference to hypotrophy, "In mild cases, the addition of dextrimaltose instead of cane or milk sugar may be sufficient to obtain a gain in weight."—*C. Herrman: The treatment of nutritional disorders in artificially-fed infants, New York M. J. 114:158-160, August, 1921.*

In athrepsia, "The carbohydrates are usually added in a slowly fermentable form, such as the maltose and dextrin compounds, which are usually started by the addition of four grams per kilogram (1/15 ounce per pound) and increased until eight grams or more per kilogram (¼ ounce per pound) of body weight are added."—*J. H. Hess: Feeding and the Nutritional Disorders in Infancy and Childhood, F. A. Davis Co., Phila., 1928, p. 278.*

Concerning the treatment of marasmus, "When the stools have become smooth and salve-like, carbohydrate, in the form of dextrimaltose, may be gradually added up to the limit of tolerance."—*L. W. Hill: Practical Infant Feeding, W. B. Saunders Co., Phila., 1922, p. 281.*

In the feeding of prematures, "As soon as there is a hesitation in the gain in weight, dextrimaltose No. 1 is substituted for the dextrose, in the same amount in the mixture, with almost invariably a gain in weight."—*F. B. Jacobs: Relation of irradiated food substances and ergosterol versus cod liver oil in childhood nutrition, Pennsylvania M. J. 35:164-167, Dec., 1931.*

"A spasmophilic baby on bottle feeding should receive a limited amount of milk—a pint, or at the most 24 ounces in the 24 hours—to which cereal gruel and some form of sugar is added, preferably one of the malt dextrin preparations; also the early addition of other foods than milk to the baby's diet."—*M. Jampalis: Infantile spasmophilia, Interstate M. J. 25:652, Sept., 1918; abst. Arch. Pediat. 35:691, Nov., 1918.*

In cases of malnutrition and indigestion, "The appetite improves rapidly, and the stools soon become normal in appearance, if the sugars are intelligently prescribed. By this I refer to proper proportions of dextrin and maltose. When there is a tendency to looseness, I have used the preparation known as 'dextri-maltose,' for the extra carbohydrates; . . ."—*M. Ladd: Further experience with hamogenized olive oil mixtures, Arch. Pediat., 33:501-512, July, 1916.*

In pyloric stenosis, "With low dextrose tolerance, a maltose dextrin preparation may be added in whole or in part. Even where the dextrose is well tolerated and gain in weight has ceased, impetus to the weight ontake may be given by the addition of a maltose dextrin preparation."—*D. J. Levy: Pyloric stenosis and pylorospasm of infancy with especial reference to medical treatment, J. Michigan St. M. S., 21:166-170, April, 1922.*

With reference to the treatment of diarrhea, "After several days, 2% to 3% of a maltose-dextrin preparation may he added (Dextri-Maltose). This is preferable to the easily fermentable lactose or cane sugar."—*F. Lust: The Treatment of Children's Diseases, J. B. Lippincott Co., Phila., 1930, p. 145.*

In dyspepsia, "The carbohydrate must not be allowed to exceed 3 per cent. Dextri-maltose is the most suitable sugar."

In the treatment of decomposition (atrophy, malnutrition, marasmus), ". . . when there has been obvious improvement, dextri-maltose is gradually increased from 3 to 5 per cent."—*B. Myers: The nutritional disturbances of infancy, Brit. M. J., 1:1079-1083, June 21, 1924.*

"The treatment of artificially fed children in the first of these groups consists in putting them on a low fat dietary, and giving them carbohydrate in the form of one of the less fermentable sugars—e.g., dextrimaltose."—*L. G. Parsons: Wasting disorders of early infancy, Lancet, 1:687-694, April 5, 1924.*

In the milder cases of inanition, "Regulation of this disturbed organismal balance is obtained by the addition of carbohydrates, while fat and casein are reduced. For this purpose dextrimaltose and flour are better than the ordinary sugars, since they are more slowly absorbed and have greater efficacy in their powers of controlling the flora in the large intestine."—*W. J. Pearson and W. G. Wyllie: Recent Advances in Diseases of Children, P. Blakiston's Son & Co., Phila., 1930, p. 116.*

In intestinal intoxication, "I have had more experience with dried skimmed milk in which 2 to 5 per cent dextrimaltose, barley or rice flour has been cooked, and the mixture subsequently fermented by lactic acid bacilli or soured with lactic acid, than with any other food except protein milk."—*G. F. Powers: A comprehensive plan of treatment for the so-called intestinal intoxication of infants, Am. J. Dis. Child., 32:232-257, August, 1926.*

Regarding the treatment of the marantic infant, "After the intolerance to sugar has been overcome a carbohydrate, preferably Dextri-maltose, may be added."—*C. S. Raue: Diseases of Children, Boericke & Tafel, Phila., 1922, p. 427.*

In spasmophilia, "Dextri maltose is the best sugar to use in these cases, in the proportion of 6 to 8 per cent."—*J. H. Reading, Jr.: Spasmophilia, Hahneman. Monthly, pp. 403-411, July, 1922.*

In the treatment of atrophy, "If the baby continues to improve, the next step in the treatment is to add to the milk one of the less fermentable carbohydrates, such as dextrimaltose; . . ."—*H. Thursfield and D. Paterson: Diseases of Children, William Wood & Co., 1929, p. 105.*

"I also find dextrin-maltose an excellent addition to albumin-milk when the first object of that food has been achieved and a gain in weight is desired; in this way I have succeeded in feeding albumin-milk far beyond the period usually advised, with highly gratifying results."—*F. L. Wachenheim: Infant-Feeding; Its Principles and Practice, Lea & Febiger, Phila., 1915, p. 158.*

"Dextri-maltose has been substituted for lactose not infrequently, when the tolerance for the latter continues low."—*J. H. West: Low fat, high starch evaporated milk feeding far the marasmic baby, Arch. Pediat. 48:189-193, March, 1931.*

"Malt sugar is indicated when others fail to produce a sufficient gain, or when malassimilation of fat is evident."—*O. H. Wilson: The role of carbohydrates in infant feeding, Southern M. J. 11:177, March, 1918; abst. Arch. Pediat. 35:447, July, 1918.*

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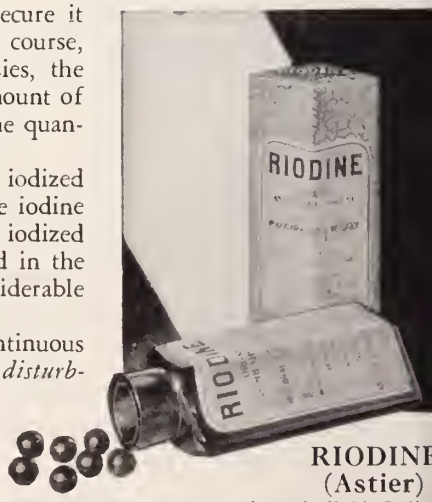

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The Dawn of a Specialty in Medicine: Allergy and Physical Allergy*

By W. W. DUKE, M. D.
Kansas City, Missouri

I WISH to express my sincere appreciation to this association for an invitation to read a paper on my favorite subject in internal medicine,—"Allergy".

We are passing into a new era in the practice of medicine in the development of this subject. We are making a wide departure from trodden paths. Possibly as wide a departure as that which followed the advent of the early studies in bacteriology. In text books of the present day on general and special pathology, and in the text books devoted to general medicine and the treatment of disease of special organs, we find classifications of disease which consist essentially of malformations, traumata, acute and chronic inflammations, intoxications, benign and malignant tumors, etc. We now have to add to the above an additional item, namely, the allergic diseases which affect the individual as a whole, and also which can affect, directly or indirectly, each of the special organs. It is a question with me whether or not any active living tissue is immune to the effect of allergy.

Allergy differs from the above mentioned illnesses in that it is caused in general by agents which are more or less inert, or actually beneficial or necessary to normal individuals, such agents for example as food, pollen, hair, or insect scales, or by physical agents as essential to health as light, heat and cold.

There are apparently two phases of allergy. The one, a local effect which occurs as a result of direct contact between a sensitive tissue and an offending agent; the other an effort which resembles that which occurs as a result of over stimulation of one or several or possibly all the branches of the vagus nerve mechanism. These effects are of course multitudinous, since the vagus nerve influences the activity of every living tissue.

The local lesion of allergy differs radically for other lesions in several respects. It consists characteristically of pale swelling which is oedematous and anemic, and is surrounded frequently by an area of hyperanemia. It can appear with great rapidity and disappear with equal rapidity. Following rapid disappearance there is almost always complete restitution of the parts affected. This is of course subject to gross exception. For example, the allergy lesion can be so intense (exemplified by the Arthus phenomenon) as to cause gangrene of the parts affected. Furthermore, if an allergy lesion affects a part perennially without remission, it can cause hyperplasia of the tissue elements. For example, perennial allergy in the nose gives rise to so-called hyperplastic rhinitis and polypi. In the skin to gross hyperplasia of the skin elements which causes it, in many cases, take on leather-like thickening of the skin. In the bronchi, it can give rise to muscle hypertrophy and proliferation of the tissues. With complete subsidence of the disease these hyperplastic lesions usually disappear and leave the tissues with complete or almost complete restitution to normal structure.

The above statements are all subject to gross exception, because of the fact that the damage done by allergy depends in large degree upon the situation of the lesion. A gross swelling in the loose elastic tissues in the

* Presented before 91st Anniversary Meeting, State Medical Society of Wisconsin, September 1932. Revised to date of publication.

axilla, for example, does no harm. A similar lesion of allergy, however. in the internal ear or inside the skull can seriously damage the affected structures and neighboring structures. Oedema in soft elastic parts is not especially dense. In more resistant structures, however, the swelling may be so dense as to give the impression of cartilage.

The allergy lesion can be very gross indeed; in fact, so gross that in cases where the face is involved, the features may be almost obliterated. It can cause obstruction in the trachea, obstruction of the intestine; and in the urinary tract can cause such a disturbance that the resulting symptoms may simulate and exceed those caused by stone.

There is a gross pharmacological difference between allergy and the lesion it may simulate. The one can be stopped immediately, as a rule, by the adequate and ideal use of adrenalin, and may be little affected by morphine. In the case of organic diseases, the reverse state usually obtains.

The allergy lesion also differs cytologically from other diseases, in fact, it is characterized by the presence of a typical cell, namely the "eosinophil". Eosinophils present an almost constant finding in allergic tissues at certain phases of the reaction. They are likely to occur in great numbers. They are to be found not only in the affected tissues but also in the blood during certain times and may amount to as much as or more than 25% of the white cells. High counts such as these, however, are the exception, not the rule. Eosinophils are increased as a rule not only in the blood but also in the secretions, such as the salivary secretion, nasal secretion, and bronchial secretions–and even in the mucous secretions found in the stools in the case of allergic diarrhea. The finding of eosinophils is most important from a diagnostic standpoint.

For example, in the case of acute coryza, the finding of a gross preponderance of eosinophils in the secretions indicates that the coryza is primarily allergic. If a gross preponderance of neutrophils is found, the disease is infectious in origin. If there is a goodly number of both eosinophils and neutrophils, the lesion is probably infection superimposed upon a primarily allergic disease.

Whereas the local lesion briefly described as above is grossly important, it is hardly so widespread or damaging as the widespread effect of over activity of one or several or all of the branches of the vagus nerve. This effect may be more rapidly fatal in extreme cases than any illness with which I am acquainted. In extreme instances, it may resemble the rapidly fatal histamine poisoning, as observed experimentally in animals. General vaso and capillary dilatation may be so extreme that the afflicted individual bleeds to death very quickly in his own vessels. In this case, none of the classical signs of allergy appear. Instead, the patient suddenly becomes apparently lifeless. Pulse and respiration stop, and the patient assumes the appearance of a cadaver. I have had the opportunity upon three occasions of restoring a patient from this condition promptly to a state of health by the quick and adequate use of adrenalin. I have also had patients subject to allergy die suddenly without apparent cause, rhyme or reason, after the eating of a hearty meal. I frankly believe that allergy ranks as one of the most common causes of sudden death of apparently healthy individuals. Death is caused as a rule, I believe, by the encountering of an agent which far exceeds the individual's tolerance.

Allergy may simulate a great many non-allergic diseases, but almost never simulates them perfectly, and can almost always be differentiated from non-allergic diseases by careful physicians who understand this subject.

For example: Cerebral allergy can simulate brain hemorrhage, Meniere's disease of organic origin, migraine, epilepsy or even brain tumor. The distinguishing features lie in family and personal history of allergic diseases, the co-existence of other symptoms typical of allergy. The fact that allergic symptoms are inclined to come and go or migrate, and by the fact that they yield promptly (if uncomplicated) to the effect of adrenalin when ideally administered. Frequently recurring cerebral disease, (diagnosed as a rule as vessel spasm) ; frequently

recurring functional disease of the heart, including tachycardia (not paroxysmal), angina pectoris, and various and sundry arrhythmias, are caused by allergic disease, (probably vagal), and can be relieved immediately when this is the case, with adrenalin if ideally given.

TYPES OF ALLERGY

There are many types of allergy. There are types which are so widely divergent as to cause, pathology and pathogenesis that we are indeed fortunate in having the noncommittal term "allergy" under which we can class a group of diseases, the different types of which have nothing more in common than is indicated by the literal meaning of the word "allergy", namely "altered reactibility". Some of the different types of allergy may be grouped as follows:

1. **Serum Sickness.** This can afflict almost any normal individual if the dose of serum administered is large enough. This occurs typically several days or two weeks or more after administration of a foreign serum. It may be gruesome in symptomatology but rarely is a dangerous illness if controlled by frequently repeated adequate doses of adrenalin.

2. **Accelerated Serum Reactions.** These are likely to occur in members of the atopic family who may or may not have had previous doses of the serum. This illness is likewise gruesome, but is almost always controllable by the use of adrenalin.

3. **Serum Allergy.** This occurs in members of the allergy family who have spontaneously become sensitive to serum. This illness gives rise to violent uncontrollable disease which quickly proves fatal. Coca has frequently mentioned the fact that if a person has tolerated one dose of serum he is almost sure to tolerate a second. Patients with atopic serum sensitiveness practically never tolerate a first dose, even though the initial dose may be excessively small. Lamson reviewed the histories of about 80 cases of reported serum deaths, and in approximately half a history of hay fever or asthma was mentioned. Deaths have been reported immediately following the intravenous injection of one drop of horse serum; several following the use of one c.c. subcutaneously. I knew of one case in which death immediately followed the injection of 1/100 c.c. of horse serum intracutaneously as a test. Some of these deaths might have been prevented in the present day by the use of a tourniquet above the site of inoculation of the serum, if the serum were injected into an extremity. This method of therapy, given us first by Cooke and several years later, but independently, by Insley, indicates that the arm or leg should be used for the inoculation of serum instead of the generally recommended sites, buttocks, back, or abdomen. In the latter areas the life saving protecting tourniquet cannot be used.

4. **Natural Hereditary Allergy or Atopy;** as it has been termed by Cooke and Coca, represent an illness which is quite different from serum sickness or accelerated reactions and which is apparently the same disease as serum allergy above mentioned. It depends upon a peculiar hereditary constitution through which a person may become sensitive to one or several or many foreign agents, (Cook and Vanderveere). The illness frequently becomes manifest in infancy in the form of eczema, gastro-intestinal disease, or in many other ways. In infancy the illness is usually caused by sensitivity to food and frequently disappears after a few years. The typical manifestations, however, often reappear again in late childhood or in youth in the form of excessive sensitiveness to some foreign agent, such as pollen, animal dandruff, fungi, insect scales, food or sera. Sensitiveness at this age is usually extreme in grade—in fact patients who are so affected may be made ill by amounts of a foreign agent which are so small as to cause the agent to rank in toxicity for them far beyond that of any known poison except one such as diphtheria toxin, and tetanus toxin. In this condition the patient can be affected seriously by one-millionth or much less of the offending substance. This type of illness differs from others to be mentioned subsequently by the fact that it can be passively transferred to other individuals by the injection of the patient's serum into the

skin of a normal person by the Preuxnitz and Kustner method.

To illustrate: if 1/10 of a c.c. of serum from an egg sensitive case is injected intracutaneously into a normal person, the skin area will react with the formation of a huge hive in case the injected individual eats egg (Walzer). This disease differs grossly from anaphylactic sensitiveness as observed in animals in the fact that the patient cannot be desensitized quickly by sublethal doses of the offending agent (Besredka's Method). This method of desensitization has been tried a number of times in the treatment of human allergy and always with disastrous results. The sensitiveness of a patient of this type, however, can be reduced slowly and effectively by repeated and frequently increasing, almost infinitesimal amounts of the agent to which the patient reacts. In this way clinical relief can be obtained, and upon this phenomenon is based our present day methods of so-called "desensitization".

5. Drug Allergies. The drug allergies are grossly like atopy as above described and may be equally and as tragically extreme, but differ in the fact that sensitiveness to drugs cannot be transferred passively to the skin of normal individuals by the Preuxnitz and Kustner method, nor does desensitization therapy seem practical in this condition.

There are two or more types of drug allergy, one as exemplified by a case of sensitiveness to chlorine, another of sensitiveness to ether as described by the writer, in which the area of the reaction is confined directly to the point of contact between a tissue and the offending agent. For example: In a case of chlorine sensitiveness the inhalation of chlorine gas causes coryza, cough and asthma and the application of a dilute solution of chlorine to the skin causes a hive directly confined to the point of application. This condition is not transferable passively. The common type of drug allergy, however, is not like the above and is exemplified by the commonly observed aspirin allergy. In this case, symptoms such as hay fever, asthma, hives, or collapse may follow the ingestion of a small amount of aspirin. The symptoms appear ordinarily a few minutes or several hours after the taking of aspirin. There may be little or no reaction at the point of contact of the mouth tissues with aspirin and skin tests are practically always negatve. Apparently ten per cent of hay fever and asthma patients are sensitive to aspirin. (Storm Van Lewen.) I have devised a simple test for aspirin sensitiveness which should always be used before administering aspirin to an allergic patient. It consists of the placing of several tiny granules of aspirin on the tongue of the patient. If he is aspirin sensitive, he usually displays symptoms of allergy within thirty seconds to two minutes. This reaction can be stopped within thirty seconds to one minute by having the patient repeatedly rinse his mouth with a glass of water containing a little dilute acetic acid. The acetic acid prevents the transformation of the insoluble aspirin into the soluble sodium salicylate by the alkaline mouth juices.

In the early days of the study of allergy it was believed that human allergy like animal anaphylaxis could be induced only by protein substances. This of course has been disproven, for humans can become sensitive to such agents as quinine, atropine, morphine and a host of other non-protein substances and even to inorganic substances. Wolf Eisner attempted to account for this type of sensitivity by assuming that a non-protein body could combine with normal body proteins so as to produce a new body which could sensitize an individual and thereafter cause a reaction upon adequate contact. This very attractive theory is very difficult to prove in clinical cases, although it can be easily proven in animals by sensitizing to such agents as iodized protein, or protein treated with bromine. In this case the animals may not react to the natural proteins used but may react with symptoms of anaphylaxis if treated with protein altered by bromine or iodine respectively. This possible explanation should be kept in mind by students of allergy. The future may disclose a method of proving or disproving the idea.

6. Physical Allergy. In 1922, I made a wide departure from the study of allergy in the discovery that patients could become sensitive not only to material substances, but to physical agents, such as certain rays of light,

specific for the individual or to certain degrees of heat generated by mental or physical effort. The fact is that patients could not only become sensitive to physical agents such as those mentioned, but could become so extremely and violently sensitive that a calory of heat applied to the skin could cause extreme grades of shock in certain individuals excessively sensitive to heat. Likewise, a sip of cold water could cause a violent reaction and shock in patients sensitive to cold. In patients excessively sensitive to light the exposure of a considerable area of skin to sun light for a few moments could cause hives and shock within a few minutes, which rendered them completely helpless. In this class of patients, that is those sensitive to physical agents, I have observed every phenomenon of allergy that I have observed in patients sensitive to egg, pollen, dander, and other material substances. The fact that the condition exists cannot be doubted and has been verified abundantly in recent literature. Furthermore I have found that such conditions as hives or asthma caused by emotional disturbances and varying types of mental or physical activity are usually in patients who are heat sensitive and react to the heat generated by effort.

The mechanism through which patients react to physical agents is rather mysterious and is probably varied. However, the fact stands proven and verified that reactions in cases sensitive to physical agents are just as specific and real as reactions caused in other sensitive persons by certain types of pollen or epithelium or by certain foods. Light sensitive cases are not sensitive to all rays of light, but only to certain specific rays toward or beyond the violet end of the spectrum. This varies in different individuals. Likewise patients sensitive to cold may not react at all to a skin temperature of 0° C. or at 20° C., but may react violently with rise to temperatures between 5° C. and 15° C. Likewise, in patients sensitive to heat, the reaction may occur very violently to skin temperature from subnormal toward normal or vice versa in cold sensitive cases from a normal or high temperature down toward subnormal. Slight grades of heat which are generated by walking across the room, or even by rising from a sitting to a standing posture, cause in some patients violent reactions which can be immediately stopped by a little cold applied to a small skin area. Patients of this sort are almost always violently affected by the ingestion of hot drinks or foods, or in cold sensitive cases by cold drinks or cold foods.

Heat sensitive cases may be relieved by cold and quiet. They rarely know that they are sensitive to heat, but instinctively lead a quiet life, and avoid situations in which they are likely to be overheated. They often give an impression of laziness. Cold sensitive persons on the other hand may be relieved quickly either by heat or effort. They rarely know of their sensitivity to cold, but instinctively lead a life of excessive activity, are inclined to exercise and develop their muscles and feel relieved after prolonged hot baths. A number of historical characters whose activities typify excessive energy could have been diagnosed as cold sensitive individuals.

In a paper of this scope I cannot deal with the details of these conditions, nor give the proofs upon which my ideas on the subject are based. For this reader is referred to previous writings.

There are two types of physical allergy, one in which the reaction is confined to the point of contact between a surface such as the skin or the surface membranes of the nose, bronchial tubes or alimentary tract. The other type, or so-called reflex type, shows reaction not only at the point of contact, but in distant structures as well, and frequently in distant structures only. For example: In a heat sensitive case of the latter type the placing of one forearm in a water bath of 42 degrees centigrade, may cause asthma in one patient, nasal stoppage in another, hives in another or even profound shock, prostration, disappearance of pulse and respiration in another and finally even convulsions, headache, temporary blindness, vomiting, or any number of symptoms which I could mention. The symptoms resemble exactly those caused by contact with egg in an egg sensitive case. It is interesting to remark, that, in extreme cases such as the above mentioned, reaction can be almost immediately relieved by rub-

bing a relatively small area of skin with a piece of ice. Often the cooling of a hand, arm or both arms will relieve. One can well wonder why patients of this type are not in a constant state of reaction. The fact is that in patients of this sort reaction is prevented by a subconsious avoidance of heat and effort or cold which is beyond their tolerance. A change in the habits or situation of patients of this sort may result disastrously; in fact, is likely to result in invalidism, or in heat cases in what is commonly diagnosed, heat prostration or sun stroke.

The causative agent in the two types of physical allergy mentioned are different. In the contact type, the patient belongs to the allergy family, in the same sense patients with drug or pollen allergy belong to the allergy family. In the reflex like type, however, the situation is different. The etiology in this type of illness is varied. It occurs very frequently in the allergy family, but occurs very often in non-allergic families, due to the effect, I believe, of some disease which throws the heat regulating mechanism out of kilter. The heat regulating mechanism is very complex and requires for its normal activity the co-ordinated action of a great number of structures. Structures of such vital importance as the sense organs in the skin, respiratory tract and internal organs for the perception of heat and cold; also a thermostat-like mechanism in the mid-brain which responds to the sense of heat or cold or to a change in blood temperature, and in their normal response cause heat to be retained or expelled as indicated from the respiratory tract or skin. Normal regulation of heat loss requires, of course, the co-ordinated responses of the vasomotor center, respiratory center and the entire cardiovascular system lungs and skin finally, voluntary actions on the part of the individual which he brings into play when he feels too hot or too cold.

Sensitiveness to heat and cold is not frequently found in children and when found usually follows a febrile disease, usually measles or scarlet fever or chorea. Reflex like reactions become more common with age as one or another element, which plays a part in the regulation of body heat, breaks down and becomes ineffective. Very frequently, however, we find individuals sensitive to heat, and effort, cold, in whom the most exhaustive physical examination discloses no cause for the condition except the fact that the illness is antedated by a febriie disease or other illness.

In writing my monograph on allergy, I introduced the term "physical allergy" as a noncommittal word under which the above diseases could be grouped. The term "allergy" is noncommittal, meaning nothing more than altered reactibility. The term "physical allergy" meaning altered reactibility to the effect of physical agents indicates only what the literal translation of the term indicates. I do not assume that either type of physical allergy is or is not related to allergy, caused by egg, dander, and other material agents.

Physical allergy is very common and complicates many other illnesses, and is commonly found in patients who have allergy due to material agents. It rather frequently follows anesthesia and over-indulgence in alcohol, in fact, in any condition which debilitates a patient to such a point that he does not respond normally to the effect of heat or cold. The condition is serious in every sense of the word unless correctly treated.

During reaction the patient is predisposed to infection, and among cases of this sort predisposition to coryza, bronchitis, and pneumonia is great. Relief of the condition is frequently associated with increased immunity, even against such organisms as affect the skin and respiratory tract.

In my experience, physical allergy has not been transferred passively by either transfusion or by the Preuxnitz and Kustner method. However, there are case reports by Sir Thomas Lewis, Hortan and Brown and several others of passive transference of cold sensitiveness.

7. **Contact Eczema.** There are several types of allergic eczema. The more common type is that caused by reaction in the skin, causing dermatitis in the same sense that reaction in the bronchial apparatus causes asthma. This can be due either to sensitiveness to material substances, such as

foods or to physical agents, such as heat or cold. There is however another type of eczema which seems to represent a different type of disease from any of those previously alluded to. This type occurs typically in the case of poison ivy dermatitis, primrose dermatitis, or ragweed oil dermatitis. The reaction is usually confined to the exposed parts, but in severe cases this can spread to areas usually covered by clothing. It is apparently caused by the oily substances of the plant. It is typified by the fact that it can be induced artificially in normal or non-allergic people by contact with the oil. It can be relieved by weekly injections of the oil in tiny doses. It cannot be passively transferred by the Preuxnitz and Kustner method. Allied with this is a type of physical allergy which causes a similar type of eczema of the exposed parts caused by physical agents such as light and which can be relieved completely by exposure of large areas of skin to light of the wave length which produces the illness. All eczema of this type appears in the form of delayed reaction occurring after a period of twenty-four hours or more but which persists for a week or ten days after removal of the cause of the trouble. In trying to account for eczemas caused by light we might imagine that the reaction is caused by the breaking down of some of the normal skin oils by light, and that the broken down substances sensitize the patient and cause eczema when the substance is liberated again in the skin through the action of light. I have nothing to offer in proof of this attractive theory except what might exist in the fact that it can be relieved by exposure of areas of skin to light other than areas subject to the reaction. This much resembles an immunologic cure. This type of dermatitis is rather common and may be extremely disagreeable. Relief results in complete restitution of the affected parts if the cause of the illness is removed.

CAUSES OF REACTION

Among the commoner causes of allergy, regardless of type, may be mentioned briefly, light dry pollen, foods, epidermal substances, spores and fungi including skin fungi, many constituents of dust, intestinal parasites, insect scales, insect bites, drugs, many constituents of smoke, bacteria, foreign sera, substances transmitted by blood transfusion. Also apparently substances of endogenous origin, such as a patient's own breast milk, also specific physical agents, such as light, heat, cold and mechanical irritants. In addition to the above, there is a type of physical allergy which is postural, and which will be described at a later date.

SYMPTOMS

Symptoms are so well known that they need not be repeated here in detail. They may be classified briefly as: generalized allergic shock, orbital symptoms, nasal and oral symptoms, pharyngeal symptoms, laryngeal symptoms, bronchial symptoms, gastrointestinal symptoms, cutaneous symptoms, urological symptoms, pelvic symptoms, neurological symptoms, and miscellaneous symptoms such as hives, angioneurotic oedema, hypertension, and certain cardiac and cardiovascular symptoms. Finally there are certain miscellaneous symptoms depending upon the site of reaction which give rise to symptoms such as headache, prostration, tremor, convulsion, delerium, bewilderment, phobias, coma, paralysis and Meniere's syndrome. Many symptoms could be added to the above which have definitely been proven due to the direct or remote effect of allergy, and probably many additional phenomena will appear as proven effects of allergy when studies of the subject progresses.

For a more complete review of the causes and symptomatology of allergy and of the means by which they can be proven allergic, the reader is referred to the vast literature which has been written on this subject.

SPECIFIC DIAGNOSIS

There are two phases in the diagnosis of allergy, first, proof as to whether or not a given symptom is allergic in origin, and, second, which is much more difficult, discovery of the specific cause of the illnes. As aids in the diagnosis of the first phase, may be mentioned a positive family and personal history of typically allergic symptoms dating from an early age. Recognition of one or more typical manifestations of allergy in the pa-

tient such as nasal or bronchial allergy or hives, one or more reactions at the site of skin tests. Finally the therapeutic effect of adrenalin, and the effect of avoidance of contact with suspected agents.

The discovery of the direct causes of a given reaction is very much more difficult than proving the condition is primarily allergic in origin. This is especially difficult because the great majority of patients, except infants, are sensitive to more than one agent, in fact, rather frequently to several. The situation is furthermore difficult because in the case of multiple sensitivenes one agent may cause reaction in one tissue while other agents may cause reaction of a different type located in other areas (Vaughn). This diagnosis may tax the ingenuity of a physician to an extreme.

The remoteness of the source of the evil can be illustrated by mentioning a patient sensitive to soy bean. He was not only made ill by inhaling soy bean dust in a mill and at home when the wind blew from the direction of the mill, but also by the ingestion of milk or butter from cattle fed with soy bean fodder. He was also made ill by contact through artificial foods and oils containing soy bean products. The patient rightfully asked, "Why leave the mill when soy bean seems to be everywhere?"

Cotton seed and linseed products, corn products, castor bean products and fish glue are difficult of avoidance in highly sensitive patients. They have a distribution which makes complete avoidance difficult. Upon finding a primary offender in a given patient the reader may be surprised at what a good encylopedia will disclose concerning its distribution and sphere of use.

Skin tests, while not infallible, are very useful in the diagnosis of allergy. They give useful information, especially in pollen cases, epidermal cases, dust and fungus cases, and in patients sensitive to insect scales. They are useful but less dependable in smoke cases, food and drug cases, bacterial cases, and in patients sensitive to sera.

Scratch tests used with glycerinated extracts offer the most practical means of testing which we have at the present time. Intracutaneous tests should not be used by general practitioners on account of the possibility of terrific reactions. The method of testing can be made harmless however, by experts. An extremity should always be chosen for intracutaneous tests so that in the case of a violent reaction the life saving tourniquet can be used. Many cases, especially those classified as contact dermatitis, do not respond to scratch or intracutaneous tests, but they give very strongly positive reactions to the so-called patch test, that is, a test made by applying the offending substance directly to the skin with the aid of adhesive. This should remain in situ for one or several days. Eczema under the material (excluding areas under the adhesive) indicates a positive reaction.

Elimination tests which eliminate specific foods with disappearance symptoms, is one of the most positive proofs of cause which we have at our disposal in food cases (Rowe) but should be verified by the finding of recurrence of the illness upon bringing the patient again in contact with the suspected substance.

TREATMENT

The effective treatment of a severe case of allergy requires more skill, knowledge, and experience on the part of the physician than for any illness with which I am acquainted in the field of medicine; in fact, upon this depends the effectiveness of the result. I know of no condition in which bungling, or playing with a condition with which a physician is not acquainted, can do so much harm. If a physician has a broad common sense knowledge of medicine and training and experience in this line of work, a result can be obtained on an average which equals or excels those which surgeons obtain in surgical cases, or dermatologists obtain in dermatological cases, in fact, the results obtained in a minority of cases seem almost magic. The correct treatment of a patient in allergic shock, for example, appears almost like raising the dead. Furthermore, the correct treatment of a child with allergic eczema, who may be asthmatic, stunted in mind and growth and who may show allergic deformities in the chest and face can be restored to normal in a year or two with such

perfect success as to make the treatment of cretinism with thyroid extract seem a very imperfect therapeutic measure. I think the specific treatment of complicated allergy cases ought to be left to a specialist in the line just as operative surgery, operative otolaryngology, or orthopedic work ought to be delegated to specialists. I think in this connection it might be well to refer the reader a portion of the Hippocratic Oath as follows: "With purity and holiness I will pass my life and practice my art. I will not cut persons laboring under the stone; but will leave this to be done by men who are practitioners of this work." This might be applied to the specific treatment of allergy. It would save many sad experiences for the patient which does neither him nor the physician much good, in fact it seems to me to be a professional mistake for a physician in one line of work to jeopardize his reputation by the mismanagement of an allergy case. The effect of this is unfortunately very obvious to the family and neighbors.

Unfortunately patients with allergy vary in their susceptibilities to such a degree that no fixed rule can be laid down which will apply to any gross number of cases. A majority of patients seem an exception to the rule, so that the skill of a physician experienced in the line seems to be needed in the average case.

Whereas, the specific treatment of allergy ought to be delegated to specialists, the common sense diagnosis of allergy and the use of the life saving symptomatic methods of treatment ought to be known to everyone. Allergic emergencies occur frequently in the work of general practitioners, and he should be equipped to recognize and meet the situation quickly and effectively. This may amount often not only to a most spectacular symptomatic relief but is frequently a life saving measure.

The effective and safe treatment of allergy depends upon the cause of reaction and degree of sensitiveness of the patient. We have at our disposal the choice of the following methods: Avoidance or removal of the specific causes of illness, avoidance or removal of contributory causes, specific treatment with the agents to which the patient is sensitive, non-specific treatment, and finally symptomatic treatment.

Removal of Cause of Illness. The matter of removal of cause is not as simple as one would believe. If a physician has made up his mind that a patient is sensitive to a given substance it would be well for him to examine an encylopedia thoroughly and find out the uses and what are made of the suspected substance and its apparent distribution. This topic has been referred to previously.

Non-Specific Treatment, is possibly indicated in certain patients. The mechanism through which it operates is speculative. I frankly believe a likely guess concerning its modus operandi would be an assumption that the benefit derived occurs partly at least as a result of the fever produced by it or by slightly raising temperature from subnormal toward normal. Fever regardless of cause, is likely to relieve allergy for a time. Likewise the straightening out of an irregular subnormal temperature frequently gives relief.

Specific Treatment. It hardly comes within the scope of this paper to discuss specific treatment with agents proven to be the direct cause of the illness. Suffice it to say that the methods which appear most promising at the present time are the co-seasonal treatment as described by Vaughn and the perennial treatment as described by Stuart and by Black, modified as suggested by the writer with an addition of ephedrine and adrenalin to the treatment extract and its subcutaneous injection distal to a tourniquet. The latter procedure described briefly by the writer makes specific therapy prove safe in the hands of physicians who understand this subject, since the tourniquet, adrenalin and ephedrine holds the treatment solution local for a time and grossly slows down its rate of absorption. For details concerning the above procedures the reader must be referred to previous writings.

Symptomatic Remedies. Adrenalin—The use of symptomatic remedies is important. Adrenalin, if adequately administered, should give relief in uncomplicated cases. It is a good practice to give about 0.25 c.c. or less

subcutaneously at five-minute intervals until tremor appears. This usually means that an adequate administration had been given and that the relief should follow. After the dose which is most useful for the patient has been discovered, it can be repeated as symptoms tend to recur. It is advisable to give adrenalin in the incipiency of an attack rather than wait until the height is reached. Adrenalin can be given repeatedly, if the dosage is correct, for months or years without much apparent ill effect.

If one wishes a more rapid effect from adrenalin in an extreme emergency, it is advisable to give it intravenously or give a given total amount, say 0.5 c.c. or 1 c.c., in five or six places intracutaneously. Both of these methods give a very quick result. The intravenous method is probably the more rapidly effective and the multiple injection probably the more useful except in extreme emergency. If adrenalin causes palpitation or arrhythmia, its rate of dissemination from the site of inoculation can be controlled almost immediately by the application of a rubber tourniquet above the site of inoculation. The tourniquet can be removed after a minute or so and reapplied if indicated. An adrenalin reaction can be stopped within less than one minute as a rule in this way. The unforunate feature of intravenous injections is that a dose once injected cannot be controlled, so far as rate of absorption and delivery to the tissues is concerned through the use of a tourniquet.

In patients who seem abnormally sensitive to adrenalin make the injection distal to a tourniquet. Remove the tourniquet after the adrenalin fixes itself in the tissues by vasoconstriction. This slowly absorbs and prevents sudden effects of overadrenalization such as headache, weakness, heart pound and tremor.

Pituitrin has an effect that is somewhat similar to adrenalin except that relief does not appear so promptly. Relief so obtained lasts longer. It is useful alone or in combination with adrenalin. Some patients are sensitive to pituitrin.

Ephedrine and allied bodies, given preferably in solution, has an effect similar to that of adrenalin except that the result does not appear so promptly but lasts longer. Very frequently constitutional symptoms are disagreeable and should be avoided if possible through reducing the dose to the smallest which will give a therapeutic result. Many patients are unable to tolerate ephedrine and many do not get a good therapeutic result from it. A solution of ephedrine 3% (two parts) and adrenalin 1/1000 (one part) is useful solution for hypodermic treatment. If a tourniquet is used for a few minutes the rate of absorption of ephedrine can be slowed down to such an extent as to allow no constitutional effects.

Drugs of the atropine series are time-honored remedies in the treatment of asthma. They can be given subcutaneously or by mouth. Sometimes as little as 1/200 or 1/500 grain three times a day is effective.

The iodides are useful remedies, especially in older patients. The best dosage varies from a few drops to 25 or even 50 drops three times a day. Optimum dosage varies in different individuals.

Salicylates are very useful in treatment of nasal and bronchial reactions given in doses of approximately 10 grains every three or four hours. One must always inquire about sensitiveness to salicylates before advising their use or make the test described previously.

The anesthetics, especially alcohol, are inclined to relieve asthma. Alcohol is frequently very useful, especially if combined in fair dosage with acetyl salicylate. This combination is a useful substitute for morphine in many cases.

Habit-forming drugs are absolutely contraindicated except in emergencies which justify the chance of causing addiction. This applies especially to morphine. The hardest cases of asthma to cure are those which have become addicted to morphine.

TREATMENT OF PHYSICAL ALLERGY

I have described the treatment of physical allergy at length in previous communications in the Archives of Internal Medicine and in the Journal of Allergy.

Treatment consists, in contact cases such as sensitiveness to light, cold or scratches, of applying the agent to which the patient

reacts more or less generally until tolerance is obtained. Surprising results frequently follow correct treatment and failure or damaging results may follow careless treatment.

The treatment of reflex like cases is more of a problem, but a problem which in many cases gives rise to highly satisfactory results.

The treatment of heat and effort sensitiveness in well marked cases is a problem. The treatment of cold sensitiveness is likely to be a success and often a brilliant success.

Heat and Effort Sensitiveness. Patients who are chronically sensitive to heat and effort have to reconcile themselves to a handicap and adjust their habits and occupation to degrees of heat and effort which they can tolerate. They have to avoid situations and climatic conditions in which they are likely to be overheated. They can frequently obtain relief by living in a cool, dry climate if they, in addition, avoid degrees of effort beyond their tolerance. A dry climate is often better for them than a cooler, humid climate.

The immediate effect of heat and effort reactions can be very effectively relieved by cold and quiet. Frequently immersing the arms and hands in cold water is adequate. This does not always give immediate relief, however, in cases of delayed reaction.

If sensitiveness to heat and effort seems to be a symptom secondary to some other illness, the condition can often be relieved in marked degree by treatment of the primary illness. However, in idiopathic cases, sensitiveness to heat and effort seem to persist in spite of health which seems perfect except in this one respect.

Agents which tend to keep body temperature at a high level usually give relief. The patients react most markedly when temperature is lowest so that the avoidance of gross subnormality in temperature is important. Temperature is inclined to be lowest in the early morning hours. Frequently a hot bath or exercise designed to raise temperature at midnight will prevent early morning attacks. Agents which cause fever, as a rule, relieve the condition temporarily whether the fever is caused by tonsilitis, pneumonia, typhoid fever, erysipelas, or even as in one of my asthma cases, by a lung abscess. Fever can be given artificially through the use of vaccine, especially B. Coli, and occasionally in heat-sensitivness cases can be definitely relieved through the use of repeated doses of vaccines which cause slight fever. In one desperate case of asthma caused by sensitiveness to heat, relief was obtained through the use of intravenous injections of colon bacilli which caused high grade rises in temperature. Asthma was relieved at the peak of the first reaction. This method of treatment is not without danger and is not highly recommended.

Hydrotherapy is very useful in the treatment of heat and effort sensitiveness. In highly sensitive cases it is very difficult to use heat without precipitating a reaction of some sort. Often a one second exposure to a hot lamp will precipitate a reaction which may result in a total loss of consciousness or a convulsion or result in twitching or violent asthma. For this reason heat and cold has to be applied in the beginning of therapy with great care. Frequently cold applied in a heat-sensitive case will cause shivering and the heat generated by shivering may cause reaction. For this reason both heat and cold have to be applied with equal caution. In the beginning of treatment it is frequently advisable to give bromides or adrenalin or both one-half hour before treatment is started. Heat may then be applied for a few seconds or more or possibly a minute or so until the patient begins to react. Reactions should be stopped immediately by applying cool cloths to the chest, arms and legs or if the patient can stand it a rapid rub with ice on the chest, arms and legs. As soon as the reaction has ceased heat can be reapplied. Care must be taken not to chill down the skin too much with ice. If it is done the patient does not tolerate it so well when reapplied. This alternation of heat and cold can be continued at frequent intervals for a period of one-half hour and can be repeated daily and for a longer period of time as tolerance is gained. A high degree of tolerance for heat can often be induced within a period of two weeks or two months. When tolerance for heat is gained an effort should be made to induce tolerance for physical ef-

fort. This can be done through the use of exercise pushed to the point of causing slight reaction and stopped with cold. This can be frequently alternated and may be repeated many times daily in the beginning of treatment. A degree of tolerance can be obtained through this means which will not only develop emaciated muscles but change a bedridden invalid into a reasonably active individual.

Symptomatic remedies such as adrenalin, ephedrine, pituitrin, atropine, salicylates, the iodides may be useful in the treatment of this type of illness just as they are in the treatment of egg or pollen sensitiveness.

Sedatives such as bromides, alcohol and even chloral hydrate can be used to advantage in the early stages of treatment as a symptomatic remedy but should not be continued for prolonged periods of time.

Avoidance of mental depression and depressing environment is important. Depression apparently allows body temperature to drop to an unusually low level in many cases and can make the patient unusually sensitive to the effect of heat and effort.

Cold Sensitiveness. Patients who are sensitive to cold should be warned against exposure to cold which is beyond their tolerance.

Certain ones can often be relieved through seeking a warmer atmosphere. This does not reduce their tendency to react to cold however.

Treatment with gradually increasing exposure to cold gives brilliant results in a large proportion of cases. This can be taken in the form of cold baths or treatment with heat lamps, alternated with ice rubs. A cold bath should not exceed over fifteen or thirty seconds in duration and should be followed, as a rule, by the drying and brushing of the skin with a stiff brush. An ice rub is a very effective method of treatment. If ice is moved rapidly enough over the skin it does not give rise to a disagreeable sensation of cold any more than a cautery gives rise to a sensation of heat if it is moved with sufficient rapidity. The entire body can be rubbed with ice within a period of fifteen or thirty seconds, in such a way that the patient need feel no sensation of discomfort from it. If this treatment is frequently repeated and gradually increased never exceeding the patient's tolerance, a high grade immunity to the effect of cold can usually be obtained.

Symptomatic remedies are useful in the treatment of this type of illness just as they are in the treatment of heat sensitiveness. The use of vaccines in this type of case is, I believe, illogical and unnecessary.

Tachycardia

By LOUIS M. WARFIELD, M. D.
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THE rapidly beating heart is a symptom of many interesting conditions and often a source of great worry and anxiety to the one who has it. It is, too, an important symptom, for it may have but little significance so far as disease of the heart goes, or it may be a symptom of most serious disease. At times a racing heart may have no evil prognosis. Again a rate twice the normal rate may occasion a grave prognosis.

To the general practitioner who usually sees the patients with fast hearts first, the subject should be most important. A knowledge of the prognosis will enable him to calm the fears of the patient and the family and also lead him to administer the proper drug or to give no drug at all. Only too often too much drugging is practiced upon such patients.

The rapid heart of fever or of that due to simple excitement will not concern us here. Much more important are the types of patients with rapid heart who come to the doctor because they want to know whether they have heart disease or not. Probably an accurate estimation of the significance of such tachycardias can be made in the majority of cases by a knowledge of the types of rapid

heart beat, by careful history taking, careful physical examination with the use of simple tests. A small percentage of cases must be studied by all methods at our disposal before an accurate opinion can be given. An occasional case will be found which in spite of intensive study will remain obscure, or there will be differences of opinion concerning the significance of the tachycardia.

For convenience of description the tachycardias may be divided into the simple and the paroxysmal, the former including all the cases where the rate of the heart is no greater than 150 beats per minute and the auricles and ventricles beat in normal sequence, the latter including the cases where the rate is higher, even to 200 or more beats per minute, and where the impulse is produced in various foci of the auricles, the ventricles, or of the conducting system. The paroxysmal tachycardias also include the ventricular as well as the auricular types.

As tachycardia means fast heart many such cases are seen. Those due to fever, to simple emotional excitement, to exercise, to external temperature changes, to heavy meals need only to be mentioned in order to be dismissed from the discussion. In all these cases the rate rarely goes above 120 beats per minute and the cause is evident. These are physiological responses and have no special significance. In one group of cases where the psychic element plays a dominant role the tachycardia may be constant, there is sweating, flushing of the skin in various areas, clammy hands, slight sharp pains in the cardiac region. The blood pressure is low and there is a tendency to faint when the individual stands "at attention" for a few minutes. These cases were common among the drafted men during the late War and were found also in those who were shell-shocked, or who had other violent jars to their nervous systems. Such cases are not often seen in every day life. They are constitutional defectives, they can not keep up the pace of modern life so they find their level and do not attempt things which they cannot accomplish. They are not usually annoyed by the slight tachycardia and do not often consult a physician. They formed the large group called neurocirculatory asthenia. These cases are often mistakenly diagnosed as toxic goitre and are operated upon to their detriment. Careful study of such cases with several estimations of basal metabolic rate should prevent such unfortunate operative procedures. The first basal rate on such patients may be suggestively increased but succeeding ones properly performed are always within the limits of normal range. Digitalis should never be given as it is quite useless.

Another cause of simple tachycardia is early pulmonary tuberculosis. Usually the pulse rate is not over 110 beats per minute. If practitioners would bear this in mind and carefully examine such patients, have four-hourly temperature records taken over a period of several days, have sputum examinations and x-ray plates made, fewer advanced cases of tuberculosis would be found entering our sanatoriums as early cases.

One cause of tachycardia which is important is that which follows upon long continued illness. Frequently such patients suffer from easy sweating, from thumping sensations (not pain) in the chest, and from weakness. The tachycardia may continue for weeks or even months and become very annoying to the patient so that he develops what might be termed heart consciousness. Often upon examination he is told he has myocarditis, a term which should be deleted from medical nomenclature, and he may then become truly neurasthenic. At times a systolic murmur is heard at the apex and he is told he has a murmur. Now systolic murmurs heard at the apex are rather common in perfectly healthy people. One might go so far as to say that the great majority of soft systolic murmurs which accompany the first apical sound are absolutely without significance. When there is a definite history of rheumatic fever, when the apex beat is definitely beyond the mid-clavicular line and when the murmur is harsh and replaces the first apical sound then it is probable that the mitral valve is damaged and the murmur is due to organic change.

Probably one of the commonest causes of continuous simple tachycardia is thyrotoxicosis, hyperthyroidism, toxic goitre, whatever name one prefers. It is immaterial to

this discussion what name one gives this disease or what grouping of the cases one uses. Whether it be exophthalmic goitre of the young or the toxic adenomata of older people one outstanding symptom, throbbing heart, and one outstanding sign, rapid pulse, are present. The rate may not be so rapid, usually it is about 110 to 120, but the tachycardia is continuous with little change sleeping or waking. There is a peculiar quality of the heart sounds in these cases. One speaks of an overacting heart and the impression one gets as he listens to such hearts is that they are working out of proportion to the rate of beats. The sounds are booming, at times flappy. Occasionally there is heard a distinct presystolic rumble ending in a somewhat flapping first mitral sound leading one to believe (particularly when edema of the lower legs is present) that one is dealing with a beginning decompensation of mitral stenosis rather than with the tachycardia of toxic goitre. Here is an illustrative case.

Case I. A married woman 44 years of age complained of pounding heart, shortness of breath on exertion and swelling of the ankles and lower legs. This came on rather suddenly following strenuous horseback riding in the mountains together with the care of a household and nursing a sick husband. She had always been unusually active and athletic. In childhood she had had an attack of rheumatic fever. On examination the dyspnea, the slight swelling of the liver, the edema of the ankles and the presystolic rumble ending in a snappy first mitral sound at the apex led to the diagnosis of mitral stenosis with decompensation. There was continuous tachycardia. No eye signs were present, the tremor of the hands was only suggestive and she had only a slight symmetrical enlargement of the thyroid gland. The fluoroscope revealed a somewhat decreased aortic knob, a prominent pulsating conus and a left border not unlike some cases of mitral stenosis. There was also a suggestive enlargement of the left auricle. As there was no response to digitalis it dawned on me that this was a toxic goitre. A basal metabolism showed plus 27 per cent. Subtotal thyroidectomy completely cleared up the process, at the same time producing normal, clear heart sounds.

Lahey and Brown have called attention to such cases. Hamburger calls them Masked Hyperthyroidism. Recently Levine has discussed these cases, especially where there are paroxysms of transient auricular fibrillation. Levine records one case of anginal attacks, forty in one day, where subtotal thyroidectomy cured the patient.

Many of these cases complain of brief attacks of violent throbbing of the heart accompanied at times by feelings of faintness. These attacks we know are attacks of transient auricular fibrillation. They may occur many times in a day and often are the cause of the patients' seeking medical advice. Recognition of the condition and estimation of the basal metabolic rate leads to the relief of the patient by operation.

An important point to bear in mind is that all these cases lose weight in spite of good appetite. Cases of decompensation due to true organic heart disease as a rule lose weight in spite of the apparent good nutrition due to the edema, but the appetite is also lost and the decreased weight is due to lack of food plus the disturbance in blood flow.

Often the cases of toxic goitre are not seen by a doctor until they have symptoms and signs of heart failure. There is always tachycardia in these cases and often auricular fibrillation with its corresponding irregular pulse. There is also very little or no dyspnea so that one can proceed very shortly to obtain a basal metabolic rate. This may not be high, plus 20 to 30 per cent. When repeated with the same definite but slight rise one can be fairly sure of his diagnosis.

Occasionally the attacks of fibrillation are accompanied not only by faintness but by severe anginal pain. The diagnosis may not be so easy.

Case II. In September 1926 I saw a married woman, 55 years of age, who had suddenly felt a severe pain in her heart succeeded by racing of the heart and collapse. When seen within an hour of her attack she was profoundly weak, with slight pain still present and a rapid, irregular heart. There was a very slight thyroid enlargement, no eye signs, no bruit over the thyroid and a coarse hand tremor. The past history was quite negative except she had known for some time that she had an increased blood pressure. Also a fact, which did not impress me as it should, that she used to be rather heavy and had lost weight during the past few months. This she insisted was due to dieting. She was at home and refused to enter a hospital. The tentative diagnosis made then was coronary occlusion. After observing her for a time I awoke to the fact that I was probably wrong and requested that she go to hospital for a basal metabolic rate. It was months before she consented. In the mean-

time she had secured another doctor. Her metabolism was plus 25 per cent. Although she had been urged to have an operation on her goitre it was some months later before she consented. Following subtotal thyroidectomy her heart rate became regular and normal and she has been well.

Such cases should not be difficult now to recognize as so much has been written about them in the past two or three years. If one always keeps in mind the possibility that rapid, irregular heart may be due to toxic goitre he will not often be led into error in his diagnosis. As Lahey has shown, the results of operation upon apparently desperate cases are often little short of miraculous.

PAROXYSMAL TACHYCARDIA

Probably the most dramatic of the tachycardias is the so-called paroxysmal tachycardia described many years ago by Nothnagel and others and separated from the confused group of tachycardias by Bouveret in 1889. Vaquez recognizes two forms. The first in which the acceleration affects both the auricles and ventricles alike, the auricular paroxysmal tachycardia. Although the heart rate may be as high as 260 or even 300 the ventricle responds to every auricular beat. Usually the rapid rate is a multiple of the normal rate. The second form affects the auricles chiefly, comes on in paroxysms and the ventricular rate is one-half, one-third, or one-quarter the auricular rate. This is known as auricular flutter. The latter form is closely allied to auricular fibrillation and is considered to be the result of abnormal functional processes within the right auricle. The former so far as known, has no pathological basis and therefore is not a serious condition.

True auricular paroxysmal tachycardia is not a very common malady yet every physician will probably see several cases during his lifetime. It is characteristic of the attacks that they begin suddenly and end suddenly. The duration may be from a few minutes to twelve or more hours. Ordinarily the patient feels only the discomfort of the thumping in his chest but occasionally the attack leads to fainting, nausea, and profound collapse. It is apparently a condition of peculiar instability of the cardiac nervous mechanism. The origin of the excessively rapid rate is either in the auricles or in the auriculoventricular node, the latter giving rise to the condition known as nodal rhythm and diagnosed by electrocardiographic tracings. In spite of the rapid heart action, repeated at intervals over a long period of time, the heart does not appear to suffer any damage. In one case under my observation the attacks had been present at monthly intervals or oftener for eighteen years. In this particular case the woman had recently had the care of her father who was dying of cancer. During the several months when the strain on her must have been great, she had no attacks. Shortly after the burial of her father the attacks again came on and I saw her in one which had lasted for twelve hours and in which the pulse rate was from 180 to 200 beats per minute.

Patients usually learn some method of stopping the attacks. They hold the breath as long as they can, assume some particular position for a time, tickle the throat to cause vomiting, or the nose to cause sneezing. Various drugs have been recommended and various procedures. Occasionally firm pressure on the right vagus nerve opposite the carotid tubercle in the neck may stop the attack. Pressure on the eye balls is of doubtful value. As to the drugs, quinidine sulphate given intravenously is at times effective. In the case mentioned above the drug which finally stopped the attack was strophanthin intravenously. Vaquez states that ouabain is preferable to strophanthin. Recently Wolffe and Bellet have reviewed the subject and have reported upon the successful use of calcium in the form of calcium gluconate (Afenil) used intravenously. The injection is made very slowly. In three cases out of five they have had dramatic results. In the intervals calcium lactate in 20 grain doses three times a day has seemed a preventive of attacks. This is worth trying.

Hochrein recently reports success in some cases by a combination of dietetic measures, psychotherapy and, especially, the administration of atropine.

However one frequently uses up all his armamentarium and still the tachycardia persists. Suddenly for no reason one can see the patient feels a sudden kick in the chest

and the heart rate returns to normal. That there is no specific for the condition is attested to by the multiplicity of suggested remedies.

The other type of paroxysmal tachycardia, auricular flutter, is of a different nature and usually has some disease of the heart as its cause. It is found in cases of fibrosis of the myocardium, in cases of hypertension, occasionally in cases of organic valvular disease particularly mitral stenosis. The onset of the attacks usually means the beginning of heart failure although people may live comfortably for a long time with this rhythm provided they live within the limitations of their diminished cardiac reserve. The attacks come on suddenly and also occasionally end suddenly, although they never have the abrupt onset and offset of the first type. The ventricular rate may not be much increased although usually it is about 150 beats but the auricular rate is often 260 to 320 to the minute. The condition may be suspected by the fact that the patient has some form of heart disease, shows evidences of heart failure (dyspnea, cyanosis, cough, swollen liver, edema, etc.) and has at the same time a regular pulse with a rate of about 150 beats per minute. It is only certainly diagnosed by the electrocardiographic record. The tracing shows no P-wave but a series of two or three or even four regular waves between the ventricular complexes.

Auricular flutter rarely lasts any length of time. Usually it passes into auricular fibrillation. This change may be hastened by giving digitalis to the physiological limit. These two mechanisms flutter and fibrillation are closely allied, often the one passing into the other and an electrocardiographic record often shows evidences of both rhythms in the continuous tracing. Whenever flutter is recognized the ventricular rate should be controlled by the administration of digitalis to the patient. When this is brought about the patient may go about fairly comfortably. Sooner or later the auricles fibrillate. This is on the whole to be desired. Cases are reported where flutter has lasted for months. Such cases are not common. On the contrary persons with auricular fibrillation may live comfortably for years provided always that the ventricular rate is kept in the neighborhood of 80 by digitalis.

Probably the most common form of tachycardia seen is that accompanied by auricular fibrillation. In this condition the auricles are dilated and are the seat of continuous fibrillary twitchings. The impulses from these contractions bombard the auriculoventricular node at a rapid rate. The ventricle cannot respond to all of the impulses. It consequently responds as often as it can, that is when the muscle is irritable at some period following a systole. As the impulses find the ventricle in all stages of diastolic filling and all stages of refractoriness the ventricular beats are rapid and irregular both in force and in rhythm. This used to be known as *pulsus perpetuis irregularis.*

Usually there is no great difficulty in recognizing this rhythm. The pulse is irregular in rate and the beats are different in force. Often there is a difference of 10 to 30 or more beats between the number of contractions heard at the heart and the number of beats counted at the wrist. This is the so-called pulse deficit. The greater the pulse deficit the more serious is the heart failure, as it means that many heart beats are occurring yet are not sufficiently powerful to open the aortic valves and propel the column of blood. A very satisfactory method of recognizing this rhythm is to take the blood pressure by the auscultatory method. At once one recognizes the marked difference in force and rhythm of the beats as they come under the cuff on the upper arm. It is quite impossible to obtain an accurate estimation of the blood pressure. All one can say is that there is or is not evidence of hypertension.

The commonest causes of this irregularity are decompensated rheumatic valvular disease (usually mitral valve disease), decompensation following upon hypertensive heart disease, arteriosclerotic myocardial fibrosis and thyrotoxicosis. Occasionally one sees this rhythm in a young person otherwise in good health, but it is most unusual and probably means some pathological changes in the auricles.

Digitalis, which has the property of blocking impulses at the A—V node, given as rapidly as possible to physiological limits, is the one best drug to control the rhythm. It has its most brilliant effect in the rheumatic cases. It has little or no effect in the cases of auricular fibrillation during the course of thyrotoxicosis. Here quinidine sulphate is preferable but it too, more often than not, fails to produce regular rhythm.

While the tachycardias arising in the auricles or in a focus at or above the auriculo-ventricular node are not by any means always of serious significance, as noted within, the tachycardias arising in the ventricles, usually the left, are always serious. The first published case of ventricular tachycardia which happened to follow upon an attack of coronary occlusion, was that in 1921 by Robinson and Hermann. Since that time many cases of ventricular tachycardia have been observed and recognized as such without the help of the electrocardiogram. In such cases the heart rate is 200 or more per minute, the pulse is often imperceptible, the patient is usually in collapse, cold and cyanotic with more or less dyspnea. Consciousness is often lost and always dulled. Although ventricular paroxysmal tachycardia usually results from some sudden and violent insult to the heart muscle, cases have been reported, for example those by Schwensen, where the tachycardia was caused by digitalis. There was no coronary thrombosis in either of his cases. Then rarely there is such a ventricular tachycardia as that reported by Scott in a young woman without evidence of heart disease. An unusual feature of this case was the retrograde conduction, the P-wave falling after the Q-R-S complex and before the T-wave. This curious irregularity and tachycardia completely incapacitated the patient. She was permanently cured by quinidine sulphate.

A case illustrating the type of paroxysmal ventricular tachycardia following coronary occlusion is the following:

Case III. A heavy set, short-necked, florid man of 56 was seen in hospital April 1928 with dyspnea and cyanosis. His important history was that he had never been seriously ill in his life. He was superintendent at a storage plant where he frequently went into the cold storage rooms. One evening, the day before admission to hospital, he came home and ate a heavy meal. He got his car and went to a lodge meeting on the second floor of a building. He did not feel well as he arrived at the building and by the time he mounted the stairs he was completely exhausted. He had never felt that way before. He rested, felt some better, drove home, put up his car and went to bed. About two A. M. he was awakened out of sleep by an agonizing pain over his heart accompanied by difficulty in getting his breath. This pain was finally relieved by morphine but his chest felt sore when he was seen later in the day.

On physical examination he was cyanotic, with some dyspnea. The heart was enlarged, no murmurs were heard but there were frequent premature systoles. The rate was 90 to the minute. The blood pressure was 130/90, the arteries were large, fibrous, and tortuous. There were rales at the lung bases. The abdomen was large due to thick layers of fat but the liver was not enlarged and no fluid was made out. The temperature was 99.5. There was no edema of the ankles. The eye grounds showed lesions of vascular sclerosis. The leucocytes were 11,000. The urine was 1.028 specific gravity, acid, contained albumin and granular casts, but no sugar.

His condition slightly improved during the next 48 hours when he suddenly went into collapse. The skin was cold, clammy and ashen-blue. The respirations were shallow, the pulse imperceptible, the blood pressure not measurable. The heart rate was 210 to the minute. He was aroused with difficulty but could swallow. An electrocardiogram showed typical ventricular tachycardia. Having learned that quinidine sulphate was of value in such cases, I gave him 10 grains by mouth and repeated it in two hours. Within an hour after the first dose the tachycardia ceased. Only an occasional premature systole was seen. Within three hours the heart was regular at 76 beats and there were no extrasystoles. The complexes were normal. Simultaneously with the cessation of tachycardia the patient woke up, the skin became warm and the dyspnea and cyanosis vanished. An apparently dead man was brought back to life. Following this attack he slowly became better, left the hospital and against advice returned to work with, however, shorter hours. He felt perfectly well for three months. At the end of that time his wife telephoned me that he had dropped dead.

Ventricular paroxysmal tachycardia is most important to recognize for very often it can be stopped with quinidine. If one does not actively interfere the patient will die. The heart can not stand many hours of such a rate when it is already profoundly damaged. There is no more dramatic change in medicine than to see an almost moribund,

cold, cyanosed patient, become conscious, pink, warm and begin talking rationally again. Such cases practically invariably follow an attack of coronary occlusion so they should not be difficult to diagnose without the use of special instruments.

Ventricular fibrillation represents the last gasp of the dying heart. By the time this occurs the patient is pulseless, no heart sounds can be heard, and no amount of stimulation can revive the heart. Electrocardiographic tracings show only a series of little waves rapidly becoming smaller until no motion of the string or light is seen. This is what we formerly thought. Quite recently Schwartz and Jezer have reported that the attacks of syncope in a patient with auriculoventricular dissociation and with Adams–Stokes syndrome were due to ventricular fibrillation during the syncopal attacks. Attacks varied in length from a few seconds to nearly six minutes. As many as two hundred and seven attacks were observed within a twenty-four hour period. All have terminated spontaneously. This may be shown to be the mechanism of the syncopal attacks in other cases of Adams–Stokes syndrome. The fact remains that the dying heart shows fibrillation of the ventricles.

For us the important tachycardias then are those of so-called neurocirculatory asthenia, thyrotoxicosis, auricular paroxysmal tachycardia, auricular flutter and fibrillation and ventricular paroxysmal tachycardia. The treatment of these various types, after recognition of the particular type, has been outlined and the prognosis given. The ability to distinguish among these various groups is important in prognosis and treatment, and often means the saving of the life of a patient.

Intussusception*

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THERE can be no doubt as to the importance of intussusception when one considers the fact that it is the cause of about fifty-six per cent of all cases of intestinal obstruction in children. Its occurrence in adults, however, is exceedingly infrequent.

The high mortality resulting from the condition makes it one of the gravest of gastrointestinal disorders. Coffey, in 1907, stated the mortality was from seventy to ninety per cent. In a series of fifty-one cases reported by Bergfeld, there was a mortality of forty-five per cent with surgical intervention within twelve hours, eighty per cent in twenty-four hours, and one hundred per cent when relieved by operation beyond this period. In reviewing the literature, I believe I may safely state that the high mortality in this condition may be laid to the delay in surgical intervention due to the difficulty in diagnosis and delay on the part of the patient in consulting a physician.

Depending upon their location, invaginations may be classified as enteric, ileo-caecal, ileo-colic, colic, or colico-rectal; the ileo-caecal type being the most common.

The etiology of intussusception in children, in the absence of new growths, Meckel's diverticulum or other conditions simulating a foreign body in the intestinal tract, is most logically explained in the following theory: The mucosal folds of the gut are over-developed and studded with lymphoid follicles. The colon of the child has a relatively narrow lumen which, when containing acutely swollen lymphoid follicles, furnishes the necessary requirements for an invagination brought on by intestinal peristalsis. In the adult intussusception is brought about by a foreign body in the intestinal tract or its equivalent in the form of a tumor, polyp, appendicitis, or ulceration. Peristalsis forces these masses along the tract and they in turn, pull the intestinal wall along with them.

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The condition is characterized by its sudden onset in a previously healthy child, more usually in the male than in the female. A very large percentage occur in the child during the first year of life.

The symptoms in a child are usually quite constant without any marked variation. The child is seized with severe abdominal pain of sudden onset as evidenced by crying, drawing up of the legs, and restlessness. The colic may be accompanied or followed by vomiting. Shortly the pain subsides and the child's condition between seizures at the onset may appear perfectly normal. There may be, and usually is, a normal stool following the onset, but after the lower bowel is evacuated the subsequent stools consist of blood and mucus. Blood in the stool, however, may not appear until quite late as occurred in the first case I am reporting.

Examination of the patient in the early stage reveals no change in temperature, pulse, and leucocyte count. Later there is usually palpable the classical sausage shaped tumor in the abdomen. It may, however, in a rigid abdomen be necessary to administer an anaesthetic to obtain sufficient relaxation to palpate this so-called tumor. Due to the colon being freely movable, the mass may be hidden beneath the costal margin on either side. As the condition progresses, the findings of an acute inflammatory condition are evidenced by a rise of temperature, rapid pulse, and an increased leucocyte count. Very rarely is there much abdominal distention in the child.

In the adult, the symptoms are typically those of an acute intestinal obstruction, the diagnosis being very difficult until the presence of a sausage shaped tumor is palpable or upon opening the abdomen.

From the literature I gather that the consensus of opinion regarding the treatment of intussusception is essentially surgical. Attempts at reduction of the invagination by injection of air or fluids is but to waste valuable time while the patient's condition becomes progressively more critical. In the medical or conservative treatment of the condition there is no method whereby one may be certain that the reduction is complete since it is the last inch or so of the reduction which is the most difficult.

TREATMENT

In the treatment of the condition the preoperative treatment must be considered as of vital importance in both the child and the adult. There is usually marked dehydration due to vomiting and the majority of cases are found in a marked degree of shock. Fluids in the form of glucose and salt solution should be administered by the intravenous route if possible or by subcutaneous injection. Heat applied to the chest and upper abdomen may be of value in warding off postoperative shock.

The success of the operation depends to a great degree upon the length of time since the onset of the condition, upon the speed and care in handling the tissues, and upon whether or not the invagination is reducible or resection must be performed. It goes without saying that if resection is necessary, the prognosis is indeed grave.

The site of incision should be governed by the location of the mass. When the abdomen is opened reduction is obtained by milking back the mass at the farthest point of invagination and one must remember that it is entirely impossible to bring about reduction by trying to pull out the invaginated portion. There may be, and usually is, more trouble reducing the terminal two or three inches because of edema but this may be overcome by enveloping this portion in a hot wet lap towel and exerting uniform pressure over the area. A typical cup-shaped dimple will be seen as the last portion is reduced and should be carefully obliterated.

If reduction is imposible, or if the bowel has become gangrenous, the tumor mass must of necessity be resected and anastomosis performed or a temporary enterostomy without resection and anastomosis until later. When the operation is completed, the abdomen should be hastily closed without drainage.

Following the operation very vigorous postoperative treatment should be instituted by the administration of fluids, stimulants, or any other treatment which may ward off the possibility of shock.

CASE REPORTS

The two cases which I have to report were treated by me during the last year. Both of these cases emphasize the importance of early diagnosis and treatment since I feel that had earlier surgical intervention been possible, their recovery would have been obtained.

I. The first case is that of a female child, age ten months, which was seen by me on the afternoon of January 5, 1932. The mother stating that the child, previously very healthy, had been taken ill three days ago. At the onset the child had been seized with severe pain in the abdomen evidenced by crying and writhing and drawing up of the legs. The attacks, she stated, came in intervals and following each one the child was quite comfortable and rested quietly. Shortly following the onset vomiting ensued and had continued at irregular intervals, nothing being retained. There had been a normal stool passed following the onset, but during the last twelve hours several stools had been passed consisting of mucus and blood with no fecal material present. The presence of blood in the stool of twelve hours' duration had been sufficiently alarming to prompt the mother to call a physician.

Examination of the child revealed marked dehydration as evidenced by drawn features, dry skin, and a very listless and dull expression. Temperature was normal, heart sound rather weak. Palpation of the abdomen immediately revealed the presence of a sausage shaped mass extending from the left upper quadrant transversely downward across the abdomen. A diagnosis of intussusception was made.

The child was taken to the hospital immediately and prepared for operation. Subcutaneous salt solution was administered and the child thoroughly warmed. Under ether anaesthesia a right rectus incision was made in the usual manner and upon opening the abdomen an ileo-colic intussusception was found. The invagination was easily reduced by manipulation and the abdomen closed without drainage. Again fluids were administered subcutaneously. The child became very restless, temperature went to 105 degrees and in spite of our efforts the child died ten hours later.

II. The second case is that of a married white female, age forty-three years, who reported to my office on June 14, 1931, complaining of pain in the gall bladder region of several days duration. The pain radiated to the right scapula and was relieved slightly by vomiting. Vomiting was, however, not persistent. Upon questioning the patient further, it was discovered that she had had several previous attacks of a similar nature over a period of years from which she had recovered without any apparent ill effects. Examination revealed a quite well nourished female quite apparently suffering from pain. Findings were essentially negative except for tenderness over the gall bladder with noticeable rigidity. There were no masses palpable, temperature was ninety-eight degrees, pulse eighty-eight, and leucocyte count was fourteen thousand. A diagnosis of gall stone colic was made.

The patient was urged to enter the hospital but declined stating that she had made recovery from previous attacks and wished only something to relieve her distress. She was given a hypodermic of morphine and went on her way with the instructions that she return on the following day for observation.

The patient was not seen until two days later when she entered the hospital. The pain had not subsided. The findings were essentially the same as those found two days previously. Temperature was normal, pulse ninety, and leucocyte count twelve thousand four hundred. The patient was given sufficient morphine to control the pain and ice bags were placed to her gall bladder region. Vomiting was not persistent and her fluid intake was fairly good. The following day the pain became more severe, fecal vomiting ensued, and she went into moderate shock. Examination revealed a tumor mass along the right abdomen which did not extend to the liver margin. Temperature was subnormal, pulse weak and rapid and a diagnosis of intestinal obstruction was made. 1000 c.c. of glucose solution was given intravenously and the patient prepared for operation.

Upon opening the abdomen, a freely movable mass which, when easily delivered, was found to be an intussusception of the ileum. The bowel was markedly edematous. After an unsuccessful effort had been made to reduce the invagination, the entire area was resected and a lateral anastomosis performed. The abdomen was explored and revealed a small contracted gall bladder packed with stones. Due to the grave condition of the patient, however, the abdomen was closed without further procedure.

Postoperative measures to combat shock were futile and the patient expired three hours after the operation.

Examination of the specimen revealed a small intestinal polyp protruding into the lumen of the small intestine which had exerted traction on the intestinal wall causing the invagination.

There is a possibility that in the adult case the diagnosis of gall stone colic was incorrect and that the intussusception was a primary condition. However, I feel, in view of the attack at the onset being so typical of gall stone colic, that there is little doubt but that the gall stone colic was the exciting cause. My opinion is that the gall stone colic had caused a reflex hyper-peristalsis of the intestinal tract, and that the requirements being present for its formation an intussusception had taken place.

CONCLUSION

(1) The mortality rate in intussusception ranges from forty-five to one hundred per

cent and is in direct proportion to the time lapsed between onset and treatment.

(2) The treatment of intussusception is essentially surgical.

(3) Report of a case of intussusception in a ten-month-old baby in which blood did not appear in the stool until three days after onset.

(4) Report of a case of intussusception in an adult in which gall stone colic was undoubtedly the exciting cause.

The Effects of Barbiturates*

By WILLIAM F. WEGGE, M. D.
Milwaukee

THE belief that the barbiturates are safe, non-habit forming, and non-toxic remedies is very prevalent among the laity in general, and, to a considerable extent, among physicians.

This, no doubt, is due to a large extent to the fact that in the earlier period of their use this was emphasized by many medical writers and in the lay press. These agents have been lauded rather extravagantly in all kinds of cases and for all kinds of conditions, so that their use has become very wide-spread, frequently with very serious results.

I have paid rather close attention to the study of their untoward effects for some years past, and have been amazed at the frequency with which they occur, and with the variability of the dosage responsible for them.

Briefly, the material gathered by me has its source to a large extent in my own experience, and in addition, in experiences related to me by physicians whom I look upon as accurate observers. In my conversations, with some physicians, I found that they had observed no bad effects.

The material gathered has become so large and covers so many conditions and circumstances under which barbiturates are being used, that I shall be able to give only a general outline in a short paper, such as this is intended to be, together with some brief comments on some of the things observed.

As a general outline we may use the designations so frequently used in this connection, namely: safe, non-habit forming, and non-toxic for our discussion. At the outset we may regard the term *safe* as covering non-habit forming and non-toxic. The question is: Are these remedies non-habit forming and non-toxic?

Now, are they really non-habit forming? Many writers have given ingenious reasons for considering them non-habit forming, but the distinctions they make between habit and non-habit forming appear to me to be distinctions without a difference. Others have based their opinions on lack of experience or lack of proper investigation.

The facts are that a large number of people take these drugs habitually and after attempts at withdrawal, relapse. They are being sold in many places at bargain prices on bargain days, and in some instances regular customers are notified of these bargain days.

The addict commonly develops changes of character somewhat similar to those found in alcohol and narcotic addicts; and frequently becomes what we term paranoid. Some of them become dangerous as a result of the persecutory ideas they develop. The victims try to cover up their weakness for these drugs in a manner similar to those employed by those subject to other types of addiction, and their statements as to their use are quite unreliable. This makes it difficult to uncover the habit if the patient does not show some signs of barbiturate intoxication, or some observing friend or relative become aware of the facts.

Quite frequently relatives or friends notice a change of character in these individuals, without being able to account for the change. Individuals who have always been known for their agreeable qualities and their high sense of honor gradually become difficult to get on with. They become quarrel-

* Presented before the meeting of the Medical Society of Milwaukee County.

some and faultfinding; blame others for their misfortunes, real or imaginary. They distort facts or lie outright.

I have spotted several addicts accidentally by noticing their gait while they were under the influence of the drug. This gait is not wholly unlike that of post-encephalitic parkinsonism, without the tremor; with involvement of speech but lack luster eyes.

At least two cases observed by me were suspected for some time of suffering from encephalitis lethargica by the attending physician. Five cases of addiction following the use of these drugs in the systematic treatment of states of mental depression as advocated by some psychiatrists, were reported to me by physicians whom I consider to be close observers.

This particular treatment reminds me of the opium treatment of similar states advocated by some physicians about thirty or forty years ago. After the treatment one had the task of curing the patients of their opium addiction.

It has been claimed that persons may be induced to disclose the truth concerning things they wish to conceal by putting them in a state of deep hypnosis with these drugs. Three addicts while in a state of deep hypnosis from self-administered sodium amytal (the facts being known) denied having taken any, and no amount of persuasion could induce them to admit the facts.

In several cases serious intoxication had been brought about in the following manner, according to the after statements of the patients: In order to avoid the necessity for getting up for more of the drugs, should the first dose prove insufficient, they had taken it to bed with them. They remembered taking a second or a third dose, but nothing after that as far as they knew. Evidently, they had kept on taking it at short intervals for in one case at least I was able to determine the fact that 45 grains of sodium luminal had been taken.

Are these remedies really non-toxic? Professor Erich Leschke in his recent work entitled "Die Wichtigsten Vergiftungen", in a series of over two hundred cases of poisoning by various agencies, most of them with suicidal intent, found that over 40% were from barbiturates. According to Zanger 80% of cases of poisoning go unrecognized.

TOXIC DOSAGE

What may be considered a toxic dose of a barbiturate? I must confess that I do not know. It appears to me that many things of which we know little enter here. That it is not individual idiosyncrasy alone is proved by the fact that habitual users of large doses may at some time be affected fatally by much smaller doses than they have been in the habit of taking. It is my experience that people suffering from acute respiratory affections are more liable to experience serious effects particularly from the rapid acting sodium compounds.

I have seen people with cerebral arteriosclerosis develop a staggering gait upon taking so small a dose as one and one-half grains of pento-barbital. It seems that in some cases delirious states have developed on taking several doses of sodium amytal, which states continued until the drug was withdrawn.

I have personally seen two deaths from sodium amytal and have information that leads to the assumption of it as the cause of death in others. In one of the latter seven grains of sodium amytal had been given as a preanesthetic for the extraction of two teeth in a healthy young man. Briefly, the patient never became entirely rational up to the time of his death from pneumonia which developed toward the end of life twenty days later. The outstanding symptoms in my two cases were total unconsciousness with a complete loss of all reflexes and response to stimulation anywhere; shallow and only slightly perceptible respiration and widely dilated fixed pupils.

In the one case the dose was not known; in the other six grains had been given orally as a preanesthetic to supplement a local anesthetic. My information also includes a number of near-deaths in surgical cases in which comparatively small doses of a barbiturate had been given as a preanesthetic.

Given in obstetric cases, I have information of wild delirium following the administration of a barbiturate in two cases.

Used as a preanesthetic, whether given by mouth or intravenously in comparatively small doses, particularly in elderly people, if not infrequently gives rise to wild delirious states much to the distress of the physician employing them.

I have sketched rather briefly what have been some of my experiences with the barbiturates together with some of the information gathered from others in this locality. I have not exhausted them by any means. I have avoided technical discussions because you can find an excess of them if you care to delve into the literature pertaining to the subject.

It is clear that our knowledge of the actions of the barbiturates, harmful or beneficial, is still very limited. Thus far, only the surface has been scratched. To my mind, the outstanding conclusion is that drugs with such potency for harmful and dangerous effects should be used with great care by physicians and prescribed only under the strictest regulations.

The Removal of Broken Needles from the Spinal Canal

By ALBERT POPP, M. D.
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BEFORE spinal anesthesia became popular it was a very uncommon experience to be called upon to remove a needle from the spinal canal. The writer has studied the literature since 1889 when Quincke reported his first lumbar puncture in the treatment of hydrocephalus, and found some unusually interesting case reports which warrant reviewing at this time. In addition to a brief abstract of all the reports found on this subject, a new case report is submitted here and a means of diagnosing a broken needle before withdrawal is described.

The earliest record of a broken needle in the spinal canal was by Naumann in 1898. A five year old boy threw himself backward on a settee and a darning needle entered his body at the right of the spinous processes of the 6th and 7th dorsal vertebrae. He had severe pain in his legs immediately after and could not stand. Reflexes, defecation and micturition were normal. The next day an incision was made at the site of the puncture wound but the needle was not found. Then an incision was made to the left of the spinal canal and a piece of needle 3 cm. in length was removed. It had broken off at the vertebral arch. The patient could stand immediately after operation and had no pain.

In 1907, Torkel reported the first spinal puncture needle case. He had just completed the injection of a spinal anesthetic when the patient suddenly straightened, breaking the needle. He had considerable difficulty in locating the needle but removed it before going ahead with the operation for a strangulated femoral hernia. The chief feature of this case was that the needle broke off immediately under the skin but was forced much deeper by the spinous process above the needle; this deceived the operator and made it very difficult for him to locate the needle.

The third case was reported by Landry in 1915. This time the x-ray was used to locate the needle and a stereoscopic study was included. A carpenter, age 38, had a diagnostic spinal puncture and the needle broke off in the spinal canal. He was informed of the accident and complained continually of severe headaches which were aggravated when attempting to rise. A few days later he complained of pains in the small of the back radiating down the thighs. All these symptoms disappeared after the removal of the needle fifty days after the accident. A half hour search for the needle was required even after removal of the spinous processes of the 3rd, 4th and 5th lumbar vertebrae.

In the fourth case, reported by Ogloblina in 1928, the needle was in the spinal canal one year. His patient had a spinal anesthetic one year previously for the removal of a tuberculous kidney, when the spinal needle was broken off in the back. He had no symptoms from it until ten months later when he bumped his back lightly on a bench; after that he complained of pain in the lower portion of the thoracic spine. Percussion over the spinous processes elicited pain in

the region of the 12th dorsal vertebra. X-ray showed the presence of a thick needle lodged upon the upper portion of the first lumbar vertebra and a productive arthritis of the 12th dorsal vertebra. At operation a piece of needle 3½ cm. in length was found exactly in the midline 3 to 4 cm. deep. The needle was rough, brittle, covered with rust and the tissues around it presented a dark brown color; a portion was broken off during removal. The patient was seen three months later and felt good but complained of pain in the spinal column occasionally.

The fifth case was reported by Milko in 1928 although he saw his patient in 1913. This was a boy 16 years of age who had a diagnostic spinal puncture two and one-half months previously for suspected meningitis. He was not informed that the spinal needle was broken and remained in the spinal canal. The meningeal symptoms cleared up and the patient complained of severe pain in the left lumbar region which radiated into the left lower extremity down to the toes. He could neither lie down, walk, nor stand and became greatly emaciated. The lumbar spine was rigidly fixed and there was a marked tenderness of the spinous processes of the second to fifth lumbar vertebrae.

X-ray showed the needle over the third lumbar vertebra. It was removed with some difficulty because it was bent at an angle which hooked into the nerve roots. All the pains ceased after removal.

The sixth case was reported in 1928 by Babcock who, with no difficulty, removed a broken spinal needle 5 cm. in length, one week after the accident. The patient complained of pain for some time after removal but the symptoms gradually disappeard completely.

The seventh case, reported by Wieden in 1930, is of the most unusual interest as the needle was removed by laparotomy. His patient was a woman, age 28, who had had a diagnostic lumbar puncture, in the course of treatment for lues, one hour before admission to the Clinic. The needle had broken before fluid was obtained. The only complaint was a mild paresthesia of the right leg. A lateral x-ray showed the broken needle between the bodies of the second and third lumbar vertebrae with the point fully 1 cm. anterior to the vertebrae. The needle could not be located through a posterior incision, so another x-ray was taken in the A. P. direction which revealed the needle exactly in mid-line between the vertebral discs, obviously penetrating the dural sac through and through. Thereupon the posterior wound was closed and laparotomy performed. The point of the needle was found to the right of the abdominal aorta and the palpating finger was pushed away by the point of the needle with every pulsation of the aorta. The end of the needle was easily extracted and recovery was uneventful.

In 1931 Sarnoff reported three cases which occurred in his service. He removed the needles at once or shortly after the accidents, before any symptoms were produced. The needle was removed with ease in his first case immediately *after operation* for perforated gastric ulcer. In his second case the needle was also removed with ease *before the laparotomy*. However, more difficulty was encountered in his third case which was a boy, age 9, with a diagnosis of acute appendicitis and beginning peritonitis. The spinal needle was broken and a thorough exploration failed to locate the needle even after removal of part of two spinous processes under spinal anesthesia which was induced by inserting a needle one space higher than the first. The wound of the back was closed and appendectomy performed under spinal anesthetic already induced. The boy's father was informed of the accident and became greatly upset. He refused consent to removal at first but the next day he was persuaded to give his consent. X-rays indicated that a fragment one inch in length was within the spinal canal. Another x-ray was made with a second needle in place as a guide before operation. The point of the fragment was in the spinal canal and was broken and embedded in the bony spinous process. After being located, it was extracted readily by removing a groove of bone around a little black dot in the center of which the needle was lodged. Convalescence was uneventful.

Although these ten cases are all that were found in the literature we know that many

of these accidents occur which are not reported, especially since spinal anesthesia has become popular. Whenever such a mishap occurs for the first time in one's experience it causes great anxiety because of the possible untoward symptoms, the surgical difficulty which may be encountered in removal, and the legal liability.

CASE REPORT

Mrs. D. B., age 47, was a patient of Dr. W. C. F. Witte. He was about to do a supravaginal hysterectomy for uterine fibroids on April 6, 1932. The patient had always been very nervous and for a few days previously she had had an attack of vomiting. Otherwise, her general condition was apparently good.

Spinal anesthesia was induced by the writer. A 22 gauge needle 3 inches in length was used and tested by bending before used. It was impossible to introduce the needle in the 3rd or 4th lumbar interspaces in the usual lateral position because of a productive arthritis. The patient was then placed in the sitting position on the edge of the table. Even in this position the needle could not be introduced into the spinal canal at the usual level. Finally the needle was inserted just below the spinous process of the 5th lumbar vertebra, and spinal fluid was obtained at once. After removing 2.5 c.c. of spinal fluid, the stylette was replaced in the needle which was left in the spinal canal and the patient was given 75 mg. ephedrine sulphate in the long muscles of the back. While dissolving the novocain crystals in the spinal fluid, the patient became faint and got out of control of the operating room assistant who was supporting her. She bent forward and then straightened up suddenly as the novocain-spinal-fluid was ready for injection. The stylette was now difficult to remove from the needle although previously it was very easily removed. No spinal fluid could be obtained now. The needle was withdrawn and found to be broken, about 1⅜ inches being left deep in the back, as the spinal needle had been inserted about 2½ inches deep.

It was necessary to make a quick decision as to the best procedure to follow. Knowing that the patient was very nervous, it was considered unwise to inform her at once of the accident. As this was the first time the writer had worked in this hospital in a strange city and did not know how the operating team would react if informed of the accident, he decided it would be best to say nothing to anyone, and complete the anesthesia so that the operation could be performed. Removal of the fragment after an x-ray examination could be discussed later.

Another spinal needle of the same kind was on the table and it was readily introduced beside the broken needle; the anesthetic agent was then promptly injected.

Ten minutes later the incision was made by Dr. W. C. F. Witte who performed a supravaginal hysterectomy. Within forty minutes the operation was completed, the general condition of the patient being very good throughout. She was somewhat nauseated and vomited a little near the end of the operation.

After the operation, Dr. Witte and the family physician were informed of the accident and all agreed it best to postpone removal of the needle unless it should produce symptoms. The patient had a very smooth convalescence and absolutely no symptoms from the spinal needle. When almost ready to leave the hospital an x-ray examination was made showing the piece of needle lying beneath the spinous process of the 5th lumbar vertebra and a little to the right of the midline. The superficial end was one-half inch deeper than the tip of the spinous process.

Permission for operation was obtained for May 4, 1932. Another spinal anesthetic was given by the writer at the request of the patient. Ten minutes after induction of the anesthetic the patient was placed upon her abdomen and the operating table bent to produce a convexity of the back. The operation was performed by Dr. W. C. F. Witte assisted by Dr. Dexter H. Witte. As the point of original entry of the spinal needle could still be seen, a longitudinal incision was made through this point 1½ inches in length and the soft tissue retracted to the right. The needle was found at once and removed with ease. The patient made an uneventful recovery and was seen by Dr. W. C. F. Witte on June 29, 1932, when she had no complaint and said she felt fine.

During the writer's experience with over 450 inductions of spinal anesthesia in the past four years, this was the only case in which a spinal needle was broken and required operative removal.

COMMENT AND CONCLUSIONS

Even if every precaution is taken, a spinal needle may break in a patient's back, and when it does occur, one must face the problem of removal. To avoid this accident, the following precautions should be taken.

1. The needle should be made of the best material obtainable and should be tested each time by bending before using. Rustless steel needles become corroded on the inside due to electrolytic eddy currents between the needle and the stylette especially if oiled; it is preferable to keep the needle and stylette separated when not in use. For the past several months I have been using, with great satisfaction, a new hyper-chrome needle in which this corrosion does not occur.

2. The assistant holding the patient should

never permit any movement when the needle is in the back. The spinal needle should never be bent at an angle when introduced. If bony resistance is encountered the needle should be withdrawn until the point is under the skin and then inserted again.

When a spinal needle is broken off in the back of a patient, the proper procedure to follow will depend upon circumstances. If the needle is broken off with the stylette in place, obviously, it should not be withdrawn at once but an incision should be made beside the needle which makes extraction of the broken fragment very easy. Another alternative is to break off the head of the stylette and unthread the needle leaving the stylette in place. Then it should not be difficult to cut down beside the stylette as a guide to the broken fragment.

Sarnoff has reminded us of this fact but no one has given any definite signs of determining when the needle is broken before it is withdrawn. Spinal needles are broken in one of two ways; either through being bent during the act of inserting, in which case the stylette remains in place, or through being bent by movement of the patient subsequent to inserting. Under the latter conditions, the stylette may have been removed at the time the needle breaks. The writer believes that in the first type of cases, in which the needle is broken with the stylette in place, the diagnosis can always be made prior to the withdrawal of the needle. This is of tremendous aid to the surgeon who can easily remove the fragment by cutting down along the needle as it remains inserted in the back.

One doing spinal punctures should thoroughly familiarize himself with the effort required and tactile sensation experienced in moving a stylette through an intact needle. The stylette slides freely and evenly through a good needle even though the needle is bent. Once the needle is broken, however, the stylette will be found to bind more or less at the point of fracture so that increased force is required to remove it. Accordingly the writer urges that extreme care be used in withdrawing the stylette, and that it be withdrawn gradually increasing distances and then reinserted before being completely removed. It should be assumed that the needle is broken if the stylette is found to catch or bind. In such a case the stylette should not be removed, but immediately pushed back and the surgeon advised of the accident. Removal of the broken end with the stylette serving as a guide should be simple.

If the needle is broken without the stylette in place it is not likely to be discovered in time to permit leaving the needle in place as a guide to the broken fragment. If it is suspected that the needle is broken without the stylette inserted, an attempt should be made to replace the stylette. If it can be replaced, the distance that it can be inserted will determine the depth at which the needle is broken; it will then be easy to cut down to the broken fragment.

When the broken fragment is not very deep and without the stylette or needle present as a guide, it may be worth while making an exploratory incision at once and search for it. Another needle may be inserted in the same direction as the spinal needle was inserted in the hopes of getting it near the broken fragment. Palpation may also aid in locating the needle in the open wound. However, if the fragment is deep, it is better to first localize it with the x-ray. Sarnoff introduces another spinal needle to the point of entry of the broken needle and then takes an x-ray to show the relation of the broken needle to the locating needle. An incision is then made and the latter needle followed until the broken fragment is found. This is a very valuable technique which should be used in difficult localizations, but in the ordinary case it is not necessary to resort to such an elaborate procedure.

A broken spinal needle may never produce any symptoms, but it should always be removed as soon as feasible because of the possibility of development of severe symptoms later, and also because of possible legal complications. If removal is not effected immediately after the accident, one should try by every means to get the patient's consent for operative removal unless the fragment of needle is so small that it cannot be localized by the x-ray. In such a case it may be permissible to postpone removal unless symp-

toms develop, but Sarnoff well says "to leave a broken needle in the spine indefinitely is irritating to the meninges of the patient and to the gray matter of the surgeon."

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Some Unusual Duodenal Pathology*

By JAMES A. EVANS, M. D.
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THE discovery of unusual duodenal pathology requires careful observation in all positions, above all the prone position in different degrees of obliquity, and films of fast technique arresting peristalsis taken under fluoroscopic control. This latter precaution especially enables the roentgenologist to permanently register on a film the lesion at the most favorable angle for careful study at his leisure. The roentgenologist, in the study of these more unusual anomalies and distortions of the duodenum, must assume the role of physiologist carefully studying the degree of the malfunction, especially as regards obstruction, in order to direct the proper treatment. We feel that his observations under the screen of such malfunction are infinitely more important in directing the internist, and above all the surgeon, in the proper procedure to obtain a cure, than are the surgeon's conclusions with the patient's abdomen open before him.

First I wish to report four cases of duodenal stasis on whom duodeno-jejunostomy was performed, two with unsatisfactory, and two with highly satisfactory results. We feel quite definitely this should be an operation of last resort, or done if laparotomy must be performed for other pathology, during the course of which a suspected duodenal stasis is confirmed by finding a marked duodenal dilatation. Most cases can be successfully handled by rest, properly fitted abdominal support, and forced feeding to fatten, using insulin if necessary to create appetite.

Our first case is a woman, age 31, who came to us four years ago. At that time she showed a slight degree of duodenal stasis, which we thought was probably due to mesenteric pedicle compression considering the ptosis present. At this time she complained of pain in the right hypochondrium relieved by lying down, accompanied by nausea and belching, with no time relation to meals and not relieved by food. She also had a mild hyperthyroidism and the appendix was found to lie upward along the left border of the cecum, though not at all tender. On return four years later she still complained of soreness in the right hypochondrium occurring in attacks, diagnosed by her local doctor as recurrent appendicitis. Again we found the same old duodenal stasis in the lower angle with marked degree of "writhing" present. This time the appendix failed to visualize. At operation a sclerosed appendix was removed, and a markedly dilated second por-

* From the extra-mural preceptorial medical service of the University of Wisconsin, St. Francis Hospital, La Crosse, Wisconsin. Read before the State Medical Society, Milwaukee, September 14, 1932.

tion of the duodenum was found. Duodeno-jejunostomy was done. Two months after operation the patient had gained ten pounds and was feeling well. The duodeno-jejunal stoma was functioning well, but there was still considerable stomach atonicity and a six hour residue. At present this patient is free of gastrointestinal symptoms.

The second case was a young man of 31 who had cholecystitis, with marked duodenitis, and a mild degree of duodenal stasis, vomiting in intermittent attacks for four months. During his cholecystectomy, however, a previously diagnosed duodenal stasis was confirmed by finding a very markedly dilated descending duodenum and lower duodenal angle. In this case we passed a duodenal tube on an empty stomach injecting barium directly into the duodenum, thus beautifully silhouetting the whole of the duodenum without interference by the shadow of barium in the stomach. Marked writhing of the metal bulb of the tube is always seen in these cases before the barium is injected. It is an especially valuable method to study the duodeno-jejunal flexure. Four weeks after duodeno-jejunostomy we had a remarkably well functioning stomach. He had gained seven pounds since operation and had ceased vomiting. We do not feel that cholecystectomy alone would have cured this patient. At operation he had a very inflamed duodenal mucosa and a mild degree of cholecystitis and hepatitis.

The next case, a boy of 22, offered us more difficulty. During fluoroscopic examination in 1925 he showed marked duodenal stasis. At operation a duodenal jejunal kink was found due to a congenital band at the ligament of Treitz. This was severed, the kink was relieved and the patient was better for several months. Three years later he returned with the same old digestive complaints and marked vomiting. A film of a duodenal tube in the duodenum showed dilatation and gastric regurgitation. A duodeno-jejunostomy was now done, which ought to have been done three years before at the first operation, with technically perfect results. A check-up fluoroscopic examination six months ago showed a perfectly functioning stoma, though he was still complaining of many gastro-neurotic symptoms. In the meanwhile he had spent one year in an insane asylum.

The fourth case, a girl age 24, was another hyposthenic visceroptotic with a low metabolism on whom we made a diagnosis of duodenal stasis and dilatation due to mesenteric pedicle compression. She had been vomiting so severely that she had acetone in her urine. Medical measures were of no avail, and surgery was necessary to save her life. This case illustrated the necessity of locating the stoma at the most dependent portion of the dilated inferior angle. The film taken two months after an operation failed to show entirely satisfactory results, though it had saved her life, and showed a four hour gastric and duodenal residue with the stoma too high on the proximal side of the descending colon to get proper drainage. A gastro-enterostomy was now done. One year and five months later the patient reports she still vomits almost every day and has gained no weight. She is able to do light work.

The fifth case, a man age 45, is another lesson in dilated duodenum with stasis. He also was a chronic sufferer from indigestion who had been treated two years for peptic ulcer without relief. His first roentgen examination showed a bent over gall bladder in juxtaposition to a duodenal cap defect. There was also a dilated duodenum with stasis present. A preoperative diagnosis of congenital cholecystic-duodenal band was confirmed at operation. The surgeon severed this band but was loath to perform a duodeno-jejunostomy in spite of our urging him to do so. Five months later our film showed the same stasis present and the patient was no better. He refused a second operation of duodeno-jejunostomy.

Duodenal diverticula may be congenital or pulsion, the latter probably the result of ulcer with adhesions or scar contraction. The finding of a duodenal diverticulum may be incidental during a gastrointestinal investigation, or it may be found while searching for a suspected duodenal ulcer. We have seen four cases who had a history suggesting duodenal ulcer. We have seen two cases with a large gas bubble in the diverticulum, which to our knowledge has never been de-

scribed. The first case was an old lady of 73 complaining of loss of appetite, weakness, and soreness in the epigastrium. There were two diverticula, one very large off the descending portion, and one off the inferior horizontal portion. Ulcer management produced relief.

Our second diverticulum was in a lady with chronic jaundice whose gall bladder failed to fill with the Graham–Cole dye. The question preoperatively was: "Has she a stone in the common duct, or does this large diverticulum in the region of the ampulla of Vater cause compression of the common duct, jaundice, and prevent filling of the gall bladder with the dye?" However, we must remember most of the duodenal diverticula are congenital anomalies, asymptomatic, and rarely require surgery. Such proved to be the case at operation. Stones were found in the common duct. The diverticulum was identified, left severely alone, and the lady made a complete recovery.

Our next case of duodenal diverticulum was also in a case of chronic jaundice due, we felt, to carcinoma of the head of the pancreas from which the patient died. Here there were two diverticula, the pedicles of each of which could be plainly seen springing from the inferior horizontal portion of the duodenum.

According to Cole the most common site for duodenal diverticula is at the ampulla of Vater, and in our experience the next most common locations are the inferior horizontal portion, then the superior horizontal portion or the superior angle. It is therefore of interest to report a diverticulum at the duodeno-jejunal angle. Here again we wish to emphasize the fact these diverticula are only incidental findings, and rarely of any pathogenic import as a cause of symptoms. This lady had cirrhosis of the liver, ascites and an atypical thrombocytopenic purpura.

Our fifth case was really a pseudo-diverticulum having no pedicle as the others, and representing a large sacculation off the lower right edge of the cap into which the barium settled. There was a six-hour stasis in this pouch. Marked writhing within this sac was noted under the screen. The duodenum emptied directly from this pouch upward high into the sub-hepatic region, and then turned downward into a normal second portion. The surgeon described a stylette scar about 2 cm. long parallel to the duodenum on its anterior surface. Just pedal to this scar was a bulging area of the duodenum about 2½ cm. in diameter and about 1 cm. deep. The walls of this sacculation appeared to be normal duodenal wall, but after excision there was a definite ulcerated area present on the mucosa. This "pseudo-diverticulum" appeared to us to be the result of a weakening or bulging of the duodenal wall near an old ulcer scar which in its contraction had caused a bulging distalward. In other words, it was only a dilatation in the wall of the cap, or an exaggeration of one of the clover leaves at the base of the cap in a cap ulcer causing a clover leaf type of deformity.

Our last case of diverticulum of the duodenum was a curious freak. The patient was a woman of 60 who gave no history of any previous gastrointestinal disturbance. For one year she had been troubled with belching, distention, and pain in the left side of the epigastrium. Our diagnosis from a film was duodenal gall bladder fistula, with a large stone present in the gall bladder. We even thought some of the barium was passing down the common duct and described the fistulous tract leading to the gall bladder. Unfortunately no gall bladder visualization was done. At operation these shadows were found to be due to a large diverticulum of the duodenum containing a mass of gall stones. An old adhesion led from the fundus of a perfectly normal appearing gall bladder to the duodenum. The surgeon did not consider it necessary to remove the gall bladder, but the duodenum was so scarred and the pylorus thickened, that with the finding of a six-hour barium residue, he thought it best to do a gastro-enterostomy.

In contrast to this last case, another patient presented a somewhat similar film where there actually was a duodenal gall bladder fistula. This lady of 58 was the clinical picture of diffuse abdominal malignancy with a huge palpable mass in the gall bladder region, enlarged liver, ascites, cachexia, melena, and profound anemia. She gave a history of passing gall stones in her

stools twenty years before, and passed another while in the hospital. A mottling of the barium shadow filling the gall bladder was interpreted as due to more stones, a carcinomatous growth, or both.

The next case, a woman age 43, is one of congenital redundant duodenal loops. Her complaint was attacks of vomiting every two weeks especially if tired. She suffered also from migraine headaches. She had much belching of gas, but no pain. A ptotic corset, soft diet and eggnogs with olive oil between meals to fatten her gave relief so a contemplated duodeno-jejunostomy was unnecessary.

CONCLUSIONS

1. Four cases of duodenal stasis are presented on whom duodeno-jejunostomy was performed. A very conservative stand is urged in advising this operation, for proper medical regime will often relieve symptoms, especially if the patient can be made to gain weight.

2. Care must be taken to locate the stoma at the most dependent portion of the inferior angle of the duodenum.

3. The study of duodenal function under the fluoroscopic screen in cases of duodenal stasis is more important than the surgeon's opinion on the gross appearance of the duodenum at operation as an indication for duodeno-jejunostomy.

4. Introduction of the opaque medium into the fasting duodenum by duodenal tube helps greatly in the determination of the degree of duodenal obstruction and dilatation.

5. Six cases of duodenal diverticula are reported, four congenital, two of which had two diverticula; one pulsion, the result of an old ulcer scar; and one due to gall stones ulcerated into the duodenum.

6. A gas bubble to the side of the main lumen of the duodenum is an important sign of diverticulum.

7. Ulcer management often offers relief at least temporarily to patients with diverticula of the duodenum, if it seems the diverticulum is the cause of symptoms.

8. Duodenal diverticula are rarely the cause of symptoms, and are most often an interesting anatomical anomaly found in the course of a routine gastrointestinal examination.

9. One case of redundant loops of the duodenum, two cases of congenital hepatic-cholecystic duodenal band, one case of duodeno-cholecystic fistula with cancer of the gall bladder and liver, and one case of extensive peri-duodenal adhesions, the result of chronic ulcer are reported.

10. Few of the lesions mentioned above are in themselves immediate surgical indications. The question whether digestive function is impaired indicates the need for treatment, and then medical treatment will often produce symptomatic relief. A serious impairment of the natural gradient of the stomach and duodenum is the most important indication for surgical short-circuiting procedures.

Treatment of Tuberculosis in General Practice III

By ANDREW L. BANYAI, M. D.
Clinical Director, Muirdale Sanatorium, Wauwatosa

COUGH

THERE are several extrapulmonary sources of cough in the tuberculous as in the non-tuberculous. Proper treatment of tonsillitis, pharyngitis, paranasal sinusitis, obstruction of the nasal passages of these patients should precede the use of any cough medicine. Heart failure is an often overlooked source of distressing cough in tuberculosis, particularly in its advanced stages. The use of digitalis will not only alleviate the cough and other disagreeable symptoms of circulatory embarrassment, but also enables one to reduce the consumption of narcotics in such cases. Tuberculous patients should be instructed to utilize the after-meal periods for expectoration since the latter is facilitated by the postprandial mucus production. Excessive cough following meals may be lessened by avoiding exercise, or by

retiring to bed. The period after rising is also advantageous for clearing the respiratory system from its contents by the least effort or exertion, and with the least mechanical upset of the healing process. Evacuation of the lungs in the morning may insure hours of undisturbed respiratory repose during the day. It may be aided by taking hot drinks, tea or coffee, on rising. It is a mistake to allow the patient to cough continuously without expectoration. Unproductive cough should be suppressed. The following rules are to be followed with this end in view: 1. Teaching the patient that it is often possible to abstain from cough by strong will power and training. 2. Stop smoking. 3. Vocal rest by reducing talking to a minimum. 4. Slow deep breathing and holding the inhaled air for a short period. 5. Resting on the diseased side. 6. Use of spray with chloretone inhalant or medicated oils, such as menthol or eucalyptol. 7. Ice chips or menthol lozenges allay pharyngeal irritation and cough. 8. Partial immobilization of diseased side by adhesive plaster strips encircling half of the chest (to be applied during expiration). 9. Administration of drugs. The use of codein for the relief of unproductive cough should be preferred to that of any other drug. It is not a habit forming drug. Higher intellectual centers, glandular secretion, and intestinal peristalsis are not depressed by codein. Codein phosphate or sulphate can be prescribed in one-half to one grain doses, depending upon the severity and frequency of cough, in tablet or in liquid form, two to three times a day. When cough sedatives are needed for a prolonged period, it is of advantage to prescribe codein alternatingly with dionin, or pantopon. Expectorants should not be resorted to for aiding productive cough, until postural drainage is suggested to and practiced by the patient. The purpose of postural drainage is to aid expectoration without the patient straining. The sputum may be evacuated from the bronchi and cavities by the force of gravity with the patient lowering the upper part of the body below the level of the base of the lung. It may take several attempts before the best position is found for effective drainage. This procedure is indicated not only when the amount of sputum is large, but also in cases in which the amount of sputum is moderate but its expectoration is difficult. For aiding expectoration the following drugs are useful: 5-8 grains of ammonium chloride in tablet form or in solutions with syrup of white pine, or with neutral syrups with or without codein; 4 grains of terpin hydrate, most often used in the form of elixir of terpin hydrate (dosage: 2 fluid drachms) and as elixir of terpin hydrate with codein (dosage: 2 fluid drachms), the amount of codein in the latter being ⅛ grain per drachm; syrup of sedatole (dosage; 2 fluid drachms). The inhalation of volatile oils often facilitates expectoration.

TREATMENT OF NIGHT SWEATS

Efforts toward controlling night sweats must be focused on its source: the diseased lung. General hygienic measures and ample fresh air, but first of all, strict bedrest, have favorable effect upon it. So long as there are no contraindications, appropriate local measures must be instituted for the immobilization of the diseased area. When no such active intervention is possible, because of the advanced disease and debilitated condition of the patient, and general hygienic regulations do not improve the condition, an alcohol or vinegar rub of the body in the morning and evening should be ordered. We observed the best results from small doses of a saturated solution of potassium iodide. It is given in three drop doses three times a day. Such minute doses are not liable to influence unfavorably the pulmonary lesion or cause hemorrhage. Moderate doses of sedatives are of value in certain number of cases. Atropin sulphate has been found effective and may be prescribed in 1/200—1/100 grain doses. Some obtained good results from the use of calcium; it is given in 15–30 grain doses once or twice a day.

TREATMENT OF DYSPNEA

The cause of shortness of breath may lie in the tuberculous process or its complications, it is also noticed in the presence of excessive fibrosis. The latter being the re-

(Continued on page 310)

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« « « EDITORIALS » » »

The Woman's Auxiliary

I VENTURE to say that it can be stated without any probability of contradiction that of all men in the industries and the professions, the medical man is the most oblivious of his opportunities of economic advancement.

There are several reasons for this state of affairs, chief among which are the many legendary beliefs connected with the history of medicine. Likewise, the ethics of the profession have inclined to cause the physician to lead a more or less isolated life and let the rest of the world go by. In spite of the fact that the physician's education and training should cause him to occupy a leading part in every community, his disposition has been to hold aloof from politics and the progressive activities of his surroundings. The time has come when it is necessary for him to call to his aid every possible means to protect his own position and to strengthen and further the interests of the medical profession at large.

As we see it, one of the potent aids in this direction is the Woman's Auxiliary, and it is difficult for me to understand the lack of enthusiasm and failure to appreciate this fact by a certain number of our colleagues.

Born at the instigation of the American Medical Association, and endorsed by most state medical societies, it should have the unanimous support and assistance of the medical profession. Misunderstanding of its functions and potentialities, along with fear that it might over-reach itself, has prompted some men to withhold their support. Inasmuch as the Auxiliary is under the guidance of medical advisors, the second of these objections is of small value. The members of some county societies are inclined to consider the Auxiliary as a social organization for bridge, teas, and what have you. This is far from the intention of its organizers, and its officers. The Auxiliary, made up entirely of the wives of physicians, proposes to meet monthly to discuss social problems and ways and means of advancing the interests of the community along social and medical lines. The term "auxiliary", according to Mr. Webster, means an "aid", a "help"; hence, an aid to the medical fraternity: to combat quackery, to support proper school health programs, to make studies in physical and mental hygiene, to familiarize the public with the worthiness of the medical profession through contacts with women's clubs of various characters, to stimulate the study of health measures in the public schools, and many other activities of a similar nature. The Wisconsin State Auxiliary has undertaken the task of getting HYGEIA into all the schools of the state, so that with what

the State Medical Society is doing along this line Wisconsin will be pretty well covered in this respect. HYGEIA, being a child of the American Medical Association, this campaign must serve to help the public to a better understanding of what the medical profession is endeavoring to do in their behalf.

Since the medical profession has asked for this organization, and has helped it on its way, it seems only fair that we should give our full support to this group of women who are aiding us in so many ways by their untiring, unselfish, and intelligent effort. A. W. R.

The Physician and the Pharmacist

FOR a long time we have had in mind an editorial on the physician and the pharmacist. A recent contribution to the Wisconsin Druggist by Ralph W. Clark, Secretary of the Wisconsin Pharmaceutical Association, entitled "Inter-Professional Relationship" furnishes the opportunity to thank him and try to crystallize our own ideas on the subject he brings up, namely, the ideal relationship between druggist and doctor.

All matters professional have been scrutinized carefully from the economic angle since the W. K. D. hit us and in general it has been a good thing for all concerned. Prof. Clark begins his discussion with some comment on the increase in the office dispensing of drugs by doctors and tries to discover the cause of a condition which we all believe is not best for either the doctor or the druggist. Is it due to economic stringency? Is it due to the activity of detail men as he suggests? Is the doctor trying to reap the profit of the druggist or save his patients from the high prices of drugs?

Do we know how to prescribe the drugs we wish our patients to have? Do our patients really get the benefit when we prescribe phenobarbital instead of luminal, or does the druggist sell both at the same price? Do we run to fads in our prescribing or to the latest fashions in the outward appearance of drugs?

One of the greatest wastes in prescribing is due to the condition of the shelves of the druggist which are filled with drugs discarded for some more recent or better detailed preparation. Bottles there are galore, out of which one or two prescriptions have been filled and which are now superseded by a later form of the same drug. To be particular, let us ask this question,—in our use of digitalis how often have we changed the form of preparation which we prescribe? There are at least a dozen different standard tinctures, the same number of digitalis leaf preparations and a smaller group of special fat free clarified tinctures for intravenous use. Any druggist must carry them all. Why do we require this duplication? Why cannot our hospital staffs through a committee on drugs agree on certain standard preparations being used in that hospital, and when a doctor orders tincture of digitalis it should always be taken from one bottle and when he orders a digitalis leaf preparation the hospital dispenses its standard preparation? Why cannot the individual doctor come to an understanding with his favorite druggist and supply him with a list of twenty drugs or more which he uses to the exclusion of others and agree to use certain preparations exclusively? Why cannot a county medical society through a cooperative effort agree to list favored articles and use them and so inform the druggists in its territory? Why cannot the local druggists get together and publish the retail prices of the standard U. S. P. and N. F. drugs and list them with the local members of the medical profession? The answer is that we are all too individualistic. But even if we got a small percentage of cooperation would not the effort be worth while? And who would suffer? By and large nobody. A certain pharmaceutical house might conceivably lose out in one market and gain in another.

The whole of the modern evils from which the medical profession suffers may rightly be attributed to lack of cooperation and the inability of the physicians as a whole to work together for the common good. This is a small but fertile field, the cultivation of which might bring a worthwhile harvest, benefiting the profession and the pharmacist.

We are anxious to develop a closer and better relationship with the Wisconsin Pharmaceutical Association. We are deluged with detail men. Would not it be to the better interests of both associations of doctors and pharmacists if a copy of Wisconsin Druggist was written for and to the medical profession and distributed to them each year? It would inform the profession and be a welcome change from the detail man. I think I can speak for the Editorial Board and say that the Wisconsin Medical Journal would welcome communications to its pages from the Wisconsin Pharmaceutical Association in order to promote a better understanding and closer cooperation between the professions.—H. P. G.

Conservative Surgical Procedures

THE profession of medicine can well be proud of its record during the past few years. During these years we have seen the great expansions in many phases of business and the disastrous results of their collapse. During the same years we have seen great strides in the field of medicine and, what is more encouraging, the substitution of conservative procedures in many instances for the more radical ones. Many could be enumerated; two or three of the outstanding ones will be commented on.

Treatment of Hydrocele by Injection

Kilbourne and Murray submitted a paper on this subject under the nom de plume "Epictetus" at the sixty-first annual session of the California Medical Association in May 1932. The paper was awarded the Clinical prize of $150 at the session. The authors presented a historical resume and the results of their experimental work and clinical application.

The injection treatment is a very old one. Several solutions were recommended and used, tincture of iodin being employed by many. A great number of cases were reported using this drug and very excellent results claimed for it. However, there were objections to the use of iodin. It caused pain and disability requiring hospitalization for an average of eight to ten days in some clinics. In the hands of inexperienced workers abscesses and sloughs followed so that when operation was proposed by Bergman and by Hartman in 1876, the profession readily accepted surgery as the method of choice. With the advent of the treatment of varicose veins by injection, a new impetus was given to this form of treatment and several English surgeons have used the solutions used in the treatment of varicose veins with encouraging results.

Kilbourne and Murray, after extensive experimental investigations, recommend the use of quinin hydrochloride and urethan for the first injection and quinin dihydrochloride for the subsequent injections.

The authors studied several published reports of the surgical treatment of hydrocele and commented on such complications as infection, hemorrhage, postoperative pain and disability, and recurrence. They noted that in Campbell's large series of cases the average postoperative hospital stay was 9.3 days; by their method of injection treatment hospitalization is not required or is reduced to a minimum of twenty-four to forty-eight hours.

Kilbourne and Murray's clinical material was comprised of thirty-five cases. In three, there was a very remote possibility of malignancy or tuberculous epididymitis and for them operation was advised. Thirty-two hydroceles were treated by injection with quinin solutions. Four patients did not finish the series of treatment. Eight were still under treatment at the time of the report. Twenty hydroceles in nineteen patients are now apparently cured. The authors pointed out that the apparent cure in these hydroceles cannot be taken as final until they have been followed for several years. Some have been followed for almost a year without any sign of recurrence.

Two patients had noted pain following injection and were given morphine and hospitalized over night. The pain was promptly controlled.

No case developed infection, violent tissue reaction or hemorrhage. There was no accident of any kind.

Except for the two cases, the treatment has avoided hospitalization and confinement to bed, or loss of time from work.

The work of these investigators appears to be outstanding and offers much for the conservative treatment of this fairly common malady. The writer has employed the method in six cases, one a very large bilateral hydrocele. The results have been extremely satisfactory. In one case a rather severe quinin reaction followed. One case has been followed for nine months and as yet there has been no evidence of recurrence.

Injection Treatment of Varicose Veins

Frederick L. Smith in a recent review of this subject, notes that this procedure is also an old one. Many different solutions and methods have been proposed. In 1921 distinct advances in sclerosing therapy followed the introduction of the use of 20 per cent saline solution, 50 per cent glucose solution, quinin dihydrochloride 12 per cent and urethan 6 per cent, as sclerosing agents. Since that time sodium salicylate solution and sodium morrhuate solutions have been introduced.

Smith states that the proportion of deaths resulting from the sclerosing treatment of varicose veins, as reported by Sicard, Kilbourne and others, is lower than that resulting from surgical operation. Sicard reported a mortality rate, from the use of sclerosing, solutions, of 1 in 5,000 whereas by surgical methods the rate was about 1 in 250.

Smith concluded that the sclerosing treatment of varicose veins is definitely superior to the surgical procedure. There are fewer deaths. Recurrence following surgical measures is about 30 per cent (Sicard), whereas in the sclerosing method recurrence is between 6 and 10 per cent. Patients are not hospitalized in most instances, and continue to work. The average number of treatments given each patient is about seven. The results from a clinical standpoint are very satisfactory, in that the discomfort which existed prior to treatment is, in the majority of cases, relieved and from a cosmetic standpoint, scarring of the legs is eliminated.

A review of the literature on the subject reveals that in 1926 the great majority of varicose veins were treated surgically by either the Mayo or Babcock methods. Since that time surgical treatment has been practically supplanted by the conservative procedure of injection.

Treatment of Hemorrhoids by Injection

Introduced by Mitchell in 1871 and for many years following was confined largely to the hands of unscrupulous physicians, the formulas being kept secret and sold to anyone who would pay for the information. The method, however, finally attracted the attention of competent proctologists.

Terrell, who introduced quinin and urea solution as a sclerosing agent, has employed the method in several thousand cases and concludes that the method is a safe, efficient, and reliable one in the treatment of simple, uncomplicated, internal hemorrhoids. Several other American proctologists concur in Terrell's views. They all agree that the method has definite limitations and unless these definite rules are followed in the selection of cases nothing but unsatisfactory results can be expected and complications are apt to follow.

Montague states that so long as ethical and legitimate practitioners of proctology persist in the idea that there is only one treatment for hemorrhoids, namely surgery, more and more we lead the laity to expect nonoperative treatment from one source—the advertising "pile doctor". There is no excuse for neglecting the method so long as the surgeon cares to acquaint himself thoroughly with anal pathology and master the technic, and offer the laity the injection as an alternative to the operative treatment when the case is a suitable one.

Montague feels that by so doing we could speedily deprive our outlaw confreres of their most valuable asset.

The writer, after employing the method for five years in several hundred selected cases, has found the method eminently satisfactory and the results very gratifying.

G. H. E.

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Society Proceedings

BARRON-WASHBURN-SAWYER-BURNETT

A meeting of this Society was held on March 6th at Rice Lake. Public health work and medical economics were discussed. Representatives of the county board were speakers.

BROWN-KEWAUNEE-DOOR

The March meeting of the Brown-Kewaunee-Door County Medical Society was held at the Beaumont Hotel, Green Bay, on the 27th.

Dr. H. Kent Tenney of Madison was the speaker at this meeting, his subject being "Empyema."

CRAWFORD

A meeting of the Crawford County Medical Society was held at Prairie du Chien on February 15th.

Following dinner at the Savory, the members adjourned to the court house where plans were made to take part in the C. W. A. health project program.

DOUGLAS

Dr. W. W. Bauer, Director of the Bureau of Public Health and Instruction of the American Medical Association, Chicago, addressed a joint dinner meeting of the members of the Douglas County Medical Society and the Woman's Auxiliary on Monday evening, March 12th. The subject of his address was "The Modern Trend in Public Health Work."

FOND DU LAC

The Fond du Lac County Medical Society held a meeting on March 14th at the Retlaw Hotel at six-thirty P. M., in which a large number of representatives from all the surrounding counties and the Fox River Valley were present.

The speakers were: Dr. C. W. Mayo of Rochester, who spoke on "The Newer Surgical Treatment of the Thyroid Gland" and Dr. E. H. Rynearson, also of Rochester, spoke on "Newer Methods of Medical Treatment of the Thyroid Gland." J. C. D.

KENOSHA

The first joint meeting of the Kenosha County Medical Society and the Kenosha County Dental Society was held on Washington's Birthday in the Dayton Hotel, Kenosha.

A dinner was served at seven o'clock which was followed by dancing and cards.

LANGLADE

The regular monthly meeting of the Langlade County Medical Society was held at the Memorial Hospital on February 21st. The guest speakers were Dr. C. D. Neidhold and Dr. A. E. Rector of Appleton who spoke on the Outagamie plan for medical care of the indigent. The Outagamie Health Association and its activities were also discussed. J. W. L.

MILWAUKEE

The March meeting of the Medical Society of Milwaukee County was held at the Milwaukee Athletic Club on Friday evening, March 9th.

Speakers at this meeting were:

Dr. C. R. Marquardt who discussed a case report on "Torsion of the Spermatic Cord"; Dr. James C. Sargent, spoke on "Resection of the Prostate: An Evaluation" and Dr. Frank Wilson, professor of medicine, University of Michigan Medical School, Ann Arbor, gave an address on "Coronary Disease."

This was followed by the social hour.

OUTAGAMIE

The March meeting of the Outagamie County Medical Society was held on March 15th. The program of the evening was in charge of Dr. L. M. Randall of the Department of Obstetrics of the Mayo Clinic. His subject was "The Kidney in Pregnancy."

On April 3rd, Dr. G. W. Hall, attending neurologist at St. Luke's and Cook County Hospitals, Chicago, spoke on "Newer Things in Neurology." G. W. C.

PORTAGE

Forty-five physicians enjoyed a good dinner and an interesting evening of scientific papers and discussion the evening of March 6th, at the Hotel Whiting, Stevens Point. Dr. W. S. Middleton of Madison gave a very interesting talk on "The Treatment of Lobar Pneumonia." Mr. George Crownhart was unable to attend, but his place was well taken by Mr. Robert B. Murphy, who read a paper prepared by Mr. Crownhart on "The Economic Status of Medicine." Mr. Murphy also explained the C. W. A. health project.

This county society meeting was held in conjunction with the officers of the ninth district, which meeting was called by Dr. Joseph Smith of Wausau, councilor of this district. E. E. K.

RACINE

The regular meeting of the Racine County Medical Society was held Thursday, March 15th at the Elks Club at 8:15 o'clock.

The program consisted of the showing of a Canti film a most interesting scientific film, and a talk on the subject of "Intestinal Obstruction" by Dr. E. H. Mensing of Milwaukee.

Dr. Leif H. Lokvam, Burlington and Dr. David Wigod of Waterford were duly elected members of the Society.

Dr. C. L. Kline was admitted into the Society by a transfer card from the Carbon County Medical Society of the state of Utah. S. J.

ROCK

The regular monthly meeting of the Rock County Medical Society was held on February 27th at the Hotel Hilton, Beloit, with President Sutherland presiding. Forty-nine physicians were present.

Minutes of the previous meeting were read and approved. Amendments to the constitution were adopted. Dr. Sutherland reported in regard to the C. W. S. project.

The resignation of Dr. C. F. N. Schram, Secretary, was accepted. Dr. T. F. Shinnick of Beloit paid a very flowery and oratorical tribute to the retiring Secretary and on behalf of the Society presented him with a very beautiful Parker Duofold desk set. Doctor Schram responded, thanking the members and told a little of the situation in Kingsport. He invited the members of the Society to stop off at Kingsport at any time.

Dr. Thomas Flarity was nominated as Secretary to fill the vacancy. The nominations were closed and Doctor Flarity unanimously elected Secretary of the Rock County Medical Society.

The meeting was then turned over to Doctor Friske who introduced Dr. W. S. Middleton, Madison, who spoke on the topic, "Secondary Anemia with Consideration for the Newer Forms of Therapy."

Following Dr. Middleton's talk, he answered a number of questions from members and a vote of thanks was extended him for his very enlightening talk.

Dr. Sutherland read a letter in regard to a Speakers' Bureau, and on motion duly made and seconded this letter was referred to the Executive Committee for action. T. F.

SHEBOYGAN

A regular meeting of the Sheboygan County Medical Society was held at the Sheboygan Memorial Hospital on February 27th. The speaker of the evening was Dr. Louis M. Warfield of Milwaukee and his subject "The Question of So-Called Heart Failure in Acute Infections" proved very interesting to the large audience present. A. C. R.

The March meeting of the Society was held on the 20th. Dr. F. A. Stratton of Milwaukee addressed the members on "The Treatment of Head Injuries" and Dr. John Tasche, Jr., of Sheboygan on "The Treatment of Dysmenorrhea."

There was also a short business meeting and the usual refreshments. The officers are delighted at the interest shown by the members in attending these meetings. A. C. R.

VERNON

The following officers have been elected to offices in the Vernon County Medical Society for the year 1934:

President, Dr. W. H. Remer, Chaseburg; Vice-President, Dr. A. L. Myrick, De Soto; Secretary-Treasurer, Dr. H. A. Rasmussen of Westby. H. A. R.

WASHINGTON–OZAUKEE

A joint meeting of the Washington–Ozaukee County Medical and Dental Societies was held on March 1st at West Bend.

Dr. R. P. Gingrass of Milwaukee read a paper on "Focal Infections"; Dr. M. E. Gabor, also of Milwaukee, talked on "Infections of the Alimentary Canal". Dr. L. C. Gardner of Fond du Lac led the discussions on the two papers presented.

WAUKESHA

Dr. J. Newton Sisk, Supervisor for the State Board of Health C. W. A. health projects, spoke before a meeting of the Waukesha County Medical Society on March 8th at the Majestic Hotel, Oconomowoc. Members of the Auxiliary of the Society were also present. Dr. Sisk discussed the present status of the C. W. A. health projects in the state.

Another speaker was the Rev. Seidenspinner who spoke on "Lew Sarett" and "William Ellery Leonard."

MILWAUKEE ACADEMY OF MEDICINE

Members of the Milwaukee Academy of Medicine met on March 20th. The program was as follows:

Presentation of Clinical Cases.

"Practical Anatomy of the Anus" by Robert I. Hiller, M. D.

"Reducing the Hazards of Intestinal Obstruction" (Lantern Slides) by E. H. Mensing, M. D.

MILWAUKEE NEURO–PSYCHIATRIC

The March meeting of the Milwaukee Neuro–Psychiatric Society was held on March 22nd at eight o'clock at the University Club.

Following the dinner at six-thirty o'clock, the following program was presented:

Dr. B. Erps: "Presentations of a case of Hysterical Fugues."

Dr. S. Plahner: "The Problem of Neurosis."

MILWAUKEE OTO–OPHTHALMIC

The March meeting of the Milwaukee Oto–Ophthalmic Society was held at the University Club on Tuesday, the 27th. Clinical exhibition of patients at 6:00 P. M. Dinner served at 6:30 P. M.

Scientific Program:

1. Maxillary and Sphenoid Diseases, Compared. (Thesis presentation) Dr. B. P. Churchill.

MILWAUKEE ROENTGEN RAY

At the March meeting of the Milwaukee Roentgen Ray Society held at the University Club, March

7th, Dr. F. W. Mackoy was re-elected president; Dr. Hans Hefke, vice-president, and Dr. S. A. Morton, Secretary and Treasurer for the ensuing year.

Dr. M. Fernan–Nunez presented "Pathological and X-ray Aspects of Amoebic Dysentery"; Dr. Hans Hefke, "Serial Studies of Colonic Diverticulitis" and Drs. A. R. Altenhofen and J. E. Habbe "Serial Studies of Gastric Carcinomata." J. E. H.

UNIVERSITY OF WISCONSIN

Dr. Chauncey E. Leake, professor of pharmacology at the University of California and formerly of the University of Wisconsin gave a lecture on "Relations of Medicine and Art" on Friday, March 23rd, in the Service Memorial Institutes building. This was the eighth annual address under the William Snow Miller Lectureship, established in 1928 by the Phi Beta Pi Medical Fraternity.

THE WOMAN'S AUXILIARY

Mrs. Eben J. Carey, Milwaukee, *President*
Mrs. Rock Sleyster, Wauwatosa, *President-elect*
Mrs. George H. Ewell, Madison, *Secretary*
Mrs. R. G. Arveson, Frederic, *Treasurer*
Mrs. Walter A. Ford, Sheboygan, *Press and Publicity Chairman*
Mrs. James Blake, Hopkins, Minn., *National President*

County Auxiliary News Items

BROWN–KEWAUNEE–DOOR COUNTY

Spring flowers inside and spring sunshine outside lent a bright touch to the meeting of the Auxiliary to the Brown–Kewaunee–Door County Medical Society held at home of Mrs. D. H. Gregory of West De Pere on March 15th.

Thirty-four members assembled for the meeting which opened with business presided over by the president, Mrs. Donne F. Gosin. Mrs. Walter P. Tippet, the legislative chairman, gave a clear, comprehensive review of the Tugwell bill.

DANE COUNTY

Thirty-five members attended the luncheon and business meeting of the Dane County Auxiliary on March 14th at the College Club, Madison. In the absence of Mrs. Reginald Jackson, president, the meeting was in charge of the president-elect, Mrs. Arthur G. Sullivan.

Ellis L. Kirkpatrick, professor of rural sociology at the University, spoke on "Rural Medical Relief".

The Hygeia Chairman, Mrs. Lester McGary, gave a luncheon at her home for the members of her committee. Definite plans are under way to get *Hygeia* "over the top" in Dane County,—the canvass includes rural and city schools, libraries, offices of physicians and dentists, beauty parlors, and members of the Auxiliary.

Letters were sent to the 189 principals of the rural schools advising them of the special offer to *Hygeia*.

DOUGLAS COUNTY

Through the auspices of the Woman's Auxiliary to the Douglas County Medical Society, Dr. W. W. Bauer of the A. M. A. addressed a meeting of the Superior Council of Education the afternoon of March 12th on the subject of "Popular Beliefs That Are Not So." The superintendent of schools announced that the meeting was open to the public. At 6 P. M. Dr. Bauer broadcast over the radio station WEBC, Superior, speaking on "Food Foolishness," and at 6:30 P. M. he was the guest of the Douglas County Medical Society members and their wives at a dinner at the Androy Hotel at which time he discussed the modern trend in public health work.

KENOSHA COUNTY

The Auxiliary of the Kenosha County Medical Society held an open meeting on March 5th at the Lincoln Junior High School Auditorium in order to present Dr. Cramp of the Bureau of Investigation of the American Medical Association in his very informative and educational lecture on Pink Pills and Panaceas.

The quiet humor with which Dr. Cramp informed the public on his subject made the evening a most enjoyable one and caused many favorable comments.

So many have asked why the Auxiliary does not have more such talks, so we hope to have another speaker from the American Medical Association at our October meeting.

Dr. Cramp's lecture was free, but admission was by ticket and about *seven hundred* people attended.

At our April meeting we will have a talk on scarlet fever and our May meeting will be held at Willowbrook, our tubercular sanatorium. As a piece of pick-up work at our meetings, we are making several layettes for emergency use.

Our year's program is very interesting, and our membership is growing and we have the hearty cooperation of all.

MANITOWOC COUNTY

Dr. George Hoffman, city health officer, addressed the Manitowoc County Auxiliary at a luncheon meeting at the Hotel Manitowoc on February 21st. His subject was "Sanitation". Several members of the Auxiliary reviewed articles of interest to the group. On March 21st the meeting was held at the Manitowoc Catholic Center.

MILWAUKEE COUNTY

About 150 members and guests attended the meeting of the Woman's Auxiliary to the Medical Society of Milwaukee County on March 9th at the Y. W. C. A. and were privileged to enjoy a most interesting illustrated talk by Dr. Carl Eberbach on his experiences in Labrador in Dr. Grenfell's mission. Dr. Eberbach showed pictures of 1,500 miles of bleak coast served by the mission.

Following the lecture committees reported that during February nine new members joined the Auxiliary and five speakers from the Speakers' Bureau of the County Society were assigned to lay organization meetings. The Hygeia committee reported that 59 eight-month *Hygeia* subscriptions were ordered by members, and seven one-year subscriptions were bought by members and donated to some institution. A committee was named to investigate various philanthropic projects in which the Auxiliary might become actively interested and to report at the next meeting. The Flower and Courtesy committee made four calls and sent nine notes to those members who have had some particular happiness or sorrow. In order to raise a fund whereby they can carry on this work the committee arranged a tea to be given at 2 o'clock at the Art Institute on April 24th at a charge of 35¢ per person. The gallery tour of the exhibit of Wisconsin sculptors and painters will be conducted by Mr. Alfred Pelican, director of the Institute. Any state auxiliary member who can be in Milwaukee on that day is most cordially invited.

At the April meeting, Dr. Robert Blumenthal, a member of the advisory committee of the Milwaukee Auxiliary will speak on "The Auxiliary as an Aid to Organized Medicine", and Mr. Walter Becherer will give an illustrated talk on "Conditions in Russia pertaining to Child Health".

PORTAGE COUNTY

The February meeting of the Portage County Auxiliary was held at the home of the president, Mrs. Fred A. Marrs, Stevens Point. An article on cancer research from *Hygeia* and an editorial from the A. M. A. Journal were reviewed by members. A dramatic reading concluded the meeting.

RACINE COUNTY

Fifty-two members and guests of the Racine County Auxiliary enjoyed a luncheon and program at the Racine Country Club last month. The speaker was Dr. Arthur J. Cramp of the A. M. A. who discussed patent medicines. A number of physicians were present to hear Dr. Cramp. At the business meeting which followed, conducted by Mrs. L. E. Fazen, reports of standing committees were heard. It was reported that the Racine County Medical Society had approved the Auxiliary's sponsorship of a Girl Scout troop.

SHEBOYGAN COUNTY

Dr. Fred Nause, Jr., addressed the Sheboygan County Auxiliary at its monthly luncheon on March 7th at the Heidelberg Club. Dr. Nause's subject was "Vitamins".

Dr. Arthur J. Cramp of the A. M. A. was the guest speaker at the meeting of the Woman's Club of Plymouth on March 21st. The Woman's Club extended an invitation to the Sheboygan County Auxiliary and the Twelfth District Nurses' Association to attend the lecture.

WAUKESHA COUNTY

The Auxiliary to the Waukesha County Medical Society met on Thursday, March 8th at the Majestic Hotel, Oconomowoc. The regular medical program was deviated from with a poetry lecture recital which proved most delightful. Dinner with the members of the Medical Society followed the meeting.

HYGEIA LETTER TO SCHOOL PRINCIPALS

One hundred eighty-nine rural school principals in Dane County received a copy of the *Hygeia* letter sent by the Dane County Auxiliary.

The superintendent of schools in eastern Dane County, Miss Esther M. Krakow, Sun Prairie, and the superintendent of schools in western Dane County, Mr. T. S. Thompson, Mount Horeb, to whom *Hygeia* was presented in 1933 by the Wisconsin Auxiliary, offered to enclose the following letter to the 189 principals in their districts:

WOMAN'S AUXILIARY TO THE DANE COUNTY MEDICAL SOCIETY

23 March, 1934.

Dear Principal:

Let Hygeia help you with your teaching.

At this time when so much is being said and written on health it is of the utmost importance that you secure your health teaching material from authentic sources. HYGEIA is the Health Magazine of the American Medical Association. It speaks with authority on health! But it is not only authentic; it is practical as well. Each month Hygeia is filled with live material for supplementing and motivating health teaching, and for correlating with practically every other subject.

The American Medical Association has given our Auxiliary a special offer to HYGEIA of *eight months for one dollar*, and we take pleasure in extending this offer to you until the fifteenth of April.

We will be pleased to start your subscription with the September issue. Hygeia never has been offered at this price before,—the regular price is $2.50 a year. If you wish to take advantage of this offer, send one dollar to Mrs. Lester McGary, 2222 Hillington Green, Madison, Wisconsin. Give your full name and address or name of school, and state what month you desire to have your subscription begin. We shall be happy to hear from you.

Very sincerely yours,

MRS. LESTER MCGARY,
Hygeia Chairman,
Woman's Auxiliary to the Dane County Medical Society.

NATIONAL CONVENTION

The annual meeting of the American Medical Association will be held in Cleveland, Ohio, June 11 to 14. The Carter Hotel has been selected as the Auxiliary headquarters,—it is located just two blocks from the Statler, the hotel headquarters for the men of the American Medical Association.

The Wisconsin Auxiliary is entitled to six delegates and six alternates at the National Convention. The names of those members attending the Convention at Cleveland should be sent to our state president, Mrs. Eben J. Carey, 2028 N. 51st Street, Milwaukee, before May first.

TO THE TREASURERS

Dear Treasurers:

The Wisconsin Auxiliary membership for 1933 increased 55% over that of 1932. Shall we continue to stride forward?

The state fiscal year for the Auxiliary is the calendar year but we urge you to send the 1934 dues for your county auxiliary *now* in order that your county auxiliary might have representation at the State Convention in September.

The number of delegates that the Wisconsin Auxiliary is entitled to at the National Convention depends entirely on the number of paid-up members at the close of the last fiscal year, namely, Dec. 31, 1933, and each paid member has an equal chance of being delegate or alternate to the National Convention.

Send your 1934 state and national dues of fifty cents for each member to the State Medical Society office,—119 E. Washington Avenue, Madison, Wis.

The State Treasurer, Mrs. R. G. Arveson, and the Executive Secretary, appreciate your cooperation.

NEW ARRIVAL

Dr. and Mrs. Oscar W. Friske, Beloit, announce the birth of a daughter, Sylvia Jean Friske, on March 18th. Mrs. Friske is Program Chairman of the State Auxiliary.

NEWS ITEMS AND PERSONALS

Dr. Joseph Grimm, Milwaukee, has returned from a year's study in Vienna and has assumed the practice of the late Dr. A. J. Taugher, Milwaukee, and will continue in the same office.

—△—

Dr. C. B. Hatleberg of Chippewa Falls is recovering from a fractured tibia which he received when he slipped and fell while making a call.

—△—

The marriage of Mr. Thomas Bardeen, son of Dr. and Mrs. Charles R. Bardeen, Madison, to Miss Janet Smith, daughter of Mr. and Mrs. A. E. Smith of Viroqua was announced on March 7th.

—△—

Mrs. Syndonia J. Jackson, 85, mother of Drs. Reginald H., James A., Sidney C., and Arnold S., of Madison, died on February 28th. Mrs. Jackson was the widow of Dr. James A. Jackson, deceased. Other members of the family who survive Mrs. Jackson are two daughters, the Misses Alice and Bettina, and another son, Col. Joseph W. Jackson.

—△—

A surgical knife which was once the property of Dr. Mason C. Darling, President of the State Medical Society in 1847, has been recently placed among the exhibits of historical objects pertaining to the history of Fond du Lac and vicinity by CWA cataloguers. The history of this knife states that in the year 1836 while Dr. Darling was in the vicinity of Sheboygan on a land buying mission, he was called to give medical attention to a group of men who were suffering from frozen arms and legs. Amputations were necessary and Dr. Darling, being without medical supplies or surgical instruments, directed a blacksmith in fashioning a knife out of a discarded file. The operations were successful. The knife which still retains its lustre and has a good edge, resembles an old kitchen case-knife.

—△—

Dr. C. R. Gilbertsen, a graduate of Rush Medical College, has become associated with Dr. Fred E. Sutherland of Janesville. Dr. Gilbertsen served internship at Illinois Central Hospital and Garfield Park Hospital, Chicago.

—△—

The marriage of Miss Helen Carter, daughter of Dr. and Mrs. R. M. Carter of Madison and Roger Hamilton, Chicago, took place on April 7th at the home of the bride.

Dr. F. W. Madison of Milwaukee presented a paper on "Research of Agranulocytosis; Its Diagnosis and Treatment" before a meeting of the staff of Mercy Hospital, Janesville, March 21st. Dr. S. A. Freitag, Janesville, opened the program with a case report on "Pyelonephritis." A film on "Elbow Surgery" was also presented.

—△—

Dr. M. W. Trentzsch of Highland is recovering in St. Joseph's hospital, Dodgeville, from severe injuries which he received in a fall down the stairs at his home. He suffered a fracture of the right shoulder, femur and ankle.

—△—

Dr. and Mrs. E. A. Pohle returned the latter part of March from a motor trip to Florida. They spent several weeks in Palm Beach and also called on friends in Tampa, Nashville and Terre Haute.

—△—

Governor Schmedeman early in March announced the appointment of Dr. Adolf Gundersen of La Crosse; Dr. W. F. Lorenz of Madison, and H. O. Wolfe of Milwaukee to be members of a citizen's committee to investigate Wisconsin institutions for the criminal and insane. Dr. Lorenz was designated as chairman of this committee which is holding its preliminary investigations presently.

—△—

Dr. M. Fernan–Nunez of Milwaukee will present a series of addresses on tropical medicine and civilization over station WHAD, Milwaukee, during the month of April.

BIRTHS

A daughter to Dr. and Mrs. George E. Thill, Milwaukee, on January 4th.

A daughter, Anne Elizabeth, to Dr. and Mrs. S. L. Henke of Eau Claire, on March 22nd.

A daughter, Sylvia Jean, to Dr. and Mrs. O. W. Friske, Beloit, on March 18th.

ENGAGEMENTS

Announcement has been made of the engagement of Dr. Alton R. Altenhofen, Milwaukee, to Mrs. Elsie Andres, also of Milwaukee.

MARRIAGES

Dr. R. A. Thayer, son of Dr. and Mrs. F. A. Thayer of Beloit, and Miss Barbara F. Pierson, also of Beloit, on Saturday evening, February 24th.

Dr. C. A. Kissinger, Milwaukee, and Mrs. Edward Higgins, at Woodstock, Illinois, on February 17th.

Dr. Hugh P. Greeley, Madison, to Mrs. Mark Troxell, dean of women, University of Wisconsin, on March 23rd at Madison.

DEATHS

Dr. Winfred M. Johnston, Johnson Creek, died on February 13th of angina pectoris at his home.

Dr. Johnston was born on August 1, 1872, at Findlay, Ohio. He was a graduate of Ohio Medical College in the year 1898 and was licensed to practice medicine in Wisconsin in 1909. For the past thirteen years he had been practicing in Johnson Creek.

The deceased was a member of the Jefferson County Medical Society, the State Medical Society, and the American Medical Association.

He is survied by his widow and two daughters.

Dr. Herbert H. Hurd, Chippewa Falls, died on March 9th from shock and complications following fracture of the hip on March 1st.

Dr. Hurd was born in the year 1852 and was graduated from Rush Medical College in 1878. He located at Chippewa Falls in 1881 and has held an honored position as a much beloved family physician and dean of the physicians of Chippewa County. His life of more than fifty years in Chippewa Falls has brought hope and cheer wherever his sunshiny smile has been. He has held many positions of trust and in his passing the physicians and the community of Chippewa Falls and county have lost a friend as well as one of the finest types of the "old time" physician.

Dr. Hurd was an honorary member of the Chippewa County Medical Society, the State Medical Society, and of the American Medical Association, and of the Kiwanis, of which he had the distinction of 100% attendance for the past year and a half.

He is survived by his wife and one daughter.

Dr. George E. Towle, Wisconsin Rapids, died suddenly on February 27th in the hospital which he conducted there.

Dr. Towle was born in the year 1887 and was a graduate of Marquette University School of Medicine in 1913. He had practiced in Stratford and Marshfield before coming to Wisconsin Rapids in 1932. During the World War, Dr. Towle served as army physician stationed at Memphis, Tenn.

He is survived by his widow.

SOCIETY RECORDS

New Members

Lorin E. Dickelmann, Oshkosh.

Karl Johnson, Osceola.

Meyer S. Fox, 3103 N. 27th St., Milwaukee.

A. W. Hankwitz, 2570 W. Kinnickinnic Ave., Milwaukee.

H. B. Benjamin, 804 N. 68th St., Wauwatosa.

V. W. Koch, Janesville.

T. F. Shinnick, Beloit.

E. J. Konop, Sawyer.

W. E. Leaper, 109 E. Walnut St., Green Bay.
H. V. Bancroft, Blue Mounds.
Neils A. Peterson, Soldiers Grove.
E. A. Lapham, Rib Lake.
Albert P. Hable, Gilman.
C. F. Browne, 842 Main St., Racine.
R. M. Baldwin, Racine.
M. E. Rideout, St. Croix Camp, Gordon.
Geo. W. Walter, 1356 Washington Ave., Racine.
D. S. Sharp, Mondovi.
J. M. Welsch, Beaver Dam.
R. J. Winkler, Hilbert.

CORRESPONDENCE

"ONE OF THE BEST"

THE BORDEN COMPANY
Department of Health Service
350 Madison Avenue, New York, N. Y.

March 13, 1934.

Mr. J. G. Crownhart, Managing Editor.
Wisconsin Medical Journal,
Madison, Wisconsin.
Dear Mr. Crownhart:

As a reader of all the state medical journals, I wish to congratulate you, and the Wisconsin Medical Society, on the attractive appearance of the Wisconsin Medical Journal. It is one of the best state journals that comes across my desk.

Sincerely yours,
JAMES A. TOBEY,
Director.

"INFORMATIVE MATERIAL"

TREASURY DEPARTMENT
Public Health Service

Washington, March 23, 1934.

J. G. Crownhart, Editor,
Wisconsin Medical Journal,
119 E. Washington Avenue,
Madison, Wisconsin.
Dear Sir:

One of the activities of the Public Health Service is the distribution of informative material to physicians in order to familiarize them with modern methods in the diagnosis and treatment of the venereal diseases. With this in mind a monthly abstract journal has been published for about ten years. It is desired to request that you cooperate with the Public Health Service in this program by printing the accompanying notice, which is self-explanatory, in the next issue of your Journal. Such action would be of considerable value in the program directed against the venereal diseases and will be greatly appreciated.

By direction of the Surgeon General:

Respectfully,
JOHN MCMULLEN,
Assistant Surgeon General,
Division of Venereal Diseases.

Venereal Disease Information

For a number of years the U. S. Public Health Service has been publishing, for the information of physicians, health officers, and others, a monthly abstract journal known as "Venereal Disease Information." This publication contains usually one original article on a subject of general interest in connection with the venereal diseases and numerous abstracts from the current literature pertaining to these diseases. In the preparation of this abstract journal more than 350 of the leading medical journals of the world are reviewed and abstracts made of the articles on this subject.

The cost of "Venereal Disease Information" is only fifty cents per annum, payable in advance to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is desired to remind the reader that this nominal charge represents only a very small portion of the total expense of preparation, the journal being a contribution of the Public Health Service in its program with state and local health departments directed against the venereal diseases.

TIMELY AND WORTHWHILE

Plymouth, Wis.

State Medical Society of Wisconsin,
Dear Sirs:

Am writing to ask that you make a slight change in the address of material you send us. In the future this weekly news service should be sent to the Plymouth Review, Plymouth, Wisconsin.

Thanking you for this service, and for your news releases which are both timely and full of worthwhile information, I remain

Sincerely yours,
REX H. BURNHAM, *Editor,*
Plymouth Review.

WISCONSIN HOSPITAL ASSOCIATION

A joint meeting of the Illinois, Indiana and Wisconsin Hospital Associations will be held at the Hotel Sherman, Chicago, on May 2, 3 and 4. All interested in problems of hospital administration will be welcomed at the meeting whether members of the associations or not.

Mr. J. G. Crownhart, Madison, is Secretary of the Wisconsin Association.

CWA Projects Under Direction of County Medical Societies End After First and Third Weeks

HEALTH surveys of school children in fifty-four Wisconsin counties were at an end Saturday night, March 31st, as a result of the federal abandonment of the CWA program. While continuance at a later date seemed a possibility, federal funds for such continuance were not available as this issue went to press.

Apparently unique among all states with the possible exception of Pennsylvania and New York, the CWA health program in Wisconsin was placed under the immediate direction of county medical societies who nominated the county project supervisor and whose membership was used in carrying forward the school health effort. Upon the original request of Dr. W. A. Werrell, Wisconsin Civil Works Service Director, plans for the health project were initiated as early as February. Funds for the project were not released, however, until March 9th. A conference was held in Madison of all the county supervisors on Wednesday, March 7th, and projects opened at once in the fifty-four counties where the profession had elected to carry forward this public health effort under their own direction. Dr. J. Newton Sisk, member of the Board of Trustees of the Dane County Medical Society, Madison, was designated by the State Board of Health as state supervisor of the combind projects and 349 nurses with 126 physicians and dentists were employed in the first week, and 259 nurses and 97 physicians and dentists in the second and third weeks.

While data from the service was not immediately available, it was being compiled in the office of the State Medical Society of Wisconsin early in April following the termination of the effort. This data will be reported to the organized profession only, and while incomplete will undoubtedly serve as the basis for future efforts of the profession in this public health-family physician program.

Counties in which the project was dropped after the first week, with the names of the local director follow:

Adams----------Dr. Harry Shapiro, Adams
Buffalo---------Dr. J. P. Reinhardt, Fountain City
Crawford---Dr. C. A. Armstrong, Prairie du Chien
Clark----------Dr. E. L. Bradbury, Neillsville
Jackson----------Dr. E. A. Petzke, Hixton
Juneau----------Dr. C. A. Vogel, Elroy
Marquette---------- Dr. H. F. Fredrick, Westfield
Pepin----------Dr. P. A. Schulberg, Durand
Pierce----------Dr. Chalmer Davee, River Falls
Polk----------Mr. George B. Larson, Frederic
Price----------Dr. H. B. Norviel, Phillips
Richland------Dr. A. D. Campbell, Richland Center
Sawyer----------Dr. D. H. Callaghan, Hayward
St. Croix----------Dr. W. H. Reed, New Richmond
Taylor----------Dr. F. J. Martin, D.D.S., Medford
Trempealeau-----Dr. R. L. MacCornack, Whitehall
Vernon----------Dr. P. H. Hansberry, Hillsboro
Vilas----------Dr. R. A. Oldfield, Eagle River
Washburn----------Dr. G. N. Lemmer, Spooner
Waupaca----------Dr. R. K. Irvine, Manawa
Waushara----------Dr. A. A. Beck, Wautoma

Counties in which the project was continued for three weeks ending on March 31st, with names of the project directors are:

Ashland----------Dr. C. O. Hertzman, Ashland
Bayfield----------Dr. C. O. Hertzman, Ashland
Brown----------Dr. T. J. Oliver, Green Bay
Chippewa---------Dr. J. A. Kelly, Chippewa Falls
Columbia---------Dr. Joseph MacGregor, Portage
Dane----------Dr. A. R. Tormey, Madison
Dodge----------Dr. W. E. Bargholtz, Reeseville
Door----------Dr. F. C. Huff, Sturgeon Bay
Douglas----------Dr. F. J. Broghammer, Superior
Dunn----------Dr. Wm. Lumsden, Menomonie
Eau Claire--------Dr. F. G. Anderson, Eau Claire
Fond du Lac-------Dr. M. O. Boudry, Fond du Lac
Grant----------Dr. M. B. Glasier, Bloomington
Green Lake----------Dr. A. J. Wiesender, Berlin
Iowa----------Dr. S. R. Ridley, Mineral Point
Kenosha----------Dr. Helen Binnie, Kenosha
Kewaunee----------Dr. W. M. Wochos, Kewaunee
La Crosse----------Dr. Clement Moran, La Crosse
Lincoln----------Dr. F. C. Lane, Merrill
Manitowoc----------Dr. Charles Wall, Manitowoc
Marathon----------Dr. V. E. Eastman, Wausau
Marinette----------Dr. T. J. Redelings, Marinette
Oconto----------Dr. G. W. Krahn, Oconto Falls
Oneida----------Dr. G. W. Huber, Minocqua
Outagamie----------Dr. D. M. Gallaher, Appleton
Portage----------Dr. H. M. Coon, Stevens Point
Rock----------Dr. F. E. Sutherland, Janesville

Sauk----------Dr. Roger K. Cahoon, Baraboo
Washington----------Dr. H. M. Lynch, West Bend
Waukesha----------Dr. Hans Schneider, Dousman
Winnebago----------Dr. M. N. Pitz, Neenah
Wood--------Dr. W. G. Merrill, Wisconsin Rapids

When the question of continuance under the new relief program was considered, members of the Wisconsin Industrial Commission and the State Relief Director, admitting the outstanding social value of the effort, stated that the new set-up, together with the prescribed allotment of funds, precluded continuance unless a special fund were granted from Washington. It was pointed out that while CWA was a joint employment and relief program, the new federal set-up comprehended a relief program only precluding the employment of any except those on relief rolls.

In practically every other state, an early survey indicated that health projects under CWA were carried forward on a nurse basis alone and without any connection with or direction of the active medical profession. The Wisconsin program was distinctive in that the profession was given and accepted the opportunity to initiate, direct and supervise all effort in the CWA health field. A more complete report of the Wisconsin work and result will be reported to officers and members of the participating societies before the end of April.

Dr. Seaman Named Medical Director

Dr. Gilbert E. Seaman, Milwaukee, former surgeon general of the Wisconsin National Guard, was appointed early in March as superintendent of the Northern Hospital for the Insane at Winnebago. Dr. Seaman has entered upon his duties at this institution which is under the supervision of the State Board of Control.

Dr. Seaman specialized in the neuropsychiatric field early in his professional career having been associated with the Milwaukee Sanitarium. In recent years he has been clinical director of the Shorewood Hospital-Sanitarium. During the World War he was chief surgeon of the 32nd Division and later of the 6th Army Corps of the American Expeditionary Force. Following war service he was chairman of the advisory board of the United States Veterans' Bureau and organized its neuropsychiatric service. He represented the United States in the fourth and sixth international congresses on military medicine at Warsaw in 1927 and in London in 1929. He holds the distinguished service medal of the United States and the Legion of Honor in France.

Since the war, Dr. Seaman has been in private practice in Milwaukee.

Medical Library Service of University Fills Needs of Wisconsin Physicians

WITH a 35% increase in the number of requests for material from the Medical Library Service, this University of Wisconsin project initiated jointly by the University and the State Medical Society of Wisconsin, made 9,418 loans during 1933 to fill 3,970 requests from Wisconsin physicians. During 1932 the requests numbered 2,950 with loans numbering 7,030.

In 1933, 280 physicians in Madison used the service for the first time and 173 physicians in the state at large were added to the service rolls. Close to one thousand Wisconsin physicians made one or more calls upon the service during the last calendar year.

The Medical Library Service as now constituted is housed in the Medical School Building at 424 North Charter Street, Madison. It offers to members of the medical profession the joint facilities of this special service and facilities of the University medical service library proper. Books will be loaned for a two-week period to include any publication reviewed in the Wisconsin Medical Journal or any publication in the medical school library proper. References on any subject including books, periodicals and re-

prints will be loaned for a two-week period and the Medical Library Service has access to 350 medical journals, 250 of which are complete sets.

No charges are made for the various services of the medical library service other than funds sufficient to cover the cost of mailing and a five cent wrapping fee for packages of journals or a ten cent fee for book packages. Material going to and from the library has the advantage of a special rate of three cents for the first pound and one cent for each ounce. Thus the postage constitutes a negligible item to Wisconsin physicians who desire to avail themselves of the privileges offered. Prompt attention is given to all inquiries and while the service has but a limited staff, inquiries from Wisconsin physicians are welcome.

A list of current periodicals which are available for reference service through the Medical Library Service follows:

American College of Surgeons Bulletin
American Heart Journal
American Journal of Cancer
American Journal of Diseases of Children
American Journal of Obstetrics and Gynecology
American Journal of Ophthalmology
American Journal of Pathology
American Journal of Physiology
American Journal of Psychiatry
American Journal of Public Health
American Journal of Roentgenology and Radium Therapy
American Journal of Surgery
American Journal of the Medical Sciences
American Medicine
American Review of Tuberculosis
American Society for the Control of Cancer Bulletin
Annals of Internal Medicine
Annals of Otology, Rhinology and Laryngology
Annals of Surgery
Archives of Dermatology and Syphilology
Archives of Disease in Childhood
Archives of Internal Medicine
Archives of Neurology and Psychiatry
Archives of Ophthalmology
Archives of Otolaryngology
Archives of Pathology
Archives of Pediatrics
Archives of Physical Therapy
Archives of Surgery
British Journal of Children's Diseases
British Journal of Dermatology and Syphilology
British Journal of Ophthalmology
British Journal of Radiology
British Journal of Surgery
British Medical Journal
California and Western Medicine
Canadian Medical Association Journal
Canadian Public Health Journal
Child Health Bulletin
Clinical Medicine and Surgery
Colorado Medicine
Current Researches in Anesthesia and Analgesia
Delaware State Medical Journal
Endocrinology
Eye, Ear, Nose and Throat Monthly
Health Examiner
Heart
Hospital Management (Occasional)
Hospital Progress
Illinois Medical Journal
Industrial Medicine
International Journal of Medicine and Surgery
International Journal of Orthodontia
International Medical Digest
Johns Hopkins Hospital Bulletin
Journal of Bone and Joint Surgery
Journal of Chemotherapy
Journal of Immunology
Journal of Industrial Hygiene
Journal of Infectious Diseases
Journal of Laboratory and Clinical Medicine
Journal of Laryngology and Otology
Journal of Medicine
Journal of Nervous and Mental Diseases
Journal of Obstetrics and Gynecology of the British Empire
Journal of Pathology and Bacteriology
Journal of the American Institute of Homeopathy
Journal of the American Medical Association
Journal of the Arkansas Medical Society
Journal of the Association of American Medical Colleges
Journal of the Florida Medical Association
Journal of the Indiana State Medical Association
Journal of the Iowa State Medical Society
Journal of the Kansas Medical Society
Journal of the Medical Association of Georgia
Journal of the Medical Society of New Jersey
Journal of the Michigan State Medical Society
Journal of the Missouri State Medical Society
Journal of the Oklahoma State Medical Association
Journal of Pediatrics
Journal of the Philippine Islands Medical Association
Journal of the Tennessee State Medical Association
Journal of Urology
Journal–Lancet
Kentucky Medical Journal
Lancet
Laryngoscope
Maine Medical Journal
Medical Annals of the District of Columbia
Medical Clinics of North America
Medical Economics
Medical Herald
Medical Journal and Record

Medical Library Association Bulletin
Medicine
Mental Hygiene
Metropolitan Life Insurance Company Statistical Bulletin
Milbank Memorial Fund Quarterly Bulletin
Minnesota Medicine
Nebraska State Medical Journal
New England Journal of Medicine
New Orleans Medical and Surgical Journal
New York State Journal of Medicine
Northwest Medicine
Ohio State Medical Journal
Pennsylvania Medical Journal
Practitioner
Public Health Reports
Radiology
Revue de Chirurgie Plastique
Rhode Island Medical Journal
Royal Society of Medicine Proceedings
Société de Chirurgiens de Paris, Bulletins et Mémoires
Southern Medical Journal
Southern Medicine and Surgery
Southwestern Medicine
Surgery, Gynecology and Obstetrics
Texas State Journal of Medicine
Tri-State Medical Journal
U. S. Division of Vital Statistics — Summary of Mortality from Automobile Accidents
U. S. Division of Vital Statistics—Weekly Health Index
U. S. Naval Medical Bulletin
Virginia Medical Monthly
West Virginia Medical Journal
Wisconsin Dental Review
Wisconsin Medical Journal

Dr. W. T. Clark, Janesville, Appointed to Advise State Relief Director on Medical Problems

Dr. W. T. Clark, Janesville, long a member of the special committee of the Rock County Medical Society dealing with medical relief for the indigent, has been appointed by Mr. Alfred Briggs as official advisor on medical aspects of the joint federal and state relief department. Dr. Clark entered upon his advisory duties the last week in March.

Among problems presented for consideration of the state relief director by the State Medical Society are the following:

1. Mandatory nature of regulations number 7 calling for free choice of physician.
2. Allowances to cover medical needs of the border line case.
3. General schedules of allowances.
4. Care of the emergency case.
5. Use of local funds for care in hospitals where hospitalization is essential.

Tuberculosis

(Continued from page 295)

sult of healing, dyspnea from this source may persist for a long time after complete recovery, therefore, it should not be always interpreted as a sign of active tuberculosis. The treatment of dyspnea must be laid down on basic principles similar to those which are followed in the treatment of heart failure, namely, protection of the diseased organ and keeping the patient within his respiratory capacity. Exercise in any form has to be restricted to a point where dyspnea is not elicited, approaching the minimum respiratory rate compatible with comfort. It must be kept in mind that if the frequency and depth of respirations are reduced, more favorable conditions are created for healing in the lungs. Accumulation and retention of mucopurulent secretion in the lungs often lead to shortness of breath in debilitated patiets in whom, because of the weakness and exhaustion of respiratory muscles, the expectoration is inadequate. The removal of inflammatory materials by means of postural drainage, administration of expectorants, or carbon dioxide-oxygen inhalation (a mixture of 10 per cent carbon dioxide and 90 per cent oxygen) may often bring gratifying relief. Massive atelectasis is an infrequent cause of dyspnea in tuberculosis. The development of multiple lobular atelectasis is more often conducive to dyspnea. The inhalation of carbon dioxide-oxygen mixture has been suc-

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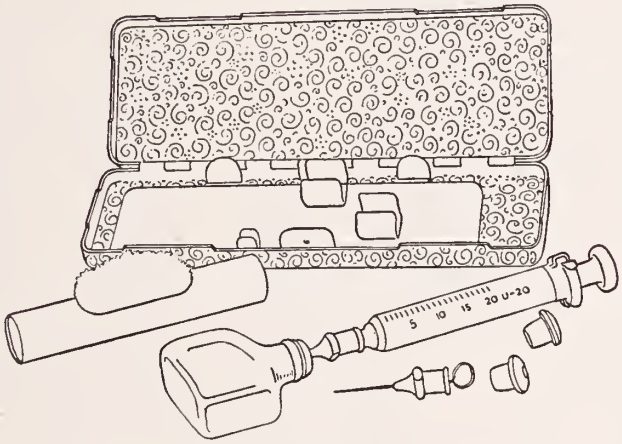

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cessfully used in our practice for this condition. The apparatus consists of a tank containing a mixture of 10 per cent carbon dioxide and 90 per cent oxygen, with an oxymeter, and an inhaler commonly used for general anesthesia which is connected to the tank by a rubber tubing. The oxymeter is set for 5 liters per minute. The length of inhalation should be three minutes on the first day and gradually increased by three minutes on successive days until fifteen minutes are reached. The time has to be gauged according to the subjective feeling of the patient. The inhalations are repeated daily. The duration of the treatment may vary from a few days to two weeks, and can be repeated at intervals if necessary. The treatments are followed by copious, easy, effortles expectoration, by relief from exasperating cough, and by marked euphoria. The euphoria is explainable by the opening up of atelectatic areas and enlargement of the functioning respiratory surface, and by the absence of cough during nights following inhalation. The facilitated expectoration may continue for days after treatment.

The dyspnea in dry pleurisy is treated by bed-rest and application of adhesive plaster straps. (See chapter on pleurisy).* When accumulation of fluid in the pleural cavity causes dyspnea, because of compression of the lung, or because of displacement of the heart, the fluid should be removed. (See chapter on pleurisy.)*

The best way of relieving dyspnea originating from spontaneous pneumothorax is the removal of air from the pleural cavity. (See chapter on spontaneous pneumothorax.)

Dyspnea caused by heart failure is not uncommon in pulmonary tuberculosis. Failure of the heart muscle under the influence of tuberculo-toxins may manifest itself abruptly or develop gradually. When dyspnea is out of proportion to the extent of pulmonary involvement and appears on comparatively slight exercise, or is noticeable even when the patient is in bed, attention should be focused on the heart. Cold sweats, epigastric pain, abdominal distention, cyanosis, distress in the chest may accompany it in acutely developing cases. In chronic cases besides dyspnea, gastrointestinal disturbances, nausea, vomiting, nervous irritability and sleeplessness are complained of. When objective evidence of heart failure develops, digitalis should be given early in proper doses.

Incidental pulmonary disease, such as cancer, pneumoconiosis, allergic asthma may lead to variable degrees of dyspnea.

Extensive, ulcerative tuberculous laryngitis may be partly responsible for the dyspnea of tuberculous patients. Local measures aiming to influence the laryngeal process itself, is of great value in these cases.

Gastrointestinal tuberculosis, when associated with intestinal stasis, fermentation, and abdominal distention, may induce an upward displacement of the diaphragm and subsequent shortness of breath. Appropriate measures should be directed toward the treatment of the intestinal tuberculosis in such instances. (See chapter on intestinal tuberculosis.)* Also large peritoneal exudate may be the cause of dyspnea.

Patients with extensive tuberculosis, whether it is the exudative or fibrotic type, often complain of dyspnea, when they are too much overweight. Overweight is not an index of, and is of no value in the cure of tuberculosis; on the contrary, because of the excess work it throws upon the diseased lungs, it should be avoided.

Mediastinal tumors, aneurysm, and substernal goiter should be remembered when dealing with dyspnea without evident cause.

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* To be published.

(This is the third of a series of short discussions on the practical treatment of pulmonary tuberculosis.)

PSYCHIATRIC MEETING

The annual meeting of the American Association on Mental Deficiency will be held at the Hotel Waldorf Astoria, New York, May 26, 27, 28 and 29, 1934. The Saturday session, May 26th, will be given over to the sociological psychological and the special educational aspects of the problem in order that local social workers and school teachers may have an opportunity to attend without interfering with their regular duties. The Tuesday afternoon session will be a conjoint meeting with the American Psychiatric Association. Data as to the program may be obtained from the Secretary, Dr. Groves B. Smith, Godfrey, Illinois.

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THE JOURNAL BOOK SHELF

BOOKS RECEIVED FOR REVIEW

Alcohol and Man. Haven Emerson, M. D., Editor, De Lamar Institute of Public Health, Columbia University. The Macmillan Company, New York.

Maternal Mortality in New York City. By the New York Academy of Medicine, Committee on Public Health Relations. Ransom S. Hooker, M. D., F. A. C. S., Director of the Study. The Commonwealth Fund, 41 E. 57th St., New York, N. Y. Price $2.00.

An Outline of the Treatment of Fractures. By the Committee on the Treatment of Fractures. American College of Surgeons, Chicago, 1933.

The A–B–C of Refraction. By F. D. B. Waltz, M. D., Detroit. Price $1.75. Copies secured direct from author at 5884 West Vernor Highway, Detroit, Mich.

The Foundations of Nutrition. By Mary Swartz Rose, Ph. D., professor of nutrition, Teachers College, Columbia University. Revised Edition. The Macmillan Company, New York, N. Y. Price $3.00.

Recent Advances in Endocrinology. By A. T. Cameron, M. A., D. Sc. (Edin.). Professor of biochemistry, Faculty of Medicine, University of Manitoba; Biochemist, Winnipeg General Hospital. P. Blakiston's Son & Co., Inc., 1012 Walnut St., Philadelphia.

Demonstrations of Physical Signs in Clinical Surgery. By Hamilton Bailey, F. R. C. S. (Eng.) Surgeon, Royal Northern Hospital, London; Surgeon, Battersea General Hospital; Consultant Surgeon, Essex County Council; Fourth Edition, revised and enlarged. William Wood & Company, Baltimore, Md. Price $6.50.

BOOK REVIEWS

Any scientific publication reviewed in this column may be obtained for inspection. Orders for such inspection should be directed to the Medical Library Service, 424 N. Charter Street, Madison, Wis.

The Principles and Practice of Rectal Surgery. By William B. Gabriel, M. S. Lond., F. R. C. S. Eng., surgeon to St. Mark's Hospital for Cancer; surgeon to the Royal Northern Hospital. H. K. Lewis & Co., Ltd., London, 1932.

The author has correlated many of the newer ideas in proctology as they concern the diagnosis and treatment of the more common diseases of the rectum. His personal preferences in regard to equipment, methods of examination, and choice of treatment are listed in detail. The injection method for the treatment of hemorrhoids and prolapse of the rectum is clearly outlined and many pitfalls pointed out.

The bibliography is fairly extensive for a treatise of this size. It is, naturally, a list of authors, the majority of which are English and a few of whom are associates of the author. Such American authorities as Rankin and Coffey are quoted frequently. While not in any sense an exhaustive presentation of the subject, there is much to be learned from perusal of this volume, especially as the author suggests "attention to small details upon which success in rectal surgery so much depends." E. R. S.

The Cure of Haemorrhoids, Varicose Veins and Ulceration, and Allied Conditions: By Modern Methods of Injection and Bandaging. By Stuart McAuslan, B. A. (Lond.) M. D. Ch. B. (Liv.) Honorary physician, Hahnemann Hospital, Liverpool; in charge of varicose vein and haemorrhoid clinics. John Bale, Sons & Danielsson, Ltd., London.

This small book contains the experience of the author extending over a period of eleven years. The subjects discussed are most efficiently handled in a brief but concise manner. Every statement is full of meat. A great deal of time has been consumed in condensing such a broad experience into only sixty-one pages. An extremely valuable reference for any physician interested in this form of treatment. J. W. G.

Post-Operative Treatment. By George S. Foster, M. D., surgeon to the Lucy Hastings Hospital, Manchester, New Hampshire. The Christopher Publishing House, Boston. Price $5.00.

This volume consisting of 323 pages gives much valuable information concerning the postoperative treatment of surgical patients. Each chapter is devoted to the care necessary in special cases. Chapter XXI is devoted to "Don'ts", about 33 in number. Each of these should be read by every surgeon who has patients under his care.

Mention is also made of the importance of cooperation between the Internist and the Surgeon. Any surgeon will feel repaid for the time necessary for reading the author's teachings. J. W. G.

CORRECTION

In the March issue of the JOURNAL it was stated that the price of "Diet and Dental Health" by Milton T. Hanke was $1.00 per copy. The price of this book has now been advanced to $4.00 per copy. The original special edition which sold for $1.00 has been exhausted.

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Record-Librarian's Manual, a guide to organizing, classifying, and filing clinical records and medical literature. By Carl E. Black, A. M., M. D., F. A. C. S., Jacksonville, Illinois. Price $2.50. Bruce Publishing Company, 2429 University Avenue, St. Paul, Minnesota.

Record-librarianship is a specialized branch of library science with its own principles and terminology. The choice of a classification system is one of the hospital's problems. The author's basic scheme is Dewey's "Decimal Classification and Relative Index." This system assigns numbers to the anatomical parts of the body. To these numbers, the expanded system adds the number which classifies the pathology. The third number added shows the plan of treatment. The pathology and treatment are "form divisions", applicable to any anatomical part. For instance, in classifying the record of a case of appendicitis, the author would proceed as follows: 616.3 is the Dewey Decimal system number for the digestive system. The number would be expanded to 616.3452, the further anatomical division for appendix. To this would be added .b2 (a form division) which always denotes infection, regardless of the anatomical location. This would build the number to 616.3452.b2. If the case were treated surgically, the number .087 which always designates operative treatment would be added. This would bring the final classification number to 616.3452.b2.087. This number would classify the "summary card", one of which is made for each diagnosis, and each surgical operation. If more than one diagnosis has been made, a summary card is made for each. If the case had been carcinoma of the appendix, surgically treated, the number would read 616.3452.d4.087, substituting .d4 to designate a carcinoma rather than an infection. If the hospital desired records of all cancer cases kept together, two summary cards could be made with cross-reference numbers, filing one under cancer and the other under the anatomical part.

The author outlines his expansion of the Dewey system in detail, and adds the indispensable index. The size of the hospital and the needs of the staff determine the minuteness with which the records are classified as well as the completeness of the summary card. The tendency is toward finer subdivisions as the file grows. The "form division" plan has the advantage of being applicable to almost any system already in use. The Dewey system was chosen because librarians are trained in its use, and because the decimal system is one of the simplest and most adaptable. The correlation of hospital library and record room is suggested, with the same system of classification applied to both. G. R.

Hospital Medical Statistics. By Caroline R. Martin, M. D., Director, Central Medical Statistical Bureau, New York Department of Hospitals. J. B. Lippincott Company, Philadelphia.

Hospital Medical Statistics is a small manual of ninety pages describing in detail the methods of handling statistics at the Central Medical Statistical Bureau of New York. It stresses accurate, complete and adequately cross-indexed records. It shows how this can be accomplished by the adoption of a mechanical cross-index in connection with the unit history system, without excessive cost. R. C. B.

An Outline of Immunity. By W. W. C. Topley, M. A., M. D., Professor of Bacteriology and Immunology in the University of London. Price $6.00. William Wood & Company, Baltimore, Md.

This book is a clear and succinct presentation of the knowledge we possess concerning the interplay between host and parasite in bacterial diseases. The author piles his thoughts one on another, chapter after chapter, to construct a highly organized body of knowledge. In the preface he calls attention to the transient acquaintance of the medical student with immunity, notwithstanding the fact that a high proportion of the total sickness with which the physician has to deal, whether he thinks in terms of prevention or cure, results from infective disease.

In the introduction he focuses attention on the breadth of the subject which is entitled immunity. By a definition of the term he shows that it really does not mean what it says. He says the word suggests a complete resistance to infection, when as a matter of fact the main concern is about those interactions between parasite and host that are characterized by a fluctuating equilibrium and with the factors which shift this equilibrium so that sometimes the host and sometimes the parasite gains the upper hand. To better express this idea he suggests the word "Resistance". He still further points out in this chapter that the scope of the subject has been restricted in the minds of many because there has been a tendency to confuse technique with subject matter; because the word immunity has happened to have been frequently applied to data obtained by a particular kind of technique and points out that the phenomena that present themselves for study are derived from diverse sources, which required various technique for their study.

Thus, epidemiology brings the problem of varying susceptibility of different animal species and of individuals of the same species to the same infectious agent, the epidemiologist records differences in the incidence and fatality of various infective diseases at different ages, and through clinical medicine comes the problem of why some patients die and why some recover from the same disease.

The book is organized in such a sequence that one chapter builds the foundation for the consideration of the subject matter contained in the next. He passes from the general consideration of the scope and influence of immunological studies on epidemiology and clinical medicine to a discussion of the specific problems and the methods by which they have been attacked. The measurement of immunity, which is a skillful presentation of the importance of using statistical measurements in planning and controlling all experiments in which all of the variables

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are not known and controllable, is followed by the Mechanism of Bacterial Invasion, and this by the Mechanism that Hinders or Prevents the Access of Bacteria to the Tissue, and so on through the whole book there is laid one foundation stone upon another. The last three chapters are devoted to a discussion of the practical application of immunity in diagnosis, prophylaxis and treatment of infective diseases.

The author by his style has caught the romance of the biology of infective disease and presented it to the reader, and at the same time, by his critical acquaintance with the literature and first hand information gained by personal experiments in the field of experimental immunology, presented an organized body of knowledge out of a confusing mass of contradictions. The bibliography is voluminous and appears at the end of each chapter. W. D. S.

Report to the United States Government on Tuberculosis with some Therapeutic and Prophylactic Suggestions. Revised and enlarged report submitted to the State Department, War Department, and War Veterans Bureau as Government Delegate to the International Union Against Tuberculosis held at The Hague, September 6th to 9th, 1932. By S. Adolphus Knopf, M. D. (New York University and Paris). This booklet of 57 pages, procurable at the office of the National Tuberculosis Association, 450 Seventh Avenue, New York City, $1.15, is a report of the author's experience at The Hague Conference, and a discussion of the after-care of the tuberculous.

At The Hague, the three subjects dealt with at the general scientific sessions were "Relations Between Allergy and Immunity", "Gold Therapy", and the "After Care of the Tuberculous".

The discussion of the first subject led to the conclusion that "allergy does not constitute immunity. Its exact value cannot be measured in our present state of knowledge. Allergy may be defined as a modified reaction of the organism manifested by a hypersensitivity to a given substance after the primary infection, whereas by immunity, one understands an insusceptibility to the disease."

The chapter on "Gold Therapy" treatment of tuberculosis of the lungs and larynx with preparations (Sanocrysin and Chrysalbin) containing 23½% to 50% gold, indicated that though results in many series of cases were good, similar results are obtainable by routine rest treatment in sanatoria or a similar regimen at home.

A relatively large portion of the booklet describes the tuberculosis villages in England; colonies for the tuberculous who are partially self-supporting. Aid is received by public and private donations, and from the British Legion. Families of patients are carefully supervised to prevent tuberculosis. In France and Germany the civilian and the veteran are cared for much as in the United States. The author believes that colonies similar to those in England should be established in America. Mention is made of the rehabilitation institutions in America, the Tomahawk Lake Camp of Wisconsin being cited. In reviewing these chapters, question is made whether the expenditure of money is justifiable for rehabilitation institutions. The sanatorium is the rehabilitation institution. If the patient is fit for discharge his cure should be adequate for him to resume at least part of his duties; he should, however, always be under the care of some one capable of determining his progress, while carrying on and furthering his activity.

Several chapters are devoted to the importance and benefits of diaphragmatic breathing, thus giving more rest to the diseased lung. The reviewer doubts if many patients would cooperate in making this form of treatment successful. Special breathing exercises for expelling residual air in the "healthy" are described. A tent-like, indoor-outdoor sleeping device attachable to the window for tuberculous city and house dwellers is illustrated.

Preventive inoculation in children with BCG vaccine (attenuated bovine tubercle bacilli developed by Calmette and Guerin, in Paris) is discussed, and the success of Park and his associates with its use is described. The vaccine, with directions, may be procured from Wm. H. Park, of New York City, and is indicated where an infant must live with a tuberculous mother. An article in the New York State Journal of Medicine, March 15, 1933, should be read.

Mention is made of successful treatment of skin tuberculosis: Lupus vulgaris, scrofuloderma, papulonecrotic tuberculid, with a diet free from ordinary table salt, combined with vegetables rich in vitamins. The diet is also known as that of Gerson–Sauerbruch–Hermannsdörfer, though how and why it cures is not known. Lupus Erythematosis does not respond to this treatment. It is said to be of value in tuberculosis of the kidney.

In conclusion the author comments on the progress made in combating tuberculosis. He mentions (a) the necessity of education in prevention; (b) the necessity of balancing the school and college curriculum so that the intellectual is not detrimental to the physical during an age especially susceptible to tuberculosis; (c) the importance of an annual or semi-annual health examination to be done by a competent general practitioner. When the individual is unable to pay, the local health department is to assign a physician to the family, the expense of which should be borne by a health tax, which will subsequently be a financial gain to the commonwealth. Such a program would not only bring about a reduction in tuberculosis, but would also produce a healthier and stronger population.

The importance of the National Recovery Act in doing away with some of the causes of tuberculosis, as undernourishment resulting from unemployment, child labor, and overwork of adults, is stressed.

That a broad outlook for social and physical welfare is necessary, as well as a new and just economic program, is indicated in the last paragraph of the report. R. H. S.

PHYSICIANS' EXCHANGE

Advertisements for this column must be received by the 25th of the month preceding month of issue. A charge is made of $2.00 for the first appearance of copy occupying 1 inch or less of space and $1.00 for each succeeding insertion of the same copy. Kindly accompany copy with remittance to cover number of insertions desired. Advertisements from members of the State Medical Society will be accepted without charge. Such copy will be taken out after its second publication unless otherwise requested. Where numbers follow advertisements replies should be addressed care Wisconsin Medical Journal.

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Blood Pictures. By Cecil Price-Jones, M. B., (Lond.). Third edition. Price $2.40. William Wood and Company. Baltimore.

The first part of this book of 71 pages and five color plates is devoted to the technique of blood examination and the description of blood cells. The second part deals with blood pictures in various pathological conditions. The author's method for measurement of the size of red blood cells is described in the final chapter.

This work serves its purpose as a guide to methods and interpretations in hematology. The author's methods differ in several details from those commonly used in this country, consequently some confusion may arise. The color plates are fair but the use of Jenner's stain makes them less useful for most people in this country who are accustomed to Wright's stain. The theoretical aspects of hematology have been omitted. O. O. M.

A System of Clinical Medicine. By Thomas D. Savill, M. D. Price $9.00. William Wood & Company, Baltimore.

The essential feature of Dr. Savill's book is its practical character. It departs from the usual methods of medical textbooks in that it deals primarily with the various diseases from the point of view of their leading symptoms and physical signs; but while this is the case, etiology, prognosis, complications and treatment are included so that complete pictures are given. Differential diagnosis is stressed and by a methodical and clear system of cross references repetition is avoided. Many tables rather than long descriptions accomplish brevity without the sacrifice of necessary details. The book is well illustrated and has been brought up to date in this ninth edition. It is to be recommended to the medical student and no less to the practitioner of medicine who will particularly appreciate that the book emphasizes the essentials necessary for bedside diagnosis. M. L. C.

Neuroanatomy. By J. H. Globus, B. S., M. D., associate professor of neuropathology and neuroanatomy, New York University and Bellevue Hospital Medical College; associate neurologist and associate neuropathologist, Mt. Sinai Hospital, New York. Sixth edition. Price $3.50. William Wood & Company, Baltimore, 1934.

This work is distinctly a laboratory guide for the study of external form and internal structure of the human brain and spinal cord. The first part of the book consists of descriptive material and the program of dissection. It has been prepared and arranged with the purpose in mind of enabling the student to progress with the dissection independently of the instructor during extramural hours and with economy of human anatomical material. The second part of the book contains semicompleted outline drawings of various parts and sections of the brain which are to be completed and labeled by the student. A feature which detracts from the value of the book for general use is the limited treatment of function and the correlation of functional significance with structure. F. D. G.

Medical Treatment of Disease. By Robert D. Rudolf, M. D. (Edin.). Professor of therapeutics in the University of Toronto. Fourth edition. Price $4.00. The University of Toronto Press. 1934.

This small volume appears in its fourth edition considerably changed and improved to bring it abreast of present therapeutic knowledge. It is designed as a guide for the medical student and young practitioner; as such it admirably fulfills its function.

After an introductory chapter dealing largely with the History of Therapeutics and a chapter on Routine in the Management of the Sick, the author selects the more important medical conditions seen in general practice and considers each in a systematic manner.

With each disease considered, after a general descriptive paragraph he takes up in order I Diagnosis, II Environment, III Diet, IV Specific Therapy and V Symptomatic Treatment.

As the author explains in the preface, the work is not intended as a therapeutic reference book, but rather as a useful handbook for the student and young practitioner; used in this way, it should be extremely helpful as it is concise, up to date and specific. R. H. V.

A Short History of Surgery. By Sir D'Arcy Power, K. B. E., F. R. C. S., Eng., honorary librarian of the Royal College of Surgeons of England. John Bale, Sons and Danielsson, Ltd., 83–91 Great Titchfield St., London, W. I.

The fact that it was written by an Honorary Librarian of the Royal College of Surgeons of England should warrant an interesting book. It is. To carry one through the history of surgery and present in eighty-seven pages anything that is coherent, logical, and interesting is a most difficult task. Yet it has been done. For anyone not a student of medical history, this small volume should whet the appetite for more; and to the student of medical history it will show how nicely a novice may be introtuced to an interesting subject. E. R. S.

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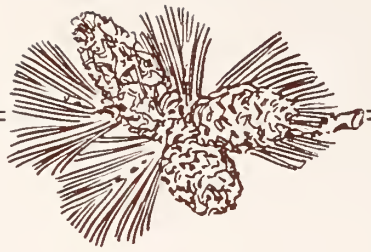

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SERIOUSNESS OF DIARRHEA

There is a widespread opinion that, thanks to improved sanitation, infantile diarrhea is no longer of serious aspect. But Holt and McIntosh declare that diarrhea "is still a problem of the foremost importance, producing a number of deaths each year. . . ." Because dehydration is so often an insidious development even in mild cases, prompt and effective treatment is vital. Little states (Canad. Med. A. J. 13: 803, 1923), "There are cases on record where death has taken place within 24 hours of the time of onset of the first symptoms."

In diarrhea, "The sugar is added gradually ... conditions admit, some sugar other than milk sugar or cane sugar being used, preferably dextrin and maltose."—*H. E. Small: Diarrhoea in bottle-fed infants, J. Maine M. A. 12:152-158, Jan. 1932.*

Regarding the treatment of diarrhea, "In our experience, the most satisfactory carbohydrate for routine use is Mead's dextrimaltose No. 1."—*F. R. Taylor: "Summer Complaints," Southern Med. & Surg., pp. 555-559, August, 1927.*

In cases of diarrhea, "For the first day or so no sugar should be added to the milk. If the bowel movements improve carbohydrates may be added. This should be the one that is most easily assimilated, so dextri-maltose is the carbohydrate of choice."—*W. H. McCaslan: Summer diarrheas in infants and young children, J. M. A. Alabama, 1:278-282, Jan., 1932.*

In diarrhea, "Carbohydrates, in the form of dextri-maltose, well cooked cereals or rice, usually can be handled without trouble."—*B. B. Jones: A discussion of some of the cammoner types of infantile diarrhea, and the principles ... the diets used in their treatment, Monthly, 55: 411-416.*

"The most desirable sugar is dextri-maltose, because of all the sugars maltose is least apt to ferment."—*A. I. Blau: The use of protein milk ... 119:359, April 2,*

Concerning the treatment of diarrhea, "If the weight remains stationary, it is an indication that loss of substance is occurring through the stools, mostly in the form of alkaline salts. To equalize this loss of substance, the diet must be increased, but in such a way as to avoid causing fermentation. This may be done by adding dextri-maltose and preparations of protein to the food, increasing the calories until the infant is taking 160 calories per kilo. of body weight."—*H. L. Ratnoff: Nutritional disturbances, Arch. Pediat., 41:771 Nov., 1924.*

"... loss of substance, ... in such a way as to ... dextri-malt...

"... use a preparation with a high dextrin and relatively low maltose content, as Mead's dextri-maltose."

"If it is desired to feed an unusually large amount of sugar to a baby, it is well to use a maltose-dextrin preparation, as in this way there is less danger of bringing about sugar fermentation than if lactose were used."—*L. W. Hill: Practical Infant Feeding, W. B. Saunders Co., Phila., 1922, p. 206.*

"The young ba... ture, usually one-third ... ally skimmed at first, and a half ... We prefer Dextri-Maltose as the carbohydrate most easily digested. . . . Preparations containing the more maltose are more rapidly absorbed, but on the other hand, are more liable to produce diarrhea. . . . Lactose which was very popular at one time, is never used in our work. The consensus of opinion seems to be that milk sugar is often source of indigestion in normal infants and the primary cause of fermentative dyspepsias ... ances."—*J. H. Reading, Jr.: Artificial ... infant during the first year ... 1923.*

... of diarrhea. . . . C... Professor Finkelstein and the development of proteins ... of being able to feed the infant with fermentative ... diarrhea a food containing 12 calories to the ounce ... like protein milk, after only one day on a starvation diet, is apparent. In addition, the further advantage of being able to safely add a carbohydrate like Dextri-Maltose No. 1 or No. 2 to the protein milk within a few days, enables one to gradually bring the infant up to its basal need ... a short time. When protein milk was ... carbohydrate additions were advis... the result that many children on ... rate of collapse. The suggestion ... Town of Toronto, Canada, that D... added to protein milk, was of great ... any practitioners still use protein m... ged periods without adding carbo... st be emphasized that regardless of ... of the stools, carbohydrate must be ... em milk within a reasonable time ... void collapse."—*G. J. Feldstein: Un... fants and children, Arch. Pe... 1933.*

"Protein milk may be continued for several weeks when a gradual transition to a whole milk or evaporated milk formula, which will supply about one and one-half to two ounces of whole milk to every pound of body weight, is reached. This also should finally have the addition of dextri-maltose amounting to five to seven per cent.—*R. A. Strang: Summer diarrheas in infancy and early childhood, Arch. Pediat. 47:344-354, June, 1930.*

"It should be remembe... of lactose may cause diarrhoea. It a hig... centage of sugar be required it is better to ... it by dextri-maltose, such as Mead's Nos. ... where the maltose is only slightly in excess ... dextrins, thus diminishing the possibility ... cessive fermen... —*W. J. Pearson: practices in in... 6:38, 1930; a... April, June ...*

... treatment of diarrhea, "Dextri-maltose preparations are preferred, for they do not ferment readily, are rapidly absorbed and leave very little for fermentation."—*V. A. Blenkle: Protein milks in infant feeding, Arch. Pediat., 42:743-760, Nov., 1925.*

... ated as the ... y the carbohydrate. It ... ally if given beyond 6 ... rrhoea in many infants. ... avoided and if it is de... unt of carbohydrate, it is ... actose by dextri-maltose ... mixtures (Mead's Nos. 1 and 2). In our view cane-sugar is less suitable than lactose, and if for any reason there is objection to the use of lactose, is obtained by the addition of carbohydrates, while fat and casein are reduced. For this purpose dextrimaltose and flour are better than the ordinary sugars, since they are more slowly absorbed and have greater efficacy in their powers of controlling the flora in the large intestine."—*W. J. Pearson ... W. G. Wyllie: Recent Advances in Diseases ... Blakiston's Son & Co., Phila., 1930.*

... gred to partly ... best to ...

"... I begin to add carbohydrates slowly, by replacing ¼ ounce Casec every two days with ¼ ounce of Dextri-Maltose, preferably Dextri-Maltose Number one. As a rule, this is tolerated. When one ounce of Dextri-Maltose is used, the Casec, of course, should be discontinued."—*J. ... Reed: The etiology and ...*

In cases of malnutrition and indigestion, "The appetite improves rapidly, and the stools soon become normal in appearance, if the sugars are intelligently prescribed. By this I refer to proper proportions of dextrin and maltose. When there is a tendency to looseness, I have used t... ...—*M. Ladd: Furth... ...hydrates; ... ...genized olive oil mixtur... July, 1916.*

"When sugar causes diarrhoea one can change the form of it. Mead's Dextrimaltose in small doses is more quickly absorbed and so superior to castor [cane] sugar. Lactose is expensive and seems not to be better than castor sugar."—*H. B. Gladstone: Infant Feeding and ...*

"After the preliminary short period of starvation, protein milk should be used. . . . When the diarrhoea has been sufficiently checked, dextri-maltose may be added and gradually increased until from 4 to 6 tablespoons are being used."—*W. L. Denney: Acute nutritional disturbances of infancy, Univ. West. Ontario M. J. 2:132-137, April, 1932.*

"Milk-sugar, which has been so extensively used in the past, should never be used where there is any digestive disturbance. It is not as easily digested as either cane-sugar (granulated sugar) or dextri-maltose. The latter is the best of all sugars to use, especially if there is any tendency to looseness of the bowels."—*A. Brown: The Normal Child: Its Care and Feeding, F. D. Goodchild Company, Toronto, 1923, p. 120.*

For cases of fermentative diarrhea, ". . . the ideal plan of treatment would be to give a food which is low in sugar (the food which that group of organisms thrive on) and high in protein. Calcium caseinate milk accomplishes this purpose. In our series of cases, we found it was necessary to use the casein calcium for from 5-8 days; we then stopped it and added dextri-maltose to the formula."—*A. G. DeSanctis and L. V. Paider: The value of calcium caseinate milk in fermentative diarrhea, Arch. Pediat. ...*

Just as DEXTRI-MALTOSE is a *carbohydrate* modifier of choice, so is CASEC (calcium caseinate) an accepted *protein* modifier. Casec is of special value during the summer months (1) for colic and loose green stools in breast-fed infants; (2) in fermentative diarrhea in bottle-fed infants, (3) as a prophylactic against diarrhea in infections.

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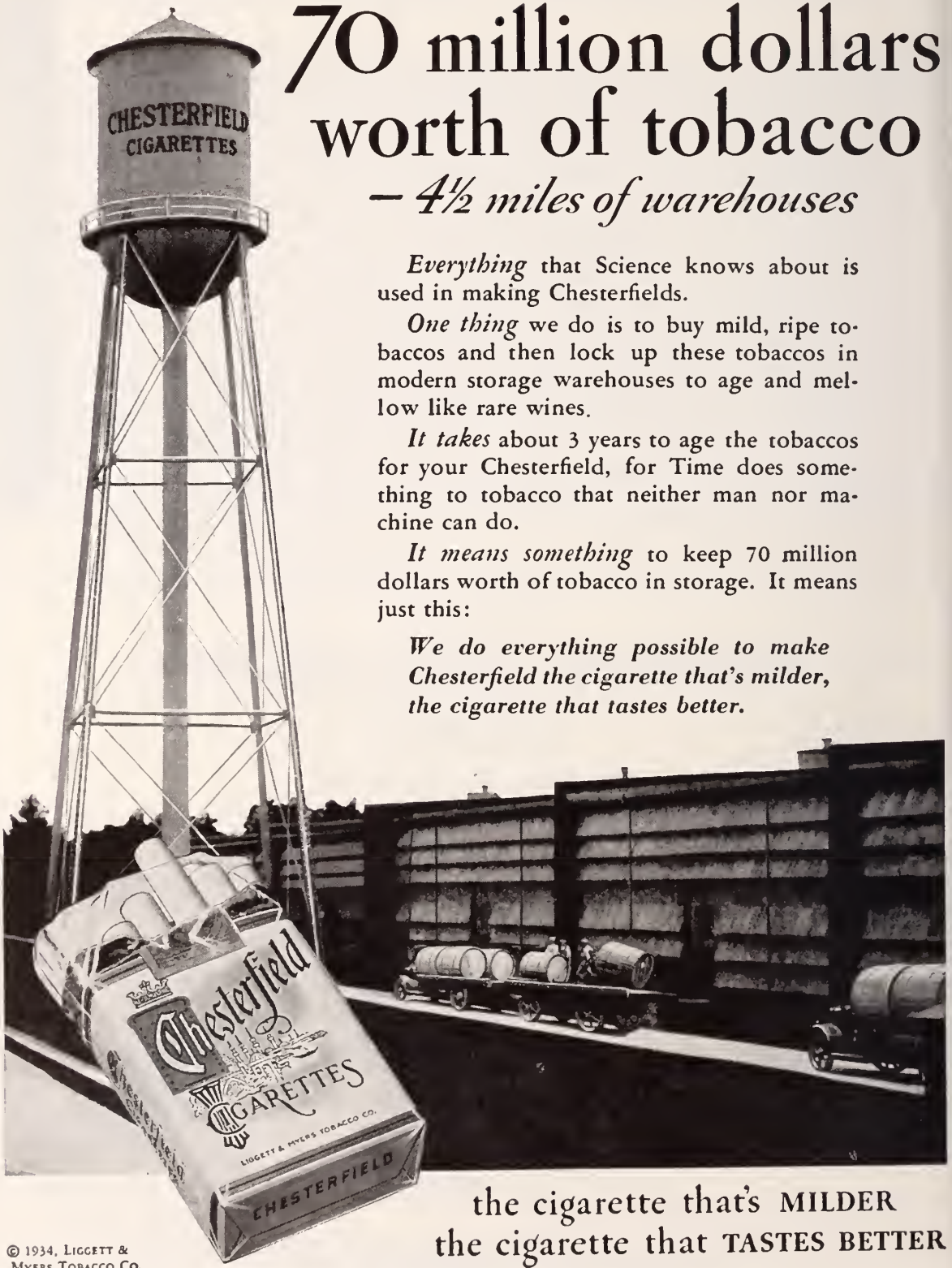

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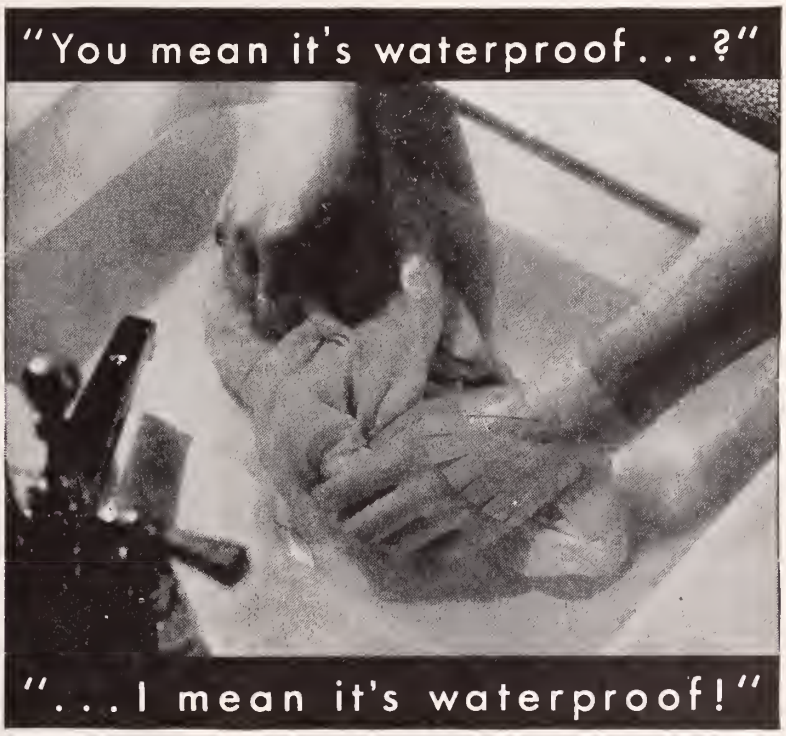

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THE WISCONSIN MEDICAL JOURNAL

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Full Thickness Skin Grafts in Finger Amputations*

By T. S. O'MALLEY, M. D.
Milwaukee

EACH anatomical area or region of the body is particularly prone to certain types of injury or disease. Aside from the respiratory infections, no area of the body in any way approximates the group of injuries and infections to which the hands and fingers are subjected.

The only actual proportionate statistics that are available as to proportionate cost and time loss to the individual and community are those of the Wisconsin Industrial Commission. These show that for the years 1927, 1928 and 1929, the total of all injury cases settled through them was 64,921. Of this number, 2,402 were for amputations in hand or finger injuries (that is—those hand or finger injury cases which during that period of time lost one week of work or more because of their injury or had some permanent partial disability resulting from amputation of hands or fingers.) The aggregate amount of indemnity paid in all injuries for that period was $11,856,827.00; of this amount $1,087,346.00 was paid for hand or finger amputations. Of a total of 9,674,336 days of work lost for all injuries, by the working man, the hand and finger amputations accounted for approximately 92,707 (and this figure is this large only because the traditional sore thumb is not taken more seriously by both the injured man and ourselves).

The aggregate amount of medical aid paid for all injuries during that period was $3,797,824.00 of that amount you and I received a portion of $197,259.00 for the care of injuries resulting in amputations of the working man's hands and fingers. Now I may have, and probably have, misled you by these figures which show approximately one-tenth to one-twelfth of all injury costs and time loss to be due to hand and finger amputation cases. One-tenth to one-twelfth is only part of the picture because, as I have mentioned, these are only those cases which received compensation because of the fact that they were unable to work due to an injured hand, or finger, or fingers which resulted in amputation—for a period of one week or more, or received compensation because of the fact that their hand or finger was not useful as formerly and consequently their future earning ability lessened. There is still another group which we treat—those who are able to continue work and are fortunate enough not to have a disabled finger or hand. These people are not available for statistics. Consequently we are low on our estimate as to the number, cost and loss regarding all hand and finger injuries resulting in amputation.

With this latter group come those non-compensable cases and all non-industrial cases which we can only imagine would be proportionate. Those cases which occur in the home, those non-insured individuals, those automobile accident cases.

I am not satisfied with the amount of thought that practically all of our physicians give this particular one-twelfth of our injury cases in industry and private life. There are innumerable surgeons who can very properly remove an appendix through a very sightly scar but the number of these same men who will give an amputation of a few fingers any serious thought is rare and certainly any patient is going through life less handicapped losing his appendix through an *unsightly* scar than losing a finger at the proximal joint instead of at the second.

* Presented before 91st Anniversary Meeting, State Medical Society of Wisconsin, Milwaukee. Revised to date of publication.

Now how are we going to reduce this waste of earning power which is paid for temporarily by compensation which does not actually compensate, aside from an estimated statistical stipend? How are we going to be of greater service to those other cases which are in no way entitled to momentary compensation?

This loss to the individual, this loss to the insurance companies and this loss to the community can be reduced by several methods, some of which I am going to mention in general and one of which I will take up in detail. In general we can reduce disability by giving more thought, care and study to the apparently minor injuries. For instance, when a minor appearing abrasion or laceration or burn of the hands or fingers presents itself to us, do we give any thought to the anatomy, the bacteriology, or the future function of that hand or finger? Certainly not. We give it a casual inspection, possibly cleanse the area immediately around the wound, apply a supposed antiseptic, of unknown value, which some detail drug man has given us a sample, and convinced us of its efficiency, we put on a dressing, wet or dry according to our habit only, and tell the man to come back tomorrow or three days from now. (There are some non-hospitalized traumatic cases who deserve bi-daily dressings.) Now have we fulfilled our responsibility to everybody concerned in this type of injury? No! We have been distinctly irresponsible to everyone. The man, his family, the insurance company, the community and ourselves. There isn't a hand or finger laceration, abrasion, contusion or burn but deserves the same thought we would give an acute intestinal obstruction. They may both, if given late and inconsiderate care, cause death. The hand and finger injuries if not terminating that drastically, may cause loss and disability far exceeding death in cost to the community and the individual.

SKIN GRAFTS

In the space allotted to this paper we cannot go into the various treatments, diagnosis, etc., of each of the injuries of the hand, but I would like to bring before you, for your trial and use, the free full thickness skin graft in the cases of loss of areas of skin and underlying soft tissues; also take up in some detail the use of the free full thickness skin graft, especially in finger amputations, as a means of reducing and preventing further loss of length to the part and consequently preserving greater function. Especially in the amputations through a phalanx, where re-amputation, to give a satisfactory stump and pad, would necessitate sacrificing the joint proximal to the original amputation. Also at the other points along the fingers or thumb where a portion of the bone of the phalanx must be cut back to give a satisfactory stump.

These free full thickness grafts do not have any great amount of contracture and consequently can be used equally well where the evulsion of skin has taken place extending over a joint proximal to the amputation, because of this lack of contracture you will have a free joint which is not limited by scar. They form a very good non-tender pad over the bone and do not tend to break down under occupations requiring considerable pressure or trauma to them. As a matter of fact, in the normal use of the apposing fingers and thumb the actual tip is not used to grasp, but the palmar surfaces of the fingers and thumb, and this is even more true where amputations have been performed.

The healing of these grafts is rapid although not so rapid as healing would be in a re-amputated stump where a flap is used. However a slightly prolonged healing period is preferable to a shortened member.

Practically all traumatic finger amputation cases which are only a few hours old and which are not definitely potentially infected may be given the advantage of this procedure. Oblique as well as the transverse finger amputation cover is equally well. Any case up to six to eight hours old can be grafted as well as can those cases which have gone on to a point of clean granulations.

In order to have success with any free full thickness graft we must know that for the first twenty-four hours nourishment of the graft is by the plasma of the host followed

in the next twenty-four hours by anastomosis of *like* sized capillaries between host and graft; then takes place an upward growth of capillaries from the host inside the old vessels of the graft. The circulation is not complete before the eighth day by the growth of arterioles into the graft, at which time the blood supply becomes adequate to fully nourish the graft.

TECHNIC

The actual technic is very simple but extreme care is necessary in carrying out certain details.

Thorough cleansing of the stump and hand with soap and water followed by ether. Do not use iodine or other antiseptics as they tend to devitalize tissues more than cleanse.

Thorough removal of contused soft tissues of the stump must be done; loose and sharp pointed spicules of bone must be removed. In removing the non-viable soft tissues use a scalpel rather than scissors as scissors crush the capillaries which we are going to ask to grow up into our graft in the next twenty-four hour period. Bleeding must be controlled by fine ligature and hot saline sponges. Oozing is not to be tolerated as it tends to loosen and raise the graft from its host.

Making perforations in the graft for the escape of serum is not advisable as the excess serum will be minor in quantity if care is observed in ligating the vessels, the serum will find adequate escapes between the sutures. Further, in making perforations damage is done to the cells which makes them less viable and also in the areas surrounding the perforations damage is done to capillaries and arterioles.

Measure accurately the area to be covered or make a design in gutta-percha or tinfoil that has been sterilized so that the graft will accurately cover the area to be grafted. It will be under the same tension as it was in its natural bed thereby keeping open and preventing collapse of the vessels through which the graft is to receive its nourishment.

Grafts should be auto-graphs and because of convenience to the patient it is preferable to remove them from the arm on the same side as the host and from an area of the arm where there is not a too abundant growth of hair.

In removing the graft, as mentioned before, cut so as to have it rather accurately fit the area to be grafted—removing the fat with a razor or sharp scalpel down to a point on the graft where the papillae show through.

Suture the graft edges accurately with a fine needle and fine non-absorbable suture material, interrupting the suture and placing the sutures in close proximity leaving free ends above knot long enough that they will aid at the time of suture removal.

Pressure of approximately 30 mm. should be maintained equally distributed over the graft when applying dressing and continued until first redressing. Ferris Smith recommends the use of a rubber balloon inflated to a point equal to 30 mm. of pressure when incorporated in the dressing. This rather complicated procedure is not well adapted to finger grafts. I have found that excellent results may be had in maintaining pressure with a small section of a rubber bath sponge incorporated in the dressing or simply by maintaining pressure by firm bandaging with a gauze pad over the graft.

Immobilization of the part is necessary for a period of five to six days, so as not to disturb the growing capillaries. I find that in the primary dressing the first redressing at five to six days, and in the subsequent dressings, that the dry dressing is preferable, not causing the maceration produced by a moist dressing. At redressings, especially the first ones, the dressings may be loosened by soaking the original dressing in warm saline for one-half hour. A small quantity of plain white sterile vaseline or paraffin mesh may be laid next the graft in subsequent dressings to prevent sticking.

In conclusion we have several methods by which we may reduce the disability of traumatic finger amputations. The free full thickness graft used in place of re-amputation of the fingers will save length of phalanges and save joints that otherwise would be sacrificed.

The application of the free full thickness graft is a simple and satisfactory procedure if carried out with a small amount of care and accuracy.

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Uterine Fibroids and Radium

A Resume of 370 Cases in Private Practice*

By A. O. OLMSTED, M. D.
Green Bay

IT WAS not until 1853 that the first recovery after total abdominal hysterectomy was reported by Walter Burnham in Nelson's North American Lancet, although the first attempt was made by A. M. Heath in 1843. Compared with ovariotomy, first performed by MacDowell in 1809, intra-peritoneal operations upon the uterus are comparatively modern developments of abdominal surgery.

Incidence—Age. Boyd estimated the incidence of uterine fibroids in white women as 1 in 5, and in negro women as 1 in 2. The Haggard Clinic reports 70% were 40 to 55 years of age while 25% were between 35 and 45. Five per cent were under 35. Ewing advises that 50% of all women over 50 years and 20% of those over 35 years are hosts to uterine myomata.

Our personal records of 370 cases in private practice show 10% under 30, 2 at 19 years and 3 at 21; 22% were between 30 and 40; 50% were between 40 and 50; with 15% between 50 and 60; 3% were over 60. The oldest patient treated was 80 years of age.

Sterility. Women who have had children are less liable to develop fibroids than those who have had none. Fifty per cent of nulliparae at age 50 have fibroids.

Our own records show that 22% of our cases were nulliparae; 10% were 1-para; 11½%, 2-para; 12½%, 3-para; 12½%, 4-para; with 31% from 5 to 20-para.

Occupation. The frequency, writes Nakuschkin, seems to be somewhat dependent upon the occupation of the patients. 61.6% did housework; 32.4% were independently employed. The families of these same patients were divided as follows:—intelligent, higher officials and tradesmen, 40.6%; laborers, hand workers and lower officials, 41.7%; farmers, 17.7%.

Weight and height. It is also found that myoma patients are slightly below the average height and slightly above the average weight. This cannot be regarded as indicative of good living conditions, but should doubtless be viewed as the effect of the endocrine influence.

The frequency of these tumors and the serious results which may be brought about by them demand careful consideration of each case.

Etiology. The theories advanced by the various writers as to the etiology of uterine myoma may all be considered feasible but as yet no one theory covers all cases.

Ewing writes, "Summarizing the evidence, one may conclude that simple uterine myoma arises chiefly from a disturbance in the development of the tubes, uterus, and vagina from Müller's ducts, which often leads at the same time to gross deformities and infantile characters in these organs."

Veit considers sterility a strong factor in

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etiology and concludes that abnormal excitation and congestion of the organ without conception may excite tumor growth. Another writer offers the theory that "their marked influence during the 4th and 5th decades of life and their prevalence in the negro race justify the assumption that chronic inflammatory lesions of the pelvis are factors in their growth." Williams emphasizes the fact that uterine myomas are often associated with a large number of abnormalities of the genito-urinary tract.

Nakuschkin—"It has, nevertheless, been observed that the development of the myoma is always preceded by a period of sterility of more or less duration, in more than 80% of the author's cases. In those cases in which pregnancy and myoma coincided there had always been a period of sterility preceding, varying from 2½ to 18 years and averaged 9.2 years. One comes in this fashion to the general pathogenetic assumption for uterine myomas: The myoma is a menstrual product of sterile women with high reproductive potency."

Symptoms. The symptoms produced by myomata are too well known to require description. Hemorrhage and pressure symptoms and symptoms developing from complications such as salpingitis are among the most frequent.

The character and severity of the symptoms are in accord with the lesions present, and as these vary greatly so also do the symptoms. All cases are symptomless in the early stages and some never cause trouble.

Treatment. The treatment for uterine myoma offers us a choice of three methods: (a) Surgery—either myomectomy or hysterectomy — which is indicated in about one-third of the cases with a resultant mortality ranging from the 1.7% reported by Victor Bonney in his Hunterian Lecture, through a 4.4% shown by the Haggard Clinic, 7.1% recited by the Nashville General Charity Hospital, to the mortality of the general surgeon which is variously estimated as 20%. (b) X-ray offers a field of treatment which is not considered here. (c) Radium is the third method and was first used in the treatment of benign uterine hemorrhage by Oudin and Verchire. These writers introduced 11 mgms. of radium into the uterine cavity for 15 minutes, repeating the treatment five or six times at intervals of four or five days.

RADIUM ACTION

Uterus. Radium produces in the uterus a distinctly local macroscopic and histologic change similar in general character to the changes produced elsewhere by irradiation. A localized sloughing or necrotic area is present, and this may, and generally does, involve the proximal layers of the myometrium, especially in those cases in which a moderately thorough curettage has preceded the irradiation. This area may be more than 5 cm. in length and 1 to 1.5 cm. in breadth, but it is generally considerably smaller. The area of necrosis is surrounded by a zone of inflammation which may be seen upon the anterior and posterior walls. The area of necrosis heals slowly, often persisting for weeks or even a few months. This corresponds in duration to what is known concerning similar radium reactions upon portions of the body where they can be observed more accurately. These findings account for the fact that patients treated by intra-uterine irradiation develop a persistent leucorrhoea. In the great majority of cases an examination made two months or more after the treatment discloses little or no macroscopic evidence of irradiation.

Despite the lack of evidence of irradiation in the uterus some months after the treatment, amenorrhoea is generally permanent. Many uteri have been examined in which, even after careful histologic examination, they were unable to demonstrate any evidence of previous irradiation. In none of the uteri were massive cicatrices present. The stroma of the endometrium at the site of the irradiation is often somewhat denser than normal but not more so than is often observed in non-irradiated specimens. A localized fibrosis of the endometrium at the site of previous irradiation is also observed at times, but these changes may be absent. When, however, they are present, they are

distinctly localized and generally moderate in degree.

Ovary. Numerous experiments have been performed for the purpose of determining the effect of radium upon the ovary. Forsdike reports the results secured in a series of experiments. This investigator states that, with strong doses of irradiation, the effects are manifest in a few hours. With moderate doses there is a definite, quiescent period before any change is observed, but the microscopic changes are identical though delayed. Apart from the engorgement of the vessels and hemorrhages, the primordial follicles are the first to be affected. Later, the cytoplasm of the cell becomes altered but the cell is probably destroyed by the action upon the nucleus.

They believe, therefore, that the success attained by intra-uterine irradiation by radium is due mainly to the action of the radium upon the ovary and the effects upon the uterus are of secondary importance.

The post-irradiation atrophy of myomata can probably be explained by a deficiency of the ovarian hormone. In the early days of abdominal surgery a similar shriveling of the tumor was frequently observed to follow a bilateral oophorectomy.

Let us sum it up in this manner:—The property of the rays responsible for this change in fibroids may be that of a specific action on hypertrophic and hyperplastic myomatous tissue. It may be that the gamma rays have the power to transform fibrous connective tissue into finer fibrils, or it may be the action of the rays on the vascular supply causing obliterative endarteritis of abnormal vessels rapidly and of normal vessels gradually, thus starving the neoplasm to its eventual atrophy.

The great regularity with which one may produce good results with moderate intra-uterine dosage casts some doubt on the role of ovarian changes due to radium rays.

Indications for radium. The practical value of radium in treatment of certain tumors of the uterus is not generally appreciated by the profession at large. The results of surgery are on a permanent and satisfactory basis. The results obtained from radium are even better.

The first requisite, as in any disease, is a correct and comprehensive diagnosis. A discriminating selection of cases suitable for irradiation must be made to secure satisfactory results. Treatment by irradiation requires carefully controlled and measured dosage administered in a cautious manner.

The chief indications for intra-uterine irradiation with radium may be briefly stated as follows: Benign uterine hemorrhage; fibroid enlargement of the uterus, producing symptoms; polypoid endometritis due to circulatory disturbances from overgrowth of fibrous and muscular tissue of the uterus; tumors not over 7 inches in diameter; for continued bleeding after myomectomy; as a second choice method for the young or old refusing surgery.

Contraindications. The contraindications may be summarized as follows: Larger than 7 inches in diameter; rapid increase in size; pressure symptoms requiring immediate relief; associated pelvic pain; pedunculated tumor; tumors in young women who desire later pregnancies; nervous women with a cancerphobia where the diagnosis is not absolutely clear; in extended calcareous or cystic degeneration; during pregnancy; associated neoplasms such as fundal carcinoma or ovarian tumor; the presence of intra-peritoneal lesions other than the myoma which requires surgical attention.

To the above, Keen adds radiophobia as a contraindication. Such a patient has generally decided for herself against this treatment and her decision should not be disturbed. The neurasthenic, over-sexed, emotionally unbalanced woman is best not treated by irradiation.

TECHNIQUE

The technique used by us has been developed with equal thought to the results anticipated and the comfort of the patient.

The patient is prepared as carefully and thoroughly as if she were to be the subject of a major surgical operation. Only the very nervous and those with some vaginal atresia are given an anesthetic. Although anesthesia is generally advocated along with biopsy, we seldom use either. The biopsy has a distinct value in some cases but we

place our reliance upon the clinical signs and physical examination rather than subject the entire endometrium to the sharp curette with the altogether doubtful outcome microscopically.

Time. Usually 1800 milligram-hours in patients over 35 years, applied intra-uterinely will suffice to cause menopause. This is our usual dosage, varied as the exigencies of the case require. The irradiation is given in divided time with a day's rest between applications. The patients object less to this than to the long, uninterrupted treatment. It does not lengthen the time of hospitalization, which is usually four or five days, and there is not much likelihood of causing that disturbing but harmless radiation nausea.

Occasionally we find that the extreme size of the fibroid necessitates further irradiation and this may be applied through several ports on the abdominal wall to the extent of possibly three or four thousand additional milligram-hours. This method requires that the radium be heavily screened in addition to the usual one inch distance.

Application. In making the intra-uterine application, the radium is screened with silver and rubber, and after the length of the uterine canal has been determined, a cross piece of rubber tubing, marking that length, is placed upon the applicator and the radium is introduced. Packing the vagina tightly with sterile packing against the cross-piece holds the radium in situ.

Postoperative care. The patient is instructed to take a daily vaginal douche with a mild antiseptic and to continue to do so until the discharge ceases. She is requested to return at least once in two months for examination over a period of eight months or until we are satisfied with the result.

Effects. Clinically, the effects of this form of irradiation varies greatly as do the types of fibroid and one may expect the immediate effects to be anything from a very mild nausea to an annoying condition typified principally by a feeling of malaise. Both of these conditions are transitory and usually do not last longer than a few days. In those with a long-continued bleeding and pronounced anemia, the usual effect is a gradual cessation of the hemorrhage with the substitution of a serous and frequently a muco-purulent discharge. In those who have evidenced a regular but excessive flow, the usual effect is that the first period following irradiation may be unchanged from previous periods, the second period is about one-half the amount and few women undergo the third period. Radiation is essentially a destructive process involving the disappearance of the immature, rapidly-growing, fibroid cell, and its replacement by connective tissue. The blood supply of the growing tumor is cut off, and the engorgement of the bleeding uterus is reduced by the production of an endarteritis. The Graafian follicle is either destroyed or undergoes cystic degeneration. The corpus luteum and the internal secretion of the ovary are evidently not destroyed. By the moderated dosage now in use the internal function of the ovary is not depressed to any greater extent than in the normal climacteric, for the radio-therapeutic menopause is not more stormy than the normal.

A gradual, progressive decrease in the size of the mass is the usual result, although it may shrink rapidly in purely myomatous growths. At the end of six months, fibromyomata disappear or decrease to a benign, stationary fibrous result.

Recurrence. Eighteen of our 370 cases were re-treated for return of the bleeding, from 2 to 28 months following the first irradiation; the average being 8½ months. One patient was under 30; 8 were between 30 and 40; 7 were between 40 and 50; 2 were over 50.

Two of our patients had subsequent hysterectomy. One had taken the irradiation to check hemorrhage in preparation for surgery as the mass was extremely large and pedunculated. Four months following irradiation the hysterectomy was performed with uneventful recovery. The second case was operated upon following a complete cessation of hemorrhage with the uterus reduced to normal size. The patient was insistent upon surgery, despite her good result

and the hysterectomy gave forth a uterus measuring two inches from cervix to fundus.

Salpingitis. Three of our patients developed a severe salpingitis following irradiation, two having a stormy time of it for about three weeks and then making a slow recovery; in the third case, we were suspicious of trouble in the offing, but, various smears being negative, we proceeded to irradiate and in another three weeks we were confronted with a large abscess in the culde-sac; this was thoroughly drained and three months later the badly infected tubes were removed followed by an uneventful recovery.

Mortality. The only death in our series was of a woman 54 years of age with a large bleeding fibroid and a hypertension of no mean degree. Four days after irradiation she had a cerebral hemorrhage and expired within 24 hours.

CONCLUSIONS

The following conclusions are presented for your consideration:

(1) The frequency and insidious development of this condition warrants more careful examination of our female patients and justifies a stimulated campaign for periodic health examinations.

(2) In treatment of fibroid uterus, surgery and radiotherapy have distinct indications and are determined by objective findings.

(3) Surgery and irradiation are not competitive methods. One or the other should be chosen by intelligent discrimination after careful consideration of the individual case.

(4) The mortality in the treatment of fibroids of the uterus today should be 1% or less. A mortality rate materially higher than this may justifiably raise a question as to efficiency of method.

(5) One irradiation by no means contraindicates a second treatment and a recurrence can usually be cured in this way. Furthermore, intra-uterine irradiation in no way mitigates against the success of a subsequent operation, although this has been rarely necessary.

(6) Whether we accept the ovarian, myometrial or endometrial theory regarding its etiology is of no special importance as far as treatment is concerned as time and experience have amply demonstrated that irradiation is an almost certain cure in all selected cases.

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The Use of the Colloidal Phase in Urine for Diagnostic Purposes*

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URINE, like all excretions, is a most heterogenous system consisting of ionized, molecular, and colloidal dispersions aside from suspended microscopical particles. The concentration of the ionized and molecular phase is incomparably higher than that of the colloidal phase, except under the abnormal condition of albuminuria which has been entirely excluded in these investigations.

Naturally only the total excretion in 24 hours can be used for comparison, amounting to an average of 0.3g in normal adults. On the other hand it seems that under normal conditions of diet (without excess in protein and salt intake) urines of normal individuals brought to the same specific gravity contain a fairly constant percentage of colloidal substances.

Some years ago Hugo Pribram directed attention to the adialyzable fraction of urine and in the laboratories of Prof. Von Jaksch in Prague, he and I started some experimental work on the urine colloids. We separated and purified the colloidal phase of fresh filtered urine by dialysis against running distilled water, and concentrated the adialysate. This salt-free colloidal fraction freed from any suspended particles by adequate filtration showed some biological effects in animal experiments. Intravenously injected into rabbits, it caused myosis and hypnotic symptoms without severe toxic effects. In vitro it retarded coagulation and proved slightly hemolytic for rabbit blood. This adialysate was fractionated by the addition of 2 normal acetic acid, yielding a biologically ineffective protein precipitate and the biologically active filtrate. Further studies undertaken to disclose the nature of the latter fraction suggested a highly complex composition with a total nitrogen content of 15.3%. As the purine body nitrogen was found to be very low and many of the protein color reactions positive, this colloidal fraction was considered a mixture of catabolic protein derivates.

For clinical studies the quantitative determination of the urine colloids by the direct gravimetric method is technically too time consuming, and the results are then of comparative value only if the same kind of a dialyzing membrane is used. For clinical purposes Bechhold, Schemensky, and Reiner therefore advised the stalagmometric determination of surface tension, which depends largely upon the urine colloids. The drop count taken from urine of a certain specific gravity is divided by the drop count after shaking and filtering a portion of the same specimen with powdered charcoal to adsorbe and eliminate the colloidal disperse phase. Another stalagmometric quotient, the acid quotient, is obtained in a similar way after bringing the same urine with hydrochloric acid to a certain P.H. Pribram and I modified the above method somewhat, and, trying it on a larger number of clinical cases, we came to the conclusion that the colloidal

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phase in urine undergoes quantitative and qualitative changes in certain diseases. In accord with the above mentioned authors we found the most striking increase in the colloid content in fever, pregnancy, and malignant tumors. While Schemensky gave lower quotients for diabetes mellitus, we found the opposite. The explanation for this is that sugar containing urine brought to a certain specific gravity according to Schemensky's method is much more diluted than urine free from sugar, thus showing a lower colloid content. The lowest stalagmometric quotient was found in alcaptonuria, for which result I have no explanation.

Shortly after Abderhalden had published the main part of his fundamental work on the organo-specific defensive ferments "Abwehr fermente" in the blood and after his pregnancy reaction became widely known and practiced, Kafka wrote a short article on the Abderhalden reaction, successfully using urine instead of blood. Later investigations discredited his work insofar as urine was always found to contain dialyzable ninhydrin positive substances. Still in 1930, Abderhalden could prove by extensive research experiments the presence of specific placenta ferments in the urine of pregnancy, using the method of Willstaetter–Waldschmidt–Leitz, to specifically isolate ferments from heterogenous mixtures by adsorption and elution. For clinical purposes this method is still too complicated and time consuming, and Abderhalden finally found in acetone a suitable precipitant to separate the ferment containing colloidal fraction of urine.

PREGNANCY DIAGNOSIS

Two years ago when I started to use this method for the diagnosis of pregnancy, I was unable to agree with Abderhalden's findings. In every instance the acetone precipitate contained dialyzable substances giving a positive ninhydrin reaction, especially when I used larger quantities of urine, or urine of high specific gravity. Furthermore, I have been unable by dialysis to free the suspension of acetone precipitated colloids from these ninhydrin positive substances. I think this difference in the results is due to the different permeability of the dialyzing membranes. I used collodium bags prepared according to Pregl, while Abderhalden is always using Schleicher–Schuell dialyzing tubes.

Guided by the experience that Essbach reagent gave good visible precipitation reactions in peptone dilutions which are almost ninhydrin negative, and that Essbach does not react with the dialysate of acetone coagulated urine colloids, I used this simpler and cheaper reagent instead of ninhydrin. The procedure is as follows: Urine brought to 1020 specific gravity is precipitated in portions of 10, 20, and 50cc with equal parts of acetone. After standing fifteen minutes each portion is centrifugated at high speed, the fluid poured off and the centrifuge tube put upside down on a thick layer of filter paper to remove most of the fluid. Each precipitate is taken up in 2cc saline and transferred into the dialyzer with 0.lg dried placenta powder, some thymol being added to prevent bacterial action. The dialysis is carried out at 37° C against 2cc saline. After eighteen hours the collodium bags are removed and 2cc Essbach reagent is added. The results are read about one hour later by comparing the turbidity. Normal urine prepared in the same way, placenta alone, and the acetone precipitate alone, serve as controls.

With this method I have found that every urine contains nonspecific proteolytic ferments, the weakest reactions being obtained with morning voidings. A positive result in pregnancy could only be distinguished by a quantitative stronger reaction in all three amounts of urine compared with the normal urine controls.

A most disturbing factor is the variable permeability of the collodium bags, and in spite of all efforts to prepare these strictly equal, it is hardly possible to make two bags giving the same turbidity on the same test. I succeeded in overcoming this obstacle by using cellophane flat bottom dialyzers, thus assuring the identical dialyzing surface and equality of the membrane with the advantage of the possibility of preliminary tests for permeability and repeated use. Besides, the membrane is easily exchangeable.

With this improvement I was able to obtain absolutely positive results in pregnancies after the fourth month. In the later stages of pregnancy the volume of the acetone precipitate always appears increased as compared with normal urine, quite in accordance with the stalagmometric findings. Characteristic and almost of diagnostic value, is the increased amount of ninhydrin positive dialyzable substances given off from the acetone precipitate of pregnancy urine, especially if symptoms of toxemia are present.

In order to obtain more sensitive reactions, I tried to use larger quantities of urine. As the acetone precipitation becomes quite voluminous under such conditions and contains a large quantity of inert inorganic and organic matter which rather hampers the fermentative action, concentration and purification of the colloidal substances was tried. 100 cc urine of 1020 specific gravity was subjected to ultra-filtration, using a long narrow rather thick-walled collodium test tube cast attached by means of a rubber connection to a separating funnel containing the absolutely clear filtered urine with some thymol crystals. The top of this funnel is connected with the air tank of hydrostatic pressure system with a 100 cm. water pressure. To accelerate the ultrafiltration and assist in the elimination of the crystalloids, the collodium tube was entirely submerged under saline in an overflow container. Distilled water caused turbidity in the colloidal residue. The filtration was continued until about 5cc fluid remained in the collodium tube, which takes about five or six hours. The tube was then cut off and its contents further purified by dialysis against frequently changed saline. This colloid concentrate was precipitated with acetone and the test for organo-specific ferments carried out as described before. A great advantage is that this precipitate does not give off any dialyzable substances that react with ninhydrin and in this way I have always been able to obtain plainly positive or negative results with either the ninhydrin or Essbach reaction. In order to further increase the accuracy in reading the ninhydrin reaction, I constructed a simple coloriscope which permits the color comparison of the 2cc fluid in a 10cm thick layer, using accurately calibrated small glass tubes of 10cm length and 5mm inner diameter. With this method I have been able to obtain in a few instances positive pregnancy reactions after the second month, mostly cases which showed symptoms of vomiting. Never have I found negative controls positive if the work was done correctly and the placenta preparation fulfilled all requirements. Placenta powder a few years old gave unsatisfactory and often negative results in pregnancy cases.

The fact that nonspecific proteolytic action is so noticeable with the direct acetone precipitate and absent after dialytic ultrafiltration, can only be explained by the assumption that the organo-specific ferments are of coarser colloidal dispersity and that during the procedure of ultra-filtration against saline, the finer disperse nonspecific ferments pass the collodium pores. No experiments have yet been carried out to prove this assumption.

MALIGNANT TUMORS

Experimental studies using the colloidal urine fraction for the diagnosis of malignant tumors did not lead to very encouraging results, although the material I have worked on is still very limited. Some authors such as Strecker, Runge, Kaufmann, flatly deny the presence of tumor specific antiferments in the blood of cancer patients, while others such as Volkmann and Grassman, report 100% positive findings. Lendel in Berlin reported 60% correct results in the diagnosis of cancer cases, using the optic-interferometric method of blood serum. The reason for the high percentage of failures, according to Lendel, is due first to the lack of decomposition and resorption of sufficient tumor material to stimulate the production of antiferments, and secondly to the impurity of the tissue preparations containing too much of connective tissue aside from the tumor cell substances. Beck lately advised the use of a provocating injection of reaktin, a colloidal pyrogallic acid in adsorptive combination with small amounts of iodine, gold, and glucose. His results sound

astonishing, as he reported 91% correct findings in skin cancer, in contrast to 46% without this provocation. The interferometric method is certainly the most delicate means to detect any fermentative action, being 100 to 200 times as sensitive as the ninhydrin reaction. While it may be used correctly on clear blood serum, its use is absolutely impossible on the urine colloids because of their optical inhomogeneity. It is quite possible that the many negative results which I experienced in the search for tumor splitting ferments in the urine of cancer patients are merely due to the lower sensitivity of the chemical reactions for protein decomposition products.

Out of sixteen cases, only one breast and one uterine cancer gave a positive reaction. In both instances the controls with placenta have been negative. The breast cancer showed a positive reaction with the dried preparation of a medullary carcinoma of the breast, while the uterine malignancy showed positive results with three substrates, namely, cancer substrates from breast, ovary, and sigmoid. At that time I did not have a preparation from a uterine carcinoma. Both cases had extensive cancers and died shortly afterward. Another breast cancer with a negative reaction showed a strongly positive test following intensive radiation.

In order possibly to stimulate the formation of organo-specific ferments I tried to re-inject the isolated colloidal urine substances. Fresh urine, sterilized by Berkefeld filtration, was precipitated with acetone, the precipitate freed as thoroughly as possible from acetone, and an emulsion made in saline on neutral reaction the acetone precipitate is not soluble in saline, but the addition of a few drops of tenth normal acetic acid brings the floccules in solution. I have never experienced any dangerous after effects from intravenous injections, though the subcutaneous application proved locally rather painful.

One patient with an inoperable cancer of the stomach who gave negative reactions on three occasions, was injected every other day for one week with increasing amounts of auto-urine colloids prepared by the ultrafiltration method, and a very weak positive reaction with the substrate of a scirrhous gastric cancer appeared. This patient complained of restlessness and some pain in the back for a few hours after each injection. In a few other cancer cases similar injections did not change the negative reaction.

As I have been unable to obtain permission for such studies on pregnant women, I injected myself three times at intervals of three days with colloid fractions of 7–9 month pregnancy urine, using the colloids of 100cc urine each time. The day following the last injection my own reaction with placenta was strongly positive and stayed so for five days. One week later hardly a trace was noticeable. This observation is in accordance with Abderhalden's recently published experiments on dogs. He is of the opinion that the antiferments as such are transmitted, stimulating even more production. It seems more plausible to assume that catabolic placenta products of colloidal nature cause the formation of specific antiferments.

With my so far few and scattered experiments I have no right to go into theoretical speculations as to future possibilities in the cancer diagnosis by this indirect biological method, but I think there is opening up an interesting field for further studies, interesting from a theoretical standpoint and possibly later of some clinical value.

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Bacterial Endocarditis

A Case of Primary (?) Acute Staphylococcus Aureus Endocarditis with Recovery

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IN REVIEWING the abundant literature on endocarditis little is to be gleaned that can not be found in any of our standard textbooks. Some of these papers have found fault with the classification and nomenclature [1]; some have been primarily concerned with the etiological factors [2]; some have reported unusual features in the clinical course of the disease; and others have gone deeply into the findings at the autopsy table [3]. Streptococcus viridans has been established as the most common bacterial agent by such exhaustive studies as those of Libman and Cellar [4] as well as by Libman's later studies [5]. Other analyses as those of Lenhartz [6], Clawson [7], and Thayer [8] have shown Staphylococcus aureus as next in frequency. Osler [9] has drawn a clear picture of the condition, emphasizing the frequency of a previous rheumatic infection. Warfield [10] reports a case diagnosed clinically as a fulminating encephalitis, but shown by autopsy to be an acute Staphylococcus aureus endocarditis. Encephalitic symptoms are not uncommon and have been reported by others[11].

However, for the practicing physician diagnosis and treatment are the most important factors. He is, of course, interested in the etiology and pathology of the disease, but he must know how to recognize it and a reasonable method of treating it. Probably many cases go unrecognized because of the absence of the usual signs or the presence of some unusual feature which detracts the attention from the primary cause.

The acute, fulminating type of the disease which in other days complicated septic surgery is today seldom seen. Often the disease is insidious in its onset with the absence of cardiac signs or embolic phenomena and the patient is up and about, consulting the physician only after weeks of malaise, weakness, slight fever, and loss of weight. Endocarditis does, however, fall into a group of diseases in which a prolonged pyrexia, although often intermittent, is one of the clinical features. A discussion of the differential diagnosis of this group may not be amiss.

Space does not permit a listing of the many conditions which may cause a prolonged pyrexia. Some of the most common are: endocarditis, specific fevers, most of which belong to the typhoid-dysentery group, the chronic granulomatous group, certain metabolic diseases as gout, the blood dyscrasias, and a host of localized inflammations with or without the collection of pus. In many cases there are signs or symptoms, or facts in the history, which enable one to make an early diagnosis; in others the precise cause of the pyrexia may remain uncertain for weeks, and the correct diagnosis will depend upon some special examination.

Today certain laboratory examinations are made almost routinely on those who are ill. Blood counts are made to determine whether there is a leucocytosis or not, and if there is, whether there is a relative polymorphonuclear leucocyte increase suggestive of purulent infection. At the same time any blood dyscrasia will ordinarily be detected. In an obscure febrile condition, in addition to the usual examination of the urine, culture of specimens of urine obtained under sterile conditions may yield valuable information. Besides the common colon bacilluria of urinary tract infection it must not be forgotten that often the healthy kidneys eliminate living germs from the septicaemic blood stream. Pertinent data may be obtained by careful examinations of the stool for pus, blood, and parasites. Bacteriological study of the stool may also be necessary. Blood is easily drawn for serological tests which may quickly eliminate such possibilities as typhoid fever, paratyphoid fever A and B, malta or undulant fever, and dysentery due to Shiga's or Flexner's bacilli. Agglutinins do not appear in the blood stream

until after the tenth to fourteenth day, however. The blood can be cultured even if the patient lies some distance at home in the country. Billings [12] has shown the necessity of frequent blood cultures in order to obtain growth in some cases of septicaemia or endocarditis. In some other diseases positive blood cultures can be obtained, as early in those of the typhoid-dysentery group and undulant fever. In these diseases a positive culture from the urine often is more easily obtained. Occasionally rarer conditions yield positive blood cultures, as, streptothrix. The roentgen ray, although more difficult to use when the patient is confined at home, may be necessary to exclude such conditions as dental sepsis or pulmonary tuberculosis. In this latter disease intracutaneous tuberculin tests are invaluable in experienced hands when coupled with the physical findings. Wassermann and other complement-fixing tests are so generally used they hardly need mentioning; and last, but not least, the careful physical examination, not only complete, but with special reference to the vagina and rectum, should not be neglected.

REPORT OF A CASE

G. W., age twenty-one, was first seen in consultation at home in the country on June 25, 1930, complaining of a fever with the temperature ranging from 103°—104° daily for 17 days, fullnes in the chest, and a healing carbuncle on the right buttock. The carbuncle developed about June first, and spontaneously opened and drained. On June eighth the patient, while at school, had a chill and since then his temperature has been as above, rarely reaching normal. There have been no subsequent chills but several chilly sensations. He has had some early morning blood stained sputum, not purulent in character, and on June twenty-third there was a severe nasal haemorrhage. Except for occasional general and localized body pains, there have been no other suggestive symptoms.

There was no past infectious history except for the acute exanthemata. He has had no chronic cough, dyspnoea with or without exertion, palpitation, chest pains, nor night sweats. He has never been troubled by dysphagia, heartburn, jaundice, nausea, nor vomiting. His appetite has always been good and there has been no loss of weight previous to the present illness. He complained of no abdominal distress, present or past, and bowel movements have been regular, formed, and brown, without the use of cathartics. There was no history of dysuria, frequency nor urgency. He denied all venereal infection.

Physical examination: There had been a loss of 20 kg. (44 lbs.) in body weight. The eyes were bright and the patient was alert. The skin had a peculiar yellow pallor, but the sclerae were clear. There was no sinus nor mastoid tenderness. The ear drums were normal in appearance and there was no aural discharge. The tongue was coated gray. No acute inflammation of the throat or tonsils was observed. The pupils reacted to light and accommodation. The retinae were normal, no petechiae. The movements of the eyes and lids were normal.

There was no abnormal pulsation in the neck and the thyroid was not enlarged on palpation.

The thorax was symmetrical and of normal type. The expansion was regular and equal, and the lung excursions 3 cm. posterior as determined by percussion. Resonance and breath sounds were everywhere normal. The borders of relative cardiac dullness were on the left side, 5, 7, 8, cm. in the 3rd 4th, and 5th interspaces respectively. No cardiac dullness was determined to the right of the sternum. The point of maximum intensity was not visible but was palpable in the 5th interspace 7 cm. from the midsternal line. There was no thrill. The heart sounds were clear and there were no murmurs. Its action was normally rhythmic and the rate 110. The blood pressure was 125 mm. Hg. systolic and 75 mm. diastolic.

There was no abdominal tenderness nor rigidity and no masses could be palpated. The liver, spleen, kidneys, and colon were not palpable. Abdominal reflexes were present and normal.

There was no oedema nor petechiae. No lymph glands could be palpated. The knee jerks were present and equal. No pathological reflexes were obtained.

On the right buttock there was an old carbuncle, 6 or 7 cm. in diameter discharging serous material freely from two necrotic ulcers, each 1 or 2 cm. in diameter. No pus nor necrotic material could be expressed and there was no fluctuation. Culture subsequently showed Staphylococcus aureus. The blood count was as follows: Hemoglobin 12.69 gm. (75%); erythrocytes 5.4 millions; leucocytes 18,000; 76% polymorphonuclear leucocytes; 15% lymphocytes; 8% myelocytes and immature neutrophilic leucocytes. The urine showed no sugar, albumen, blood, nor bile, and miscroscopically there were no casts nor pus. Agglutination tests were made with B. typhosus, B. paratyphosus A and B, B. abortus, and B tularense, all of which were negative. The Wassermann was also negative. No tuberculous organisms were found in the sputum. A blood culture was made with brain dextrose broth. No growth was obtained until after 48 hours when there was an abundant growth of Staphylococcus aureus.

On June 30, 1930, sodium cacodylate grains 3 was given intravenously and daily injections of the drug were given grains 7 to 7½ subsequently. On this day there was precordial pulsation in the second interspace on the left and a harsh systolic

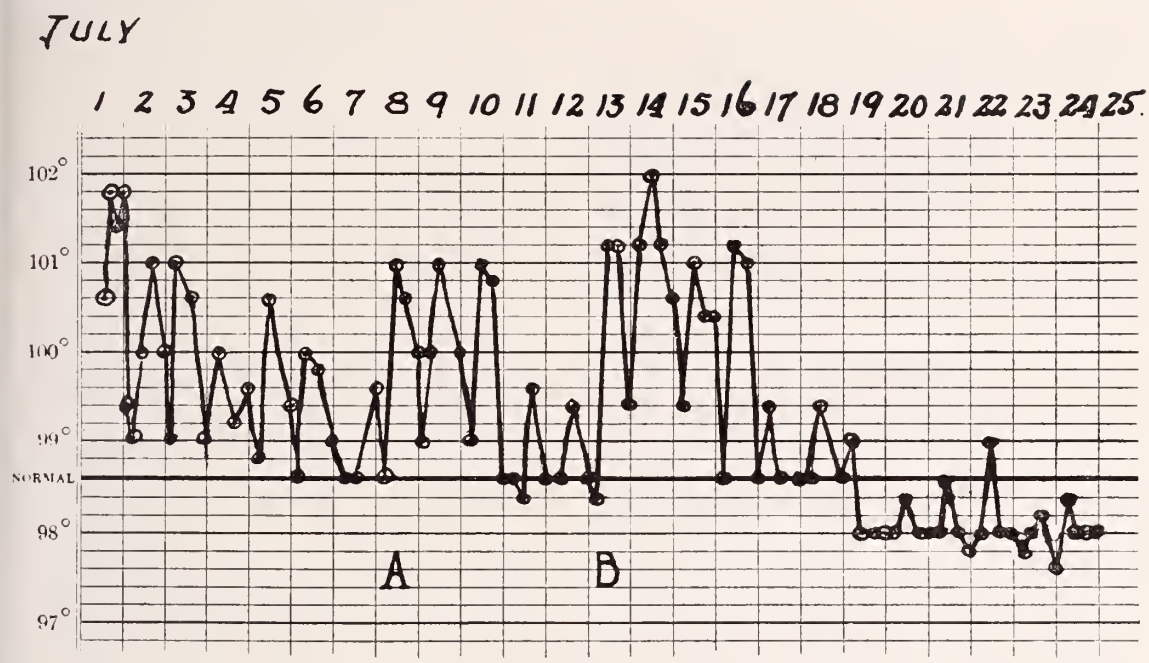

Fig. I. Temperature curve during the administration of sodium cacodylate. A—onset of arthritis of the right knee. B—onset of left pulmonary infarction.

murmur was heard at the base somewhat transmitted toward the axilla. For the following ten days this murmur was exceedingly variable. At times it was absent or barely audible while at other times it was exceedingly loud and completely filled the interval between the two sounds. At one time a presystolic murmur was heard. On July 4th there were marked visible irregular pulsations of the great vessels of the neck with a corresponding irregularity in rhythm and variability of the intensity in the sounds but no murmur. At this time also, there was a pulse deficit. The heart borders by percussion were unchanged; the spleen was not palpable but seemed to be slightly enlarged as judged by percussion. The next day the cardiac rhythm was regular (no digitalis was given). On this day it was easily seen that his yellow pallor was disappearing. His temperature by this time rarely was over 101°. By the next day, July 6th, a harsh presystolic murmur was again heard. No petechiae had been found. Examination of the blood showed practically no change from the previous examination except a decrease in leucocytosis, 18,000 to 15,200.

There was no blood in any of the urine specimens neither microscopically nor chemically. On July 7th the borders of cardiac dullness had extended 1 cm. further to the left. He complained of pain in the right knee. Examination was negative except for slight crepitus with extreme flexion. On July 13th he complained of slight aching pain low in the left axilla which was aggravated by breathing. There was no dullness in the chest nor any cough, but a friction rub was heard in the fifth interspace of the left axilla. On July 15th the right knee was very oedematous with tenderness most severe over the inferior margin of the patella. There was no redness nor local heat. This swelling in the knee continued for about eighteen days decreasing gradualy. On July 20th sodium cacodylate was discontinued. At no time had there been any evidence of arsenic saturation such as garlic breath, gastrointestinal disturbance, kidney disturbance, desquamation of the palms and soles, and so forth.

Sodium cacodylate was commenced on June 30, with a preliminary dose of 3 grains intravenously. Subsequently daily intravenous injections of 7 to 7½ grains were given for 22 days. Following the initiating of this therapy the temperature never exceeded 102° and with one or two exceptions the peak of the daily temperature dropped several tenths of a degree each day until 98.6° was reached. One of these exceptions was the possible infarction of the lower lobe of the left lung which occurred on July 13th. At this time the temperature rose from a peak of 99.6° to 102° falling back in a few days to the previous peak. The temperature remained normal the entire day, July 20th, and with the exception of one temperature reading of 99.0° was at no time subsequently found to exceed 98.6°.

On August 13th the patient visited the office. His weight was now 73 kg. (161 lbs.) an increase of 10 kg. (22 lbs.). The heart was apparently normal on examination, and no pathology was detected in the knee. On August 27th the leucocyte count was 8,800. He was again having trouble with the right knee and was placed on crutches. A blood culture on September 11th was negative for any growth after one week's incubation. The patient has been examined at frequent intervals since with no evidence of re-

currence of his trouble. It perhaps is interesting to note, however, that during the first week of July, 1931, he had a silent haematuria of fresh red blood and clots. Cystoscopic examination, culture and guinea pig inoculation of the urine were all negative insofar as demonstrating any pathological process. The blood in his urine lasted but a few hours and there has been no evidence of it since. His present weight, one and one-half years after his illness, is 90 kg. (198 lbs.) and the only cardiac abnormality demonstrated by physical examination is a faint presystolic murmur.

SUMMARY

This case has been reported with the idea of presenting the problem of differential diagnosis of prolonged pyrexia. In addition it is unusual both from the standpoint of etiology and the final result. Although infection of the endocardium is usually secondary to previous heart damage, especially rheumatic, it can be primary. Brodin and Richet [13] report a case following smallpox vaccination. Even though in my case but one blood culture was made early in the disease and a positive growth of an organism which may be considered a frequent contaminant was obtained, the clinical course sustains the diagnosis of primary acute Staphylococcus aureus endocarditis following the infection of an untreated carbuncle. Sodium cacodylate was used entirely in the treatment as suggested by Capps [14]. Other arsenicals may be more bactericidal, but perhaps not as safe. Many other substances [15] as mercurochrome 220 soluble, gentian violet, and so forth have been suggested, but none report as good results as recorded by Capps with the drug in question. Vaccine therapy also has fallen in disrepute. Browne[16] attempted an unusual therapeutic procedure as recommended by Hemsted, Horder, and Jockman. His patient was transfused with blood from sisters who had previously been injected with six doses of a vaccine made from the organism obtained from the patient's blood. Apparently this serum was not studied for its protective power and it is questionable as to whether the benefit obtained might not have been due to the transfusion. It is also recognized that negative blood cultures occurring in the course of the disease are not the only criteria upon which to base the prognosis, since patients frequently die under these conditions

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DIPHTHERIA TOXOID

The results of the tests made by John L. White and Emil A. Schlageter, Chicago (Journal A. M. A., March 24, 1934), indicate that the Park alum toxoid was somewhat more effective in producing immunity than the same lots of toxoid containing no alum. This was most noticeable in the series utilizing two doses of 1 cc. each at an interval of one week. In the authors' series, 96.1 per cent of 295 children were immunized by the Park alum toxoid in two months, and 100 per cent of 254 children in six months, as compared with 94.6 per cent of 263 children in two months and 95.9 per cent of 213 children in six months, the same lot of Park toxoid without the alum being used. The results likewise indicate that there is no decided advantage in using an interval of three weeks between doses as compared with an interval of one week. The percentages in the series in which two 1 cc. doses were used did not show any significant difference for either time interval in producing negative Schick reactions. Three doses of 0.5 cc. each of Park alum toxoid at weekly intervals were less effective than two doses of 1 cc. each of a similar reagent at an interval of one week. The former series gave 94.2 per cent of immunes at two months and 96.8 per cent at six months, as compared with 96.1 per cent in two months and 100 per cent in six months in the latter series. A single dose of the Park alum toxoid produced immunity in but 50.8 per cent in two months and 73.2 per cent in six months. The Park toxoid without alum for one dose only produced immunity in 49.2 per cent in two months and 82 per cent in six months.

Radiation Therapy in Medical Practice; III. Intraoral Carcinoma*

With Special Consideration of the "Coutard Method"

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SURGICAL treatment of intraoral carcinoma, i.e., tongue, buccal mucosa, tonsil and pharynx, has never been very satisfactory; it is also true that a high percentage of these patients seek medical advice at a rather advanced stage of the disease. Radiation therapy has become, therefore, the predominant method of treatment in these conditions during the last ten years. It is the consensus of opinion that radium implantation into the primary lesion supplemented by high voltage x-ray therapy or radium packs to the adjacent glandular areas represents the most effective procedure. Some radiologists prefer platinum filtered radium needles, others gold or platinum filtered radon seeds for use in intraoral carcinoma. The seeds have the advantage of convenient insertion even in places unsuitable for radium needles; they remain in the tissue, however, as foreign bodies and are difficult to anchor in soft friable tumors. On the other hand, the needles remain in the growth for a relatively short period—3 to 7 days—while the seeds irradiate the carcinoma for almost one month. In the light of our present knowledge this prolonged exposure is advantageous. Early lesions can be cured with the combined radium and x-ray treatment and in more advanced cases astounding degrees of palliation may be obtained or even a temporary clinical cure lasting for several years. It is perhaps best to treat the cervical glands by high voltage therapy or radium packs in *all* cases although the presence of metastases cannot be diagnosed clinically. Involvement of the glands renders treatment of both cervical areas imperative. Surgical exposure of these nodes and implantation of radium needles or radon seeds can also be carried out. A typical example of a carcinoma of the tongue treated according to these principles follows:

X-ray No. 1839, white female, 35 years of age. Patient had noticed a soreness in the right border of the tongue about three months before admission. Examination showed several small nodules over an area of about 2 x 1 cm. with definite induration extending as far as the midline and into the adjacent floor of the mouth. Wassermann reaction was negative. Biopsy revealed squamous cell carcinoma. No definite metastases could be felt. On 11-3-1931, eleven radon seeds filtered through .3 mm. Au., 1.5 mc. each were implanted into the lesion, giving a total dose of 2195 mch. X-ray deep therapy was given over the cervical glands and a total of 1600 r were applied to each side during a period of one month. The lesion responded well to the treatment and had healed completely on 1-28-1932. She has been examined since regularly and was last seen on February 21, 1934. There was no evidence of recurrence.

Our clinical experience of the last 10 years has demonstrated convincingly the superiority of radium implantation in intraoral carcinoma over roentgen therapy administered from the outside. However, two French radiologists, Régaud and Coutard, have developed a special technic for roentgen therapy of advanced intraoral lesions which has produced remarkable results. It is based on the fundamental experiments of Régaud in 1922, who showed that the effect of radium on the testicle of the goat is greater if small intensities per second are applied over a period of 28 days as compared with the same total dose being applied in one single sitting of five hours. His findings were confirmed by other investigators, who used x-rays and transplanted tumors in mice. Coutard tried the method clinically first on carcinoma of the larynx and in 1928 he reported a rate of 26% cure in 46 cases of carcinoma of the tonsil treated accord-

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TABLE I

Radiation	HVL Cu.	% in 10 cm. depth (Large Field)	r/ min.	Dose per field	Min. per field	Total Exposure	Total dose per field
180 KV., .5 mm. Cu. + 1 mm. Al. ---	.95	40	20	150 r	7.5	6 days	900 r
180 KV., 2.0 mm. Cu. + 1 mm. Al. ---	2.4	43	2.5	150 r	60	24 days	3600 r

ingly. The principal features of the Coutard "protracted fractional dose method" are (1) high voltage (180-200 Kv.), (2) heavy filtration (1.0-3.0 mm. Cu.), (3) low intensity (2-6 r per minute), (4) long single exposure (1-2 hours per day), (5) long total treatment time (3-5 weeks), (6) high total doses (3000-5000 r). It is assumed that the difference in the radiosensitivity between normal and cancer tissue can be used to better advantage with this type of treatment: The cumulation of the dose in normal and cancer cells is not identical.

Experiments were carried out in a German laboratory on rabbits in order to determine the role played by the dividing of the dose and by the protraction. No marked difference could be seen in the skin reactions nor in the changes observed in the heart muscle. However, a much more injurious effect was obtained in the blood, lungs and kidneys if the dose was subdivided but not protracted. It was concluded, therefore, that both factors are essential.

In view of the fact that unusually high total doses are applied it is essential that the reactions occurring in the skin and mucous membrane be carefully observed. Patients should be hospitalized if possible and the blood count and kidney function followed. On the 12th to 15th day the mucous membrane is usually quite red, swollen and there is pain on swallowing. Two to four days later a fibrinous exudate appears extending over the whole surface. There is very often loss of weight; a slight rise in temperature may also occur. Strict hygiene of the mouth is very essential. There is a good deal of variation as to the time interval between the beginning of the exposures and the appearance of these reactions. The full development of the fibrinous exudate within the buccal mucosa indicates the upper limit of safety for the treatment.

An inquiry into the technical factors shows that the use of this method is expensive. Patients must be treated daily, each exposure takes a considerable length of time causing an appreciable wear of the equipment and it also permits the treatment of only a small number of cases. Because of the high doses administered a most accurate determination of all physical factors controlling the dose is essential. For these reasons it would appear that the Coutard method is not the choice for routine treatment but should be used in carefully selected cases in laboratories properly equipped to carry out investigations of this type. We have modified the original technic somewhat and in Table I the necessary data are given permitting also a comparison with the standard deep therapy method. We have found that the reactions are nearly the same when using 1 mm. of copper instead of 2 mm. of copper. This statement is confined to apparatus delivering practically constant potential to the x-ray tube.

MODIFIED METHOD

We have treated over 20 cases with our modified Coutard method, mostly far advanced malignancies in the mouth, tonsil and pharynx. This is the group for which Coutard recommends his method. However, we are trying it carefully in selected cases of deep seated malignancies in other organs. Most patients have not been under observation long enough to permit of a statistical evaluation of the results. The majority were so far advanced that nothing could be expected except palliation. Suffice it to say, therefore, that the high doses are tolerated as a rule surprisingly well and that in a few cases the therapeutic effect is striking. We wish to emphasize again the neces-

sity of studying the patients carefully every day in order to prevent any untoward reactions. One case history of a successfully treated patient is briefly quoted:

X-ray No. 3222, white female, 70 years of age. Patient developed pain in the right tonsil area, particularly when swallowing, about 6 months ago. This pain increased, when heat or cold would come in contact with that part of the mouth. During the last two months she lost weight and a mass about walnut size appeared in the right cervical region. Examination revealed considerable enlargement and ulceration of the right tonsil with marked induration forward and back into the palate and also involvement of the right posterior border of the tongue with extension into the pharynx. There was undoubtedly a metastatic nodule in the right cervical glands. It seemed to us that the case was too far advanced for radon implantation and it was decided to give the Coutard method a trial. No biopsy was performed but the clinical diagnosis of far advanced carcinoma of the right tonsil with extension to the adjacent structures was agreed upon by the consulting surgeon and two otolaryngologists. The patient was treated beginning 7-10-1933, daily except Sunday and received a total of 22 exposures over left and right neck, the central ray being directed to the tonsils, giving a total dose of 2200 r in air. On the fifteenth day a definite reaction appeared in the skin and about the twentieth day there was marked reddening of the entire mucous membrane in the mouth. The mass started to decrease in size after the sixteenth treatment; when seen last on 1-23-1934, she was in good general condition and there was no evidence of local recurrence. There was no interference whatsoever with swallowing and the metastatic nodule had entirely disappeared. The pigmentation of the skin remained within normal limits.

SUMMARY

1. The combined x-ray and radium treatment of intraoral lesions is discussed and one case of carcinoma of the tongue treated with this method reported.

2. The principles of the protracted fractional dose method (Coutard) are outlined and the history of one case with inoperable carcinoma of the tonsil treated with this method is related.

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Treatment of Tuberculosis in General Practice; IV. Tuberculous Pleurisy

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IN TREATING dry pleurisy, one should follow the same principles that form the basis of the treatment of pulmonary tuberculosis. Prolonged bed rest is imperative, even when toxic symptoms are absent. Diminished respiratory excursions, while resting, greatly alleviate thoracic pain. Postural rest, i.e., having the patient lie on the diseased side is usually followed by abatement of pain in about half an hour. The external application of counter-irritants (tinct. of iodine, tinct. of capsicum, mustard plaster, chloroform or camphor liniment) is also of value, although less effective than heat. The prevention of cough by codeine in ½ grain doses, every hour for three doses, if necessary or the administration of the same dose three times a day, is of utmost importance. Adequate doses of the well-known analgesics should be given early and repeatedly as long as the pain persists. Adhesive plaster straps, applied in expiration, and reaching from beyond the middle line in front to beyond the middle line on the back, aid in the immobilization of the diseased part of the chest. In case of painful plastic pleurisy over the upper lobe immobilization and prompt relief from pain can be obtained by applying adhesive plaster strips vertically over the chest and shoulder. The strips should be applied during expiration and should reach from the sixth rib in front to the angle of the scapula. Only when external applications and the medication of codeine and analgesics are ineffective the hypodermic injection of mor-

phine is justified. Prompt and splendid results are obtainable by introducing air between the two layers of the pleura in dry pleurisy. The effect of such an artificial pneumothorax is not only palliative by separating the inflamed serous membranes and diminishing the motion of the lung, but also curative in that it improves the blood supply and the nutrition of the diseased area. Artificial pneumothorax should be induced in every case of dry pleurisy, when pulmonary tuberculosis is present on the same side, and when parenchymal changes on the opposite side are absent, or of minor extent and activity. From 300 to 500 cc. of air is injected at the first inflation. The inflations should be repeated at three day intervals during the first two weeks, followed by weekly injections of from 500 to 700 cc. of air. If there is no underlying parenchymal tuberculosis and artificial pneumothorax is applied, it has to be continued for at least three months, or until constitutional and localizing symptoms and signs disappear. (See chapter on technic of artificial pneumothorax.) * We have had the opportunity to observe good symptomatic and curative effect from inducing temporary paralysis of the phrenic nerve on the involved side.

PLEURISY WITH EFFUSION

Every case of pleurisy with effusion should be considered tuberculous unless other causal factors can be proven. For this reason general measures such as rest, fresh air, ultraviolet rays and adequate diet, should be resorted to in every case. Strict bed rest from several months to a year not only aids in the healing but also contributes to the prevention of later development of pulmonary tuberculosis. Light treatment in the form of graded irradiation should be applied to the entire body, not only to the diseased side of the chest. Smaller effusions will often be absorbed from a few weeks to a few months. Indications for aspiration of large simple effusions are as follows: 1. When fluid persists or increases over three months and medicinal treatment is unsatisfactory. 2. Without previous medicinal treatment when there is cardiac embarrassment, due to displacement of the heart and the large blood vessels. 3. In the presence of respiratory embarrassment caused by the loss of function of the lung on the same side by congestion, or by partial compression of the opposite lung. 4. When gastric disturbances develop because of pressure of the fluid upon the left dome of the diaphragm. 5. Symptoms of distress due to the weight of the effusion. 6. When active tuberculosis appears in the other lung. 7. When, because of the existence of pulmonary tuberculosis on the same side, the establishment of artificial pneumothorax is necessary. The aspiration of fluid is performed under local anesthesia. The procedure must be carried out aseptically. The skin is painted with tincture of iodine and concentrated alcohol over an area possibly near the lowest point of the fluid, where a dull percussion sound is obtained preceding the time of aspiration. The thoracic wall and the pleura are infiltrated by 5 cc. of a 1 per cent solution of novocain. The same needle and syringe that is used for infiltrating the chest wall is used for exploratory puncture, a procedure that must precede every aspiration, by pushing the point of the needle past the parietal pleura, after the novocain was injected and then slowly withdrawing the plunger. If fluid is not obtained at the first attempt, another attempt should be made over the area of effusion at a lower or higher level, depending upon the site of the first attempt. The exploratory puncture is followed by the insertion of a larger needle (gauge 18, length 2½"); its attachment to a 10-20 cc. syringe renders the handling of the needle much easier. The actual withdrawal of the fluid is done by a 20 or 50 cc. syringe or a vacuum bottle (Potain's bottle), if available. The former is more tedious and a slower procedure than the latter, but it has the advantage that sudden removal of the effusion is prevented. The syringe, whenever filled with exudate, is removed from the needle, evacuated, and replaced. There is absolutely no danger of air being aspirated into the pleural cavity while the syringe is off. Air thus entering the pleural cavity usually disappears shortly

* To be published.

by absorption, or if persists, has the effect of artificial pneumothorax. As a matter of routine, we inject 10-20 cc. of air into the pleural cavity to remove the fibrin particles from the needle that frequently enter it with the fluid and, by blocking the needle, prevent further aspiration. When a vacuum bottle is used, the removal of the exudate should be done slowly. This can be arranged by slightly turning the cock between the bottle and the needle. It is advisable not to remove more than 1500 cc. of fluid at one sitting, unless the patient is in extreme respiratory or cardiac distress, or unless it is replaced by the same or half the amount of air. Aspirations can be repeated daily, if necessary, or at intervals adapted to the individual case. When fluid cannot be withdrawn because of large amounts of fibrin particles, the injection of small quantities (about 1-2 ounces) of physiological salt solution may facilitate aspiration. The injection of 30 cc. of a 10 per cent sterile solution of sodium citrate may aid in liquefying the fibrin. Large amounts of fluid can be easily withdrawn on the day following such injection. To avoid injury to the visceral pleura, the patient should be instructed not to cough during aspiration. Administration of ½ grain of codeine, half an hour earlier, will diminish a tendency to cough. The needle should be immediately removed if a severe coughing spell develops during aspiration.

Autoserotherapy, that is, the injection of 10-20 cc. of the pleural exudate hypodermically has no particular merit in treating simple pleural effusions. Cathartics and diaphoretics are of little value in the treatment of this condition. Beneficial results were seen from the use of diuretics. Diuresis is promoted and the absorption of effusion effected by the administration of calcium. Calcium lactate or calcium gluconate is well taken by mouth, 75 grains in 24 hours in divided doses in tablet form. Its dosage may be gradually increased until three times 75 grains are taken. Such doses may be administered two to four weeks, provided the stomach is in good condition. Calcium chloride and sodium salicylate may be given simultaneously. Ten cc. of a 10 per cent solution of calcium chloride, injected intravenously with 4 to 5 day intervals, has been used with success. These injections can be combined with the hypodermic injection of 20 units of parathormone. We obtained excellent results with this combination treatment.

Accumulation of pus in the pleural cavity may be divided into two main groups: 1. tuberculous empyema, without secondary pyogenic microorganisms; 2. tuberculous empyema, caused by the presence of tubercle bacilli, together with pyogenic microorganisms. The best diagnostic procedures by which we are able to differentiate these two types of empyemata are the examination of smears, or the cultural method. The rules or general measures apply also to the treatment of these forms of tuberculosis; however, the immediate institution of local intervention is of prime importance. The local treatment of sterile tuberculous empyema consists of aspirating the pus. The removal of small amounts of pus is just as important as the aspiration of large empyemata. Leaving the pus in the pleural cavity may lead to thickening of the pleural coverings, subsequent rigidity of the visceral pleura which, in turn, may prevent the reexpansion of the respective lung when the empyema disappears; it also may result in adhesions between the two layers of the pleura, in permanent atelectasis of the respective lung, in contracting pulmonary fibrosis, in serious damage to the heart muscle or kidneys; finally, prolonged absorption of pus from the pleural cavity may cause generalized amyloidosis. Because it is not known how long even a small empyema will persist, the safest treatment is to resort to repeated aspirations. The same technical rules should be followed as in aspirating a simple effusion. Tuberculous abscess of the chest wall, following aspiration, is a rare complication. This can be avoided by flushing the needle, while withdrawing it, with 2 per cent mercurochrome, 10 per cent iodoform in olive oil, or physiological salt solution, or by injecting air and having the patient lie on the healthy side after aspiration. The treatment of such cold abscesses consists of repeated aspirations. Hedblom ad-

vocates a graded posterior extrapleural thoracoplasty, in case the pus continues to reaccumulate and the lung fails to show expansion to its normal position following from six months to a year of conservative treatment. We are of the opinion that it is advisable to perform an exeresis of the phrenic nerve before resorting to thoracoplasty, because this minor intervention may, in itself, effect a partial obliteration of the gaping pleural cavity and promote healing.

The treatment of pyogenic tuberculous empyema varies according to the intensity of symptoms and the number of secondary microorganisms found on exploratory puncture. If symptoms are not severe and the number of secondary infecting microorganisms is small, the same method is followed as in non-pyogenic tuberculous empyemata. When there is marked rise in temperature, with chills, malaise, rapid pulse, and other evidences of toxicity, open or closed drainage is indicated. It is advisable to combine both open and closed drainage with repeated irrigations with antiseptic fluids, such as Dakin's solution, gentian violet in 1:5000 to 1:1000 dilution, acriflavin in 1:5000 to 1:2500 dilution. Such irrigations are preceded by washing out the pleural cavity with physiological salt solution. Open drainage is established by resecting a portion about two inches long of the eighth rib, in the axillary region or the same length of the ninth rib, if the operation is done posteriorly. Alexander recommends a very ingenious method of obtaining air-tight drainage: "After all tissues to the parietal pleura have been thoroughly infiltrated the skin and underlying muscle are pushed upward on the ribs and held exactly in this position until the incision has been made and the endoscope introduced. It is obvious that, when the drainage tube has been introduced through the tissues held in this way, the tube will pass obliquely through the thoracic wall from skin to pleura as soon as the skin and muscle are released and return to their normal lower position." An ordinary bladder trocar has been used in our practice. After removal of the obturator, pus will start to flow; then a stiff-walled catheter is introduced through the cannula to a distance of about an inch beyond the inner surface of the thoracic wall. The cannula is then withdrawn, while carefully holding the catheter in place. The catheter is now clamped and connected with a long rubber tubing the lower end of which is immersed in a container of known capacity which is filled up half way with bichloride solution. When there is satisfactory spontaneous flow, the desired amount of pus is drained off, the catheter clamped, the connecting tube removed, and a dressing applied. When spontaneous drainage is not satisfactory, the pus must be aspirated. If symptoms are severe and the amount of pus is large or rapidly accumulates, drainage can be instituted every two hours during the day.

In a certain number of instances these methods do not result in a cure. For such cases a graded extrapleural thoracoplasty is the only effective treatment. This procedure is particularly advantageous when there is also an underlying active pulmonary tuberculosis or in cases in which a bronchial fistula is present.

(This is the fourth of a series of short discussions on the practical treatment of pulmonary tuberculosis.)

AMEBIASIS IN PRIVATE PRACTICE

H. S. Sumerlin, San Diego, Calif. (Journal A. M. A., Feb. 3, 1934), presents a survey that shows the incidence of intestinal protozoa in individuals of a higher social status than that of indigent persons. It is a summary of the results of routine examinations of the stools of 1,852 patients during the past four years. The results of the examinations in the cases of 1,339 adults and 513 children are listed separately to show the low incidence of protozoa as compared to adults. Endamoeba histolytica was found in thirty-one adults, or 2.3 per cent, and in two children, or 0.4 per cent. Combining these results gives an incidence of 1.7 per cent. In three of the author's adult cases the infestation undoubtedly occurred outside the United States. In this series only one case of frank amebic dysentery was encountered and that was in a 5 year old child. In only four cases were cysts absent from the stools. A comparison of the results of this survey with others made elsewhere indicates that the incidence of Endamoeba histolytica varies from 0.2 to 15.58 per cent in the different studies. There is no doubt that the incidence varies with the class of patients and the geographic location. One cannot but wonder why, in view of the large number of people harboring this parasite, so few cases of frank amebic dysentery are seen and why there are not more local epidemics like the recent outbreak in Chicago. It has been stated repeatedly that a single fecal examination will reveal only about half the protozoa that can be detected by multiple examinations. This has not been the author's experience. In thirty-three cases of infestation with Endamoeba histolytica, the parasite was found in the first specimen in thirty-one cases, in the second in one case and not until the third examination in one case. The fact that the first specimen was collected following a saline cathartic probably explains these results. He found, however, that in some cases subsequent examinations revealed other species of protozoa not found on the first examination.

Melanosarcoma of Iris and Ciliary Body; Report of Case

By BENJAMIN I. BRINDLEY, M. D.
Madison

MRS. W. S., a white female 66 years of age, referred because of poor vision in the left eye. The patient stated that about three weeks previous to admission she had a neuralgic type of pain in the left side of her head. She applied heat and was relieved of her pain, but discovered she was practically blind in the left eye.

Examination:

Vision: O. D. 20/100 J[1] No. with glasses 20/20 J[1] 28 cms.

O. S. Count J[1] No. with glasses 3/200 J[1] No. fingers—projection faulty.

The right eye was a normal hyper-presbyopic eye. The left eye had a slightly injected conjuctiva, a dew-like infiltration of the corneal epithelium, and increased tactile tension. The diameter of the pupil was about 6 m.m. with a small temporal niche. The iris did not react to light and was much browner than the right, with an ectropion uveae at three o'clock apparently causing the above niche in the pupil. There was a brownish-black sector between three and five o'clock where the iris was thicker, with the thickness increasing out near the periphery. The pectinate ligament was darker throughout this sector. The lens contained a few cortical opaque specks and streaks. The fundi as seen through the corneal haze appeared normal except for a definite physiological cupping of the disc. Tonometric tension

O. D. 17 m.m. Hg. (Scheotz)

O. S. 65 m.m. Hg.

All laboratory tests were essentially normal.

Eserine 1% was instilled O. S. and the pupil contracted to about 2 m.m. The pulling down of the pupil lowered the tension to 45 m.m. Hg., and made the thickened pigmented sector and pectinate ligament infiltration stand out much more clearly. The generalized pigmentation of the iris decreased, and vision improved. The invasive character of the ectropion uveae was more definite, and globe transillumination revealed the sector between three and five o'clock to be much darker than the rest of the iris.

From these findings a diagnosis was made of melanotic tumor of the iris causing secondary glaucoma and enucleation was advised.

The left eye was enucleated on April 27, 1933.

Microscopic examination by Dr. W. D. Stovall was as follows: "The sections reveal a cellular tumor located in the iris and ciliary body. The cells are small, round and ovoid in shape, have single and sometimes multiple small nucleoli and contain pigment. The cells are confined to the iris and ciliary body and do not appear to have penetrated other ocular tissues. The tumor is malignant, but since it is entirely intraocular, it appears that removal will have effected its eradication unless metastasis through the blood vessels has taken place.

"Diagnosis melanosarcoma"

Fig. I. Showing tumor of iris and ciliary body.

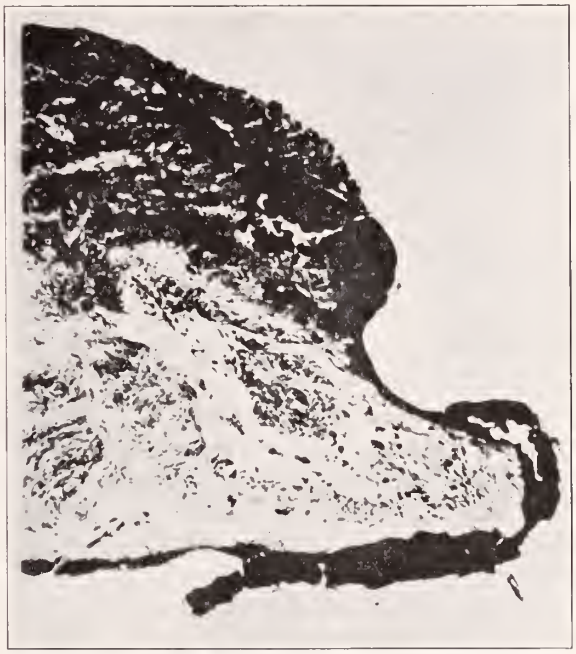

Fig. II. Higher power showing pigment invasion at the pupillary margin and thickening of pigmented layer of retina at site of ectropion uveae.

DISCUSSION

Sections of this eye reveal the bulk of the tumor to be in the iris, with a possible primary pigmentary source from the ectropion

(Continued on page 374)

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« « « EDITORIALS » » »

A Program

A SURVEY of the changes which have taken place in the practice of medicine during recent years, together with a perusal of current magazine articles and of reports of various commissions would seem to show that the medical profession as a whole has been gradually losing caste with the general public; lately, if we are to believe the statements of a vociferous organized minority, this change has been proceeding at an accelerated pace. We are led to believe that many sections of the country are without adequate medical care, that the quality of medical care which other sections are receiving is the cause of great dissatisfaction, that this is an urgent problem requiring solution in the immediate future, that organized medicine is incapable of grappling with it successfully, and that therefore it must be taken out of our hands by various all-wise lay organizations.

That the situation is not nearly so black as it has been painted is clearly shown by the findings of the Commission on Medical Education, as set forth in its Final Report, which report could be read with profit by everyone. Every practicing physician, from his own observation and experience, can largely verify the conclusions contained therein as regards his own community.

Nevertheless, it cannot be denied that some dissatisfaction with the profession as a whole undoubtedly exists on the part of the public. Spontaneous criticisms are not infrequently heard which cannot be attributed to the general dissatisfaction which prevails as a result of the depression, nor to the organized propaganda of self-interested organizations. Likewise, the increasing prevalence of various cults and systems of so-called nonmedical healing is significant.

If the public could be convinced that the medical profession is truly its friend, that physicians, as is actually the case, are more interested in preserving and restoring health than they are in exploiting the people, as seems to be widely thought in some quarters, a long step toward public confidence would be taken. Health problems would then be brought to us for solution, instead of being turned over to lay organizations.

With this object in view, several of the county medical societies have adopted programs which seem to be working to the general satisfaction of both the medical profession and the public.

The basic principles underlying such a program would appear to be as follows:

1. To promote cooperation between the medical profession and the community at large, and to convince the public that the profession is really its friend and has its interest at heart.

2. To see that all health activities of the community are sanctioned and approved by, and under the direction of the county medical society, where they properly belong.

3. To see that all those engaged in medical and health work receive compensation, to some extent, at least.

Such a program, varying naturally in certain details according to circumstances, can be carried out in every community. The first important step is to establish a relationship of friendly cooperation between the representative of the medical society and the representative of the public, such as city councils, county boards, or others, and to convince them that we are serious and in earnest. Once this is accomplished, other things will naturally follow. For this program to succeed, there must necessarily be cooperation between the various members of the medical society itself; individual differences must be forgotten, and every man must work when called upon for the common good. Results will come slowly, but by persistent efforts they cannot fail to be obtained. If the county societies generally will take it upon themselves to initiate such programs, within a comparatively short time, much of the criticism which is now heard would be silenced, and there will be no further talk of laymen taking over the management of medical affairs because the profession is not capable of solving its own problems.—R. M. C.

Excretory (Intravenous) Urography

SINCE the introduction of this method of pyelography into clinical medicine a few years ago, there has been a tendency toward a more favorable opinion of its value, probably due in a great part to a better understanding of its definite limitations and contraindications and to experience in interpretation of the urograms obtained.

Braasch [1] has repeatedly pointed out that one of the greatest obstacles to its routine employment has been the problem of urographic interpretation. He feels that as more of the deformities of the renal pelvis become roentgenologically standardized the obstacle of interpretation will be partially overcome. Some of the earlier enthusiastic advocates of the method felt that it would supplant cystoscopy: this prediction has not been fulfilled. Cystoscopy is still indicated to determine accurately the source of pyuria or hematuria.

Excretory urography gives a fair estimate of renal function. Great care is necessary in the interpretation of such urograms. It is of great value in determining the presence of renal or ureteral stasis and particularly in the demonstration of hydronephrosis and the results obtained by surgical plastic procedures on the renal pelvis. It is likewise of great value in the diagnosis of renal and ureteral calculi and shadows suspected of being urinary tract calculi, and in demonstrating whether upper abdominal tumor masses in the lateral quadrants are in the urinary tract.

It is of great value in children or where cystoscopy cannot be performed and in cases where the ureters have been transplanted into the sigmoid. In many cases anomalies of the urinary tract are demonstrated. These anomalies may or may not be of any clinical significance.

Excretory urography as a means of diagnosis in cases of suspected renal tumors and renal tuberculosis leaves much to be desired. In suspected cases of this type, it should be supplemented with cystoscopy and retrograde pyelography.

The recent work of Swick on excretory urography by the oral administration of sodium ortho-iodo hippurate promises to be a method of great value. He has employed it in several hundred cases and so far the results have been about 50 per cent satisfactory.

dos Santos [2] of Portugal employs excretory urography by introducing the dye into the abdominal aorta by means of a long needle introduced through the muscles of the back on a level with, to the left and opposite the twelfth thoracic vertebra. His idea is that the arteries are first visualized, then the veins and then the pyelogram is obtained. He has employed the method in over 500 cases without a reported mishap. His method is certainly a formidable procedure.

Excretory urography is undoubtedly a valuable adjunct to other means of urological diagnosis. It is to be hoped that further experimental and clinical investigation will broaden its field of usefulness and that improvement in methods of manufacture of the dye will materially reduce its cost. G. H. E.

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1. Braasch, Wm. F., J. A. M. A., vol. 101, 1848–1853, (Dec. 9) 1933.
2. dos Santos—See Bryan, R. C., Bull. of the Stuart Circle Hospital, Richmond, Va., Dec. 1933.

A Challenge to Close Our Own Ranks!

A RECENT speaker before the American Medical Association Committee on Medical Education made the statement that he had been told sixty per cent of appendices removed had been removed by mistake and otherwise in his remarks blasted the medical profession in no complimentary terms. If we look around in our daily practice we can not help but feel in our hearts that his remarks, though exaggerated, were somewhat justified.

The economics of medicine is certainly topsy-turvy. It would seem that the doctor should be paid more for avoiding an operation than for performing one. It is a service to the patient worthy of greater remuneration than a bit of carpentry, albeit no matter how skillful, to have saved him by skillful medical treatment the mutilation of his precious body. It would be better for the souls and consciences of our own profession. Under economic pressure it is hard even for the most honest physician not to unconsciously lean sometimes to the side of surgery. We all know in our hearts that this statement is true so let's call a spade a spade.

This condition of affairs is a good deal our own fault for in the heyday of rising surgery and "exploratory operations" our surgeons doing a general practice made a living off such surgery charging what are considered moderate fees, to be sure, for appendectomies, cholecystectomies, breast amputations, hysterectomies and such common mill-run of a busy general practice. But he would so often, at the same time, take care of a very difficult pneumonia case, a typhoid fever or diabetes requiring far more skill, knowledge and time and send his bill for twenty or thirty dollars. This has set up a precedent and still makes it necessary for a doctor to earn his living out of the surgery he can pick out of his general practice.

It is inevitable under this system that abuses creep in. The public needs education. A difficult and skillful surgical case is still worth as much as ever, but it is not fair either to the medical profession or the public that surgery should be made to bear the load for diagnosis, internal medicine and pediatrics. They should stand firmly on their own financial feet.

Discipline and censorship in our own hospital staffs and county societies is not one hundredth active enough. Most of the censorship is conducted sub rosa by gossip and innuendo amongst our colleagues when it ought to be fought in the open on the floors of our meetings. Abuses in certain clinics where it is found out by the mathematics of an accountant that so many x-ray treatments and so many diathermy treatments a day must be given to produce a profit leads to the exploitation of our clientele and redounds dishonorably on the fair reputation of us all. Men crazy for surgery performing a "hitless hysterectomy" where the simple reading of a hospital record might have revealed the uterus to have been removed several years before, amputation of the breast for cancer with pulmonary and bone metastases already existing because proper x-rays have not been taken, pregnant uteri removed because an Aschheim–Zondek test had not been performed, a "raspberry gall bladder" removed without proper diagnostic study, "Type IV appendices" removed in influenza, daily "x-ray treatment," over a period of 3 months, incompetent ignorant application of radium and all these abuses so well known to all of us are the proper subjects for lively staff meetings, proper censorship and control of offending staff members.

Such conditions must be controlled within our own ranks for are we not after all "all our brothers' keepers."—J. A. E.

. . . . THE PRESIDENT'S PAGE . . . .

Leadership in Public Health Activities

IN THE March issue of the JOURNAL, I raised the question of the possibility of organizing about the several county medical societies successful units for the carrying on of public health activities. Since that time, this question has been partially answered and several important developments relating to the subject make further comment desirable.

The C. W. A. health project in Wisconsin was developed as a public health survey of school children. The decision to accept this project as the one to be undertaken came about through the co-operation of various interested agencies with the officers of the State Medical Society. The State Board of Health placed the direction of the project in the hands of the county medical societies. The efficiency with which the work was done in the 54 counties undertaking projects encourages me to believe that a permanent organization can be developed which, working along definite lines, will be able to bring about the active participation of the physician in public health work.

The money expended by the C. W. A. on this survey may prove to be one of the most valuable investments made by the government during the period of emergency relief. While only a fraction of the children of the state were examined, their number and distribution were such as to make the survey entirely satisfactory as a basis for the careful planning of work designed to improve the conditions found.

It seems almost trite to say that the medical profession should accept the leadership which is offered to it by this development. Of one thing we may be certain, and that is that this work will be done. If it is not initiated and carried through under the leadership of the local county medical societies, it will be initiated and directed by some one else. A discussion of the reaction of the medical profession to lay and public groups doing health work need not be entered into here. I feel sure that the public will have little patience with a profession which criticizes an outside agency for attempting to do things which it might have done but lacked the desire or vision to undertake.

Our own State Board of Health has indicated its willingness to co-operate in every way with the medical profession in the solution of problems disclosed by the survey. It is recognized by public health workers that their ultimate objectives can be attained only through the co-operation of the family physician and with his active participation in public health projects. The acceptance of this leadership in various communities by the county medical societies involves also the acceptance of a distinct concept of public relationship. It involves, too, a serious study of the social aspects of public health projects and it is in this field that the physician has unfortunately received little training. The Council has, therefore, appropriated a sum of money to be used in securing the services of a physician trained in public health work to assist those county medical societies desiring to work out constructive programs. The State Medical Society in Wisconsin can and should become the most important and the most active agency in furthering public health and preventive medical activities. We should begin now to lay the foundation of a program leading to this end.

Society Proceedings

BROWN-KEWAUNEE-DOOR

The April meeting of the Brown-Kewaunee-Door County Medical Society was held at the Northland Hotel, Green Bay, on the 26th.

Dr. Rock Sleyster, Treasurer of the State Society, gave a talk on "The Patient with Chronic Complaints."

COLUMBIA

A joint meeting of members in Columbia and Adams counties was held at Rio on Tuesday, April 10th. The meeting opened with a six-thirty o'clock dinner, which was followed by a talk by Dr. E. R. Schmidt of Madison. Members of the Auxiliary were also present.

DANE

Dr. Arnold S. Jackson, Madison, read a paper on "The Acute Surgical Abdomen" before the regular meeting of the Dane County Medical Society on April 10th at Turner Hall, Madison.

EAU CLAIRE-DUNN-PEPIN

Dr. M. L. Jones of Wausau spoke on "Back Pain" before a meeting of the Eau Claire and Associated Counties Medical Society held at Eau Claire on March 26th.

MILWAUKEE

On April 13th, a meeting of the Medical Society of Milwaukee County was held in the Milwaukee Athletic Club. Following are the speakers and their subjects:

Drs. S. J. Silbar and H. B. Podlasky—"Serial Pyelography".

Dr. M. Fernan-Nunez—"Amebic Dysentery."

Dr. Louis Hamman, associate professor of clinical medicine, Johns Hopkins University School of Medicine, Baltimore,—"The Diagnosis of Obscure Fever."

Social hour followed the program.

OUTAGAMIE

The April meeting of the Outagamie County Medical Society was held on April 3rd.

Dr. G. W. Hall, associate professor of neurology, Rush Medical College and attending neurologist at St. Luke's and Cook County Hospitals, Chicago, was the speaker. His subject was "Newer Things in Neurology."

Fifty physicians attended the meeting. G. W. C.

POLK

On April 20th members of the Polk County Medical Society were dinner guests of Dr. A. N. Nelson at the Village Hall at Clear Lake. Members of the Auxiliary were also invited to attend.

The program of the evening consisted of the following talks:

"My Medical Errors" by Drs. W. C. Andrews and L. O. Simenstad and moving pictures on "Colles' Fractures"; "Mid-Forceps Delivery", and "Left Mediolateral Episiotomy and Repair."

Discussions were also had on the Tugwell bill; C. W. A. Health Survey, and other committee reports, as well as an explanation of the new "Polk County Professional Bureau Set-up."

PORTAGE

A combined meeting of the Portage County Medical and Dental Societies at the Hotel Whiting, Stevens Point, on the evening of April 3rd, was so well attended and enjoyed that it promises to become an annual event. The wives of the members were also invited.

Following the dinner, Dr. M. N. Federspiel of Milwaukee talked on "Some Diseases and Deformities of the Mouth, Jaws, and Face, of Common Interest to the Physician and Dentist." The talk was illustrated with lantern slides. E.E.K.

RACINE

The regular monthly meeting of the Racine County Medical Society was held at the Dr. George L. Ross residence, 3417 Taylor Avenue, Racine, Thursday, April 19th, at 8:15 P. M.

The program consisted of a "Round Table Discussion on Medical Economics" by Mr. Theodore Wiprud, Executive Secretary of the Medical Society of Milwaukee County.

Lunch and entertainment followed the business session. S. J.

ROCK

The Rock County Medical Society held its regular monthly meeting on Tuesday, March 27th, at the Monterey Hotel, Janesville.

Following dinner at six-thirty o'clock, Dr. J. P. Allen of Beloit gave an address on "Auxiliary Activities," and Dr. E. L. Sevringhaus of Madsion spoke on "Female Sex Hormonology."

WASHINGTON-OZAUKEE

The Washington-Ozaukee County Medical Society meeting was held March 29th at the Beacon Restaurant in West Bend. A steak dinner preceded the meeting.

Dr. F. D. Murphy of Milwaukee gave a very interesting paper on "Some Aspects of Angina Pectoris and Coronary Thrombosis." A good discussion by the members followed the paper.

Many "dents" attended the meeting and enjoyed the program. In this manner we are promoting good fellowship between the medical and dental societies. R. S. F.

WINNEBAGO

Dr. William Brams and Dr. Louis N. Katz, both of Chicago, were guest speakers at the monthly meeting of the Winnebago County Medical Society held at the Hotel Raulf at Oshkosh.

Dr. Brams spoke on "Clinical Aspects of Coronary Diseases" and Dr. Katz discussed "Mechanism of Anginal Pain."

INTERURBAN ACADEMY OF MEDICINE

A meeting of the Interurban Academy of Medicine was held at the Androy Hotel, Superior, on March 25th.

Dr. Arnold S. Jackson, Madison, was the speaker of the evening, his subject being "Acute Surgical Lesions of the Abdomen."

MILWAUKEE NEURO–PSYCHIATRIC

The April meeting of the Milwaukee Neuro–Psychiatric Society was held on Thursday, April 26th, at the Milwaukee County Hospital for Mental Diseases at Wauwatosa, as the guest of Dr. A. F. Young, Superintendent.

Dinner was served at six-thirty o'clock after which a program was given by members of the staff of the hospital.

MILWAUKEE OTO–OPHTHALMIC

A meeting of the Milwaukee Oto-Ophthalmic Society was held at the University Club on Tuesday, the 24th. Following the scientific program:

"Biophysics of the Eye" by Dr. Hilmar G. Martin.

"Observations on the Elschnig Intracapsular Cataract Operation" with motion pictures by Dr. Herbert G. Schmidt.

UNIVERSITY OF WISCONSIN

The University of Wisconsin Medical Society sponsored two lectures during April. The first was a lecture on "Thyroidism" by Dr. John W. Shuman, formerly professor of medicine at the American University of Beirut, Syria. This was followed by a discussion of the various phases of the subject by members of the Society.

On April 16th, Dr. Wm. F. Petersen, professor of pathology at the University of Illinois, gave an address on "The Patient and the Weather."

THE WOMAN'S AUXILIARY

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Mrs. Rock Sleyster, Wauwatosa, *President-elect*
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Mrs. Walter A. Ford, Sheboygan, *Press and Publicity Chairman*
Mrs. James Blake, Hopkins, Minn., *National President*

HOW THE AUXILIARY SERVES

THE Auxiliary's sphere of activity is great. There are many fields in which the group may expend effort with most gratifying results. One of these is education, and here we mean education not only of others, but also of ourselves. It is necessary for every woman to be intelligently informed on matters which are of concern to her. It is well known that knowledge is power and if we are to accomplish what we have set out to do we must cultivate this power. The public in the past few years has become distinctly "health conscious", and with interest in affairs that had previously been left to the medical profession people have gone further, with the result that we have had our Committees on the Cost of Medical Care with its many ramifications. Naturally enough there has been a great deal of criticism of the medical profession based on misinformation. The Auxiliary then has urged every member to inform herself thoroughly and intelligently concerning these questions so vital to her husband's profession.

It is important that a bit of true information about the Auxiliary itself be given—namely, the Auxiliary is not concerning itself with the scientific aspects of the medical profession. It is directly contrary to the aims and ideals of the Auxiliary to meddle in affairs which belong to the members of the medical fraternity. One of the things a doctor's wife knows without question is that prescribing and advising others in medical matters is taboo. This cannot be emphasized too strongly for there have been some men, not versed in the work of the Auxiliary, who have trembled lest the weaker sex encroach upon their fields. Let them have no fear for, aside from the ethics of the matter, every Auxiliary member is basically just like any other wife with a watchful eye on the family budget and with enough common sense to see the folly of endangering her husband's income by trespassing on his province.

Every member of the Auxiliary belongs to various lay organizations, parent-teacher associations, federated clubs, and church groups. Every social contact affords one more opportunity for disseminating factual information concerning the medical profession. Having interested herself in lay organizations she is in a position to promote the work of the Speakers' Bureau of her local medical society

in order that the work of educating the public in health matters may be done by those best fitted for it and not left to unscrupulous imposters. This concerted effort cannot help bringing results and working to the advantage of both physician and layman.

The National Auxiliary has a Legislative Committee which acts here, as in all matters, directly under the guidance of its Advisory Council. The same committee exists in the state organizations and has justified its existence in many instances when called upon to act by its state advisory council. This phase of work has been educational to a great degree in that it has aimed to keep members informed as to any legislation which deals with the medical profession. The women cannot easily get out and act as a lobby for a definite piece of legislation but they may be a powerful factor in moulding public opinion. At the present time with the Tugwell Bill looming large on the horizon the well-informed Auxiliary member is able to do a great deal toward making the public realize that the fight on quacks, harmful patent medicines, and their allied false advertising is not an infringement on personal rights or a fight on self-medication with ulterior motives, but rather an honest effort to protect the great mass of people.

The promotion of *Hygeia* along with many other projects find places in the national program. It is difficult to write of all the accomplishments of the Auxiliary, not because they are few but because they are so numerous that any adequate chronicling of them would be a stupendous task. Then too, it is a bit like advertising to extol the virtues of an organization to which one belongs. The Auxiliary does not, and should not, have to sell itself to the medical profession; we like to feel that it has demonstrated its value without leaving any room for doubt. The Auxiliary is not primarily a social club formed for the amusement of its members; it has none of the "kaffee klatsch" elements that are apt to characterize many groups. It is an earnest group dedicated to a worth while piece of work. On the other hand it is not a militant group of what have been called "short haired women". These women have not forfeited any of the virtues which are innate in womanhood and motherhood. The most avowed enemy of the "modern woman" could find nothing to quarrel with in the aims and ideals of the Auxiliary, which by its very name admits subservience to those we feel are best able to guide them. Each member is sincere in her desire to help as far as she is able, to be a good soldier, and to take orders from those who are her leaders. The organization does not claim to have fulfilled all its aims. Some of these, they realize, are Utopian, and yet like Goethe it believes "It is necessary to strive for the impossible in order to attain the possible." And so it keeps on year after year and each year leaves behind a brighter record of achievement. As the representative and ally of the doctor, the Auxiliary member will continue to go on along the channels he has marked out for her to follow, and she will feel amply repaid if her efforts lighten his burdens and help him advance the ideals of the noblest profession in the world.

Mrs. Robert E. Fitzgerald,
Milwaukee, *Chairman,*
Press and Publicity Committee,
Woman's Auxiliary to the A. M. A.

COUNTY AUXILIARY NEWS ITEMS

DANE COUNTY

Forty-seven eight-month *Hygeia* subscriptions were sold by the Woman's Auxiliary to the Dane County Medical Society between March 20th and April 20th.

A letter went forward to every member of the Dane County Medical Society telling the reasons for an Auxiliary.

Professor Margaret Pryor of the university economics department discussed "The Copeland Bill" at the luncheon meeting of the Auxiliary at the College Club on April eleventh.

Dr. Walter Joseph Meek, Professor of Physiology and Assistant Dean of the Medical School of the Univ. of Wis. will address the group at their May meeting on "Vivisection".

GREEN LAKE–WAUSHARA–ADAMS COUNTY

The president, Mrs. Arthur Wiesender, Berlin, was hostess to a one o'clock luncheon and business meeting of the Green Lake–Waushara–Adams County Auxiliary at her home on Tuesday, March 24th.

The Hygeia committee planned to make a canvass of all the rural schools and place *Hygeia* in as many as possible.

MILWAUKEE COUNTY

One hundred nineteen people attended the April luncheon meeting of the Woman's Auxiliary to the Medical Society of Milwaukee County held at the Y. W. C. A.

The guest of honor of the meeting was Mrs. James Blake, president of the national auxiliary, who had just returned from Cleveland where she had been making plans for the national convention in June. "Mrs. Blake gave an inspiring talk on the work the Auxiliary has accomplished, and the vast possibilities to aid the medical profession that are ours especially through our contacts with lay organizations. She stressed our need of self-education on such questions as 'Vivisection', that we may give correct information to our lay friends with

whom we visit in social groups. Mrs. Blake instilled a hope in all of us that we might attend the national meeting."

A medical discussion, a travel talk and a program of songs—these were the other features of the meeting Dr. Robert Blumenthal, a member of the advisory council of the Milwaukee auxiliary, talked on "The Auxiliary as an Aid to Organized Medicine"; Mrs. Walter Becherer gave an illustrated talk on "Russia"; (Mrs. R. F.) Elsa Holinger Teschan, a member of the Auxiliary, sang a group of Russian songs.

Seventeen new members were received into the Auxiliary in March. During April the Public Relations committee placed 27 speakers from the Speakers' Bureau before lay organizations. Since January 104 *HYGEIA* subscriptions (82 one-year subscriptions) were placed by the Hygeia committee. Many of the subscriptions were gifts from the committee or members of the Auxiliary to institutions or schools in the county; others were personal subscriptions of doctors or their wives. The membership and social committees are busy with plans for a dinner dance to be given by the Medical Society at the Wisconsin Club on June second.

Nearly 200 attended the tea at the Art Institute on April 24th which was sponsored by the Flower and Courtesy committee for the purpose of raising money with which to carry on their work.

ROCK COUNTY

Dr. Harold C. Bradley, Professor of Physiological Chemistry of the University of Wisconsin addressed the members of the Rock County Auxiliary on April 24th on the Copeland–Tugwell Bill.

SHEBOYGAN COUNTY

The members of the Sheboygan County Auxiliary held its April luncheon on April 4th. A member of the health department gave a talk on "Milk"; a short talk on "Handicapped Children" also was heard.

WAUKESHA COUNTY

An open meeting held at the high school auditorium in Waukesha with Dr. Arthur J. Cramp, bureau of investigation of the A. M. A., as speaker, was sponsored by the Auxiliary to the Waukesha County Medical Society on Monday evening, April 23rd.

NATIONAL NEWS LETTER

Mrs. James Blake has just returned from a visit to Cleveland where she went over the plans for the Annual Meeting with the Cleveland women. A very capable group of doctors' wives under the able supervision of Mrs. Clyde L. Cummer has charge of the social affairs for the Convention. The tentative program of entertainment follows:

Monday, June 11—

Luncheon of Auxiliary Board at the Hotel Carter. Dinner in honor of Past Presidents and Board at Hotel Carter. Mrs. Alfred Maschke, Chairman.

Tuesday, June 12—

Luncheon, Bridge and Style Show, Lake Shore Hotel. Mrs. Oliver A. Weber, Chairman.

Wednesday, June 13—

Auxiliary Luncheon at the Hotel Carter. Mrs. Russell H. Birge, Chairman.

Thursday, June 14—

Luncheon at Country Club, Sight-seeing Tour. Mrs. James R. Driver, Chairman. "Bring-Your-Husband Dinner"—Hotel Carter.

Friday, June 15—

Women's Golf Tournament, Wentwood Country Club. Mrs. E. D. Saunders, Chairman.

Along with this splendid social program, which is entirely in the hands of the wives of the Cleveland members of the American Medical Association, will go a program of business planned and directed by the Auxiliary. The reports to be heard and the business to be transacted this year are of such import that the meeting cannot help being of exceptional interest to every Auxiliary member. Decide to be with us in Cleveland from June 11 to 16.

News Items and Personals

The Circle, the honorary student society of the Marquette University School of Medicine sponsored a lecture on Monday, April 30th, at 8:00 P. M., by Mrs. Eugenia Long Harper of Atlanta, Georgia. Mrs. Harper is the daughter of Crawford Long, the discoverer of ether anesthesia in Georgia in the year 1842.

The title of Mrs. Harper's lecture was "My Father, Crawford Long, the Discoverer of Ether Anesthesia."

Crawford Long was selected by the State of Georgia to occupy one of the two niches assigned to Georgia to honor her two most prominent citizens in the Hall of Fame in Statuary Hall at the Capitol in Washington, D. C., for his discovery of ether anesthesia.

—△—

Announcement has been made of the coming marriage of Neil H. Milbee, son of Dr. and Mrs. H. H. Milbee of Marshfield to Miss Margaret Heggy of La Crosse.

March 31st marked the completion of thirty years as State Health Officer for Dr. C. A. Harper, Madison. He was appointed in 1902 by Gov. R. M. La Follette and took over the executive direction of the department on April 1, 1904. Succeeding appointments for seven year terms have been made by Governors Davidson, Phillip, Blaine and Kohler.

—△—

Dr. and Mrs. F. A. Davis of Madison returned the early part of April from a three weeks' trip to San Juan and Puerto Cabello, Venezuela, where Dr. Davis attended the fifth scientific meeting of the Pan-American Medical Association of which he is a member. During the course of the voyage at sea, Dr. Davis presented two papers,—"A New Operation for the Correct of Squint or Crossed Eyes" and "The Intracapsular Method for the Removal of Cataracts."

—△—

The engagement of Miss Gertrude Allen, daughter of Drs. William J. and Jessie P. Allen of Beloit, to Mr. Ludwig J. Grauel of the Fairbanks, Morse & Company, Beloit, was recently announced. The wedding will take place in early autumn.

—△—

The American Association for the Study of Goiter will hold its annual meeting at Cleveland, Ohio, on June 7, 8, and 9th. Dr. Arnold Jackson of Madison is scheduled to speak on "A Survey of Cretinism in the United States" on the Friday afternoon program.

Included among the speakers are the following: Dr. H. M. Clute of Boston who will speak on "Hyperthyroidism in the Aged"; Dr. Herman L. Blumgart of Boston, who will give a paper on "Indications, Contraindications and End Results in Treating Various Forms of Cardiovascular Disease by Complete Removal of the Thyroid"; and Dr. George W. Crile of Cleveland will present "Comparative Studies of the Thyroid Gland in Animals."

Headquarters for the Association will be Wade Park Manor, Cleveland, Ohio.

—△—

Mrs. Lucille Doerr, wife of Dr. August Doerr of Milwaukee, died on March 23rd of a heart ailment. Survivors are her husband and one daughter.

—△—

The following physicians were licensed by reciprocity at a special meeting of the Wisconsin State Board of Medical Examiners held at the Hotel Plankinton, Milwaukee, Thursday, April 5th:

Name	*School of Graduation*	*Year*	*Present Address*
J. L. Armbruster	Pennsylvania	1931	2557 S. Kinniekinnic, Milwaukee.
E. S. Busby	Illinois	1930	Laona
Anson Cameron	Hahnemann Medical	1900	30 N. Michigan Chicago.
L. Rosa Minoka Hill	Women's Med. College	1899	Oneida, Wis.
N. C. Risjord	General Med. College	1923	2582 N. Stowell Ave., Milwaukee

WANT BARBITURATE REPORTS

The State Medical Society of Wisconsin desires reports from physicians throughout the entire year of 1934 containing information on either bad results or deaths resulting from the unprescribed use of barbiturates,—the so-called hypnotic drugs. Reports need not mention patient by name but brief statement of circumstances and particular derivative used by the patient, where obtained, etc., will be most appreciated. Send reports to the Secretary, State Medical Society of Wisconsin, 119 E. Wash. Ave., Madison, Wis.

Dr. C. F. Dull of Richland Center was reappointed city health officer by the Board of Health on April 17th.

—△—

Dr. C. A. Vogel, Elroy, President of the Juneau County Medical Society, has been elected Mayor of the city of Elroy.

BIRTHS

A daughter to Dr. and Mrs. F. J. Kozina, Milwaukee, on March first.

MARRIAGES

Dr. Ed. Eisenberg, Milwaukee, to Miss Charlotte Adland, also of Milwaukee on March 25th.

DEATHS

Dr. Burton N. Clark, Sr., Oshkosh, died on April 18th at Mercy Hospital after a long illness.

Dr. Clark was born October 8, 1869, in the town of Aurora in Waushara County. He took his premedical training at the University of Wisconsin and while there was a member of the first football team to represent the University. He then entered Rush Medical College, graduating in the year 1894, and came directly to Oshkosh.

He became associated in general practice with the late Dr. C. W. Oviatt, also assisting in conducting Maple Grove Sanitarium.

Dr. Clark was a member of the Winnebago County Medical Society, the State Medical Society, and the American Medical Association. He was also a member of the American College of Surgeons. For a number of years, Dr. Clark served as President of the Winnebago County Medical Society.

Besides his widow, Dr. Clark is survived by two sons,—Dr. Burton, Jr., of Oshkosh, and Dr. William of Cleveland, Ohio, and one daughter, Mrs. Julietta Buckstaff of Oshkosh.

Dr. J. L. De Cock, Green Bay, died on April 14th. He had been in ill health for some time but had continued his practice up to March 24th when he entered a local hospital.

Dr. De Cock was born in Green Bay, July 25, 1880. He graduated from Milwaukee Medical College in 1907, practiced for one year at Leeman, Wis., and then moved to Angelica where he remained until 1920. He then came to Green Bay to establish his practice.

He served as staff member of Bellin Memorial, St. Mary's and St. Vincent's hospitals, and in 1923 took the position of county physician, which he held until his death.

Dr. De Cock was a member of the Brown–Kewaunee–Door County Medical Society, the State Medical Society, and the American Medical Association.

He is survived by his widow and two sons.

SOCIETY RECORDS

New Members

Byron J. Hughes, Winnebago.
Geo. E. Whalen, 1703 N. Racine St., Milwaukee.
J. M. Dodd, Jr, The Clinic, Ashland.
Julius A. Roth, 115 No. 11th St. La Crosse.
F. D. Roth, Grand View Hospital, La Crosse.
John C. Harmon, Lutheran Hospital, La Crosse.
Clifford L. Kline, 1700 No. Main St., Racine.
Maurice Monroe, Hartford.
Carlisle Dietrich, Red Granite.
Erwin F. Hoffman, Cameron.
Owen C. Clark, Oconomowoc Health Resort, Oconomowoc.
John C. Kyllo, Superior.
J. C. Baker, Hawkins.
R. A. Thayer, Public Service Bldg., Beloit.
A. J. Brickbauer, Plymouth.
C. L. Rumph, 1029 Madison Ave., So. Milwaukee.
Samuel B. Black, 7020 W. Greenfield Ave., West Allis.
C. L. Newberry, 1351 N. 27th St., Milwaukee.
A. J. Raymond, 1525 W. Lincoln Ave., Milwaukee.
J. S. Ackerman, 917 Packard Ave., Cudahy.
T. H. Marsden, Fennimore.
J. H. Fowler, Lancaster.
Clifford A. Grand, Ashland.
Louis H. Sieb, Seymour.
Edwin B. Banister, Appleton.
R. S. Vivian, Beloit.
Gerald Rau, Two Rivers.
E. A. Addington, Dresser Jct.
J. P. Canavan, Neenah.
Elgie Kraut, Lancaster.
L. R. Cole, Wisconsin General Hospital, Madison.
John A. Thranow, 231 Wis. Ave., Milwaukee.
B. E. McGonigle, Ableman.
G. A. Kriz, 806 No. 11th St., Milwaukee.

Changes in Address

J. W. Ehmer, Muscoda to Crivitz.
C. Bossard, Richfield to 2630 No. 69th St., Wauwatosa, Wis.

CORRESPONDENCE

"CONGRATULATIONS"

Minnesota State Medical Association
Office of the Secretary
E. A. Meyerding, M. D.
11 West Summit Avenue
St. Paul, Minnesota

April 18, 1934.

Mr. J. G. Crownhart
119 E. Washington Ave.,
Madison, Wisconsin
Dear Mr. Crownhart:

I want to congratulate you upon the splendid appearance of the Wisconsin Medical Journal.

I have contended for a long time that one difficulty with our medical journals was the fact that they are the most unattractive and uninteresting appearing publications that I have ever seen. There never was anything about them that would induce one to look inside.

With best wishes, I am

Sincerely yours,
E. A. Meyerding, M. D.

Section on Radiology Meets at Janesville, Friday and Saturday, May 18th and 19th

THE tenth annual meeting of the Section of Radiology of the State Medical Society will be held at the Colonial Club, Janesville, beginning Friday noon, May 18th, and ending Saturday noon, May 19th. All members of the State Medical Society interested in the field of radiology are invited to be present at this meeting. The program of the meeting follows:

Address of Welcome, City Manager of Janesville, Mr. Henry Traxler.

1:00. X-ray diagnosis of Chest Disease, T. O. Nuzum, M. D., Janesville.

1:20. Age of Onset of Pulmonary Tuberculosis, J. E. Habbe, M. D., Milw.

1:40. X-ray Aspects of Thoracic Surgery in Tuberculosis, J. A. Evans, M. D., La Crosse.

2:00. Kidney Injuries, R. P. Potter, M. D., Marshfield.

2:20. Types of Primary Carcinoma in the Lungs, H. B. Podlasky, M. D., Milwaukee.

2:40. Metastatic Carcinomatous Lymphangitis of the Lungs,—Carcinoma of the Stomach, H. W. Hefke, M. D., Milwaukee.

3:00. Perthes' Disease. Clinical Demonstration of End Results, V. W. Koch, M. D, Janesville.

3:20. Pneumoconiosis, W. S. Middleton, M. D., Madison.

3:45. Some Interesting Gastrointestinal Problems, James T. Case, M. D., Chicago.

6:30. Joint Meeting with Rock County Medical Society, F. E. Sutherland, M. D., President.

Dinner—Colonial Club.

Address—Diagnosis and Treatment of Diverticulae of the Gastrointestinal Tract, James T. Case, M. D., Chicago.

SATURDAY, MAY 19TH, 8:30 A. M.

1. Business Meeting.
2. Round Table Discussions, Chairman, J. A. Evans, M. D.
   a. A Spine Case. L. V. Littig, M. D., Madison.
   b. Spondylolisthesis (2 cases). R. M. Baldwin, Beloit.
   c. An Unusual Heart. I. G. Ellis, Madison.
   d. A Gastrointestinal Lesion L. W. Paul, M. D.
   e. Intra-Cardiac Calcification (Valve and Coronary). J. E. Habbe, M. D., Milwaukee.
   f. Bone Lesions. R. P. Potter, M. D., Marshfield.
   g. A Chest Lesion. A. M. Dorr, M. D., Milwaukee.
   h. Biliary Colic Fistula. H. B. Podlasky, M. D., Milwaukee.
   i. A Bone Lesion. J. N. Sisk, M. D., Madison.
   j. Acute Pulmonary Pathology. W. T. Clark, M. D., Janesville.
   k. Multiple Exostoses. M. M. Baumgartner, M. D., Janesville.
   l. Hypo-parathyroidism. Richard Farnsworth, M. D., Janesville.

Officers of the Section on Radiology are: Chairman, R. L. Troup, M. D., Green Bay; Vice-Chairman, F. H. Kuegle, M. D., Janesville; Secretary-Treasurer, F. W. Mackoy, M. D., Milwaukee; Executive Committee, J. A. Evans, M. D., La Crosse; L. V. Littig, M. D., Madison, and J. E. Habbe, M. D., Milwaukee.

Local arrangements for the session are in charge of the following committee: Drs. F. H. Kuegle, Chairman; W. A. Munn, Frank Van Kirk, Fred E. Sutherland, G. E. Crosley and W. T. Clark.

American Medical Association Holds Eighty-Fifth Annual Session at Cleveland, June 11-15

BEGINNING with the first meeting of the House of Delegates Monday morning, and the first of the general scientific meetings at two that afternoon, the American Medical Association will open its eighty-fifth annual session at Cleveland, Ohio, on June 11th. General scientific meetings will continue through the second day, Tuesday, and the first day and a half of this general program is of a fairly practical nature arranged to command the interest of all physicians.

Section meetings will open on Wednesday, June 13th, and continue through Friday, June 15th.

Wisconsin's delegates to the House of Delegates of the American Medical Association are Dr. Joseph F. Smith, Wausau; Dr. J. Gurney Taylor of Milwaukee, and Dr. W. E. Bannen, La Crosse. Dr. Rock Sleyster, Wauwatosa, is one of nine members of the Board of Trustees of the American Medical Association.

Special cars for Wisconsin physicians attending the June session have been reserved

on the New York Central night train,—"The Forest City" leaving Chicago at 11:40 Sunday night, June 10th, and on an extra section of the same train Monday night, June 11th. These trains arrive in Cleveland the following morning. Reservation can be made in these cars by asking local agents to obtain space in the Wisconsin cars.

Reports of officers of the American Medical Association and the status of the Association's work during the year appear in the Journal of the American Medical Association for May 5th and the complete Cleveland program will appear in the Journal on May 12th. It is anticipated that over two hundred Wisconsin physicians will attend the Cleveland sessions.

SCIENTIFIC ASSEMBLY

The Opening General Meeting, which constitutes the opening exercises of the Scientific Assembly of the Association, will be held Tuesday evening, June 12, 1934, at 8:30. The Sections will meet on Wednesday, Thursday and Friday, June 13, 14 and 15.

Convening at 9:00 A. M. the Sections on—

- Surgery, General and Abdominal.
- Ophthalmology.
- Pediatrics.
- Pharmacology and Therapeutics.
- Nervous and Mental Diseases.
- Dermatology and Syphilology.
- Gastro-Enterology and Proctology.
- Radiology.

Convening at 2:00 P. M. the Sections on—

- Practice of Medicine.
- Obstetrics, Gynecology and Abdominal Surgery.
- Laryngology, Otology and Rhinology.
- Pathology and Physiology.
- Orthopedic Surgery.
- Urology.
- Preventive and Industrial Medicine and Public Health.
- Miscellaneous Topics.

GOLFERS AT CLEVELAND

The American Medical Golfing Association will hold its twentieth annual tournament at the Mayfield Country Club in Cleveland on Monday, June 11, 1934.

Thirty-six holes of golf will be played in competition for the fifty trophies and prizes in the eight events. The trophies include the Association Championship for thirty-six holes gross, the Association Handicap Championship for thirty-six holes net, the Choice Score Handicap Championship for thirty-six holes gross, the low gross Eighteen Hole Championship, the low net Eighteen Hole Handicap Championship, the Maturity Event limited to Fellows over 60 years of age, the Oldguard Championship limited to competition of past presidents, and the Kickers' Handicap. Other events and prizes will be announced at the first tee.

All male Fellows of the American Medical Association are eligible and cordially invited to become members of the A. M. G. A. Write the Executive Secretary, Bill Burns, 4421 Woodward Avenue, Detroit, for an application blank. Participants in the A. M. G. A. tournament are required to furnish their home club handicap, signed by the secretary. No handicap over 25 is allowed, except in the Kickers'. No trophy is awarded a Fellow who is absent from the annual dinner.

OFFICIAL CALL

The eighty-fifth annual session of the American Medical Association will be held in Cleveland, Ohio, from Monday, June the eleventh, to Friday, June the fifteenth, Nineteen hundred and thirty-four.

The House of Delegates will convene on Monday, June the eleventh.

The Scientific Assembly of the Association will open with the General Meeting held on Tuesday, June the twelfth, at 8:30 P. M.

The various sections of the Scientific Assembly will meet Wednesday, June the thirteenth, at 9 A. M. and at 2 P. M. and subsequently according to their respective programs.

Attest:

OLIN WEST,
Secretary,

DEAN LEWIS,
President,

FREDERICK C. WARNSHUIS,
Speaker, House of Delegates.

Milbank Memorial Fund Head Advocates State Controlled Compulsory Health Insurance

THE Milbank Memorial Fund of New York, principal supporter of the Committee on the Costs of Medical Care, has now declared itself for compulsory health insurance under State control. Speaking before the Western Hospital Association, Mr. John A. Kingsbury, Secretary of the Fund which contributed so largely to financing the five-year committee study, offered tentative conclusions of studies of himself and associates which call for a state plan with the following features:

1. Compulsory sickness insurance for all families with annual incomes of less than $3,000 or $5,000.

2. Plan to be grounded on a state compulsory basis.

3. Medical benefits to fall into two classes:

(a) First to include general practitioner, hospital care, and perhaps prescribed medicines;

(b) Second class, not mandatory, to include services of medical specialists, dentistry, nursing, laboratory and clinic service, etc.

4. General practitioner can be paid a sum, according to Mr. Kingsbury, equivalent to at least $7.50 per insured person (amount presumably to be determined by legislation).

5. Total cost of insurance per person estimated at $36.00 a year to be financed 20% from taxes and 80% from direct contributions of insured persons, or contributions shared between employer and employees, or borne entirely by the state.

6. Lay supervision of financial and executive problems.

7. Professional supervision for professional personnel and problems, with a judicial agency, combining lay and professional representatives to deal with complaints and grievances.

"European experience," declared Mr. Kingsbury in admitting the contention of organized medicine, "shows clearly that every voluntary scheme is merely a bridge to a compulsory scheme. * * * Unfortunately, many of the worst abuses which develop under voluntary schemes are carried over into the compulsory stage * * *."

Mr. Kingsbury's "tentative proposal" calls for paying the general practitioner $7.50 per insured person, pointing out that the practitioner who serves 1,000 potential patients would receive a *gross income* of something like $7,500 and added "the practitioner who serves 2,000 obviously would receive more."

While commending the American Hospital Association plans for hospital insurance, Mr. Kingsbury's address recognized that this was but a step on the way towards compulsory insurance, and it is apparent that he favors it only as an educational step in that direction.

While declaring that his proposal does not call for "State medicine or public medicine or the socialization of medicine," the title of the newspaper release for Mr. Kingsbury's address was "Urges Study for Compulsory Health Insurance and State Control." The Kingsbury plan involves reorganization of present methods for the delivery of medical services and while it presumes to include no cash benefits, would include them in fact if no better method could be devised. Mr. Kingsbury urged leadership upon California for the new State system inasmuch as California already has a State Senate Committee on Investigation of the High Costs of Illness. "Experience and occasion thus combined to give California an opportunity to blaze the trial in the search for a better way to furnish health service and medical care to the people," said Mr. Kingsbury.

This and subsequent releases place the Milbank Memorial Fund of 40 Wall Street, New York City, behind a compulsory State system for the delivery of medical service. Mr. Kingsbury's address carefully avoided any reference to the difficulties that had been encountered in presenting exactly that type of service to the poor, where presumably,

with Federal Control, the most ideal situation existed for the creation of a model system. Mr. Kingsbury is joint author of the book "Red Medicine," extolling the virtues of medicine under Soviet Russia, which publication was issued after a 9,000 mile journey which occupied but a period of five weeks last summer.

Michigan Proceeding Towards Health Insurance Plan

At a special meeting of the House of Delegates of the Michigan State Medical Society held at Flint, Michigan, on April 12th preliminary endorsement was given to a system of voluntary health insurance entitled "Mutual Health Service." Final decision as to whether the Service will be made operative will be made by the Michigan Society at its September annual meeting pending determination of its legal status and necessary legal action for organization of the plan. If the plan becomes operative, it is the present intent of the Society to limit its operation to a few counties for preliminary experience.

The plan is the result of an economic survey in Michigan under the direction of Nathan Sinai, former investigator for the Committee on the Costs of Medical Care, who is employed by the Michigan Society under direction of a special committee.

The preliminary form of the plan would call for complete health insurance to include the services of physicians, dentists, registered nurses, pharmacists, laboratories, hospitals, as well as drugs, medical and surgical, and optical appliances. The cost to the insured person would be $27.88 per person, of which the general practitioner would receive $5.00 a year plus 50¢ for a report of an annual physical examination and 25¢ for a report of immunization. An additional $3.00 would be allotted for the services of specialists including surgeons. This amount would be made available to the general practitioner if he was deemed competent to render specialized service. Dentists would receive $5.00 while $2.50 would be allotted for nursing services; $5.00 for hospital services; $1.00 for laboratory services; administration $2.42 and $1.21 towards a surplus. It is interesting to note that the same amount of $5 is set aside for the physician, dentist and hospital which presupposes that the demands for these three services are of equal magnitude.

The plan would exclude hospital services for mental illnesses and tuberculosis and covers full hospital payment for but a period of 21 days during any one year. For any illness requiring hospitalization for more than 21 days but less than 90 days, the Service would pay 75% of the per diem hospital charges.

The services of a special nurse would be limited to a period of thirty days for any one year or sixty days for the services of a visting nurse. The subscriber would pay the original 25¢ charge on each prescription and the Service would pay the balance.

It is of particular interest to note that this plan is for employed persons only and the cost of the subscription shall either be borne by the employe or jointly by the employe and his employer. Under action of the House of Delegates, however, the Service would not be available to any person who earns more than $1,500 a year. Thus, a man and wife and three children where the husband was earning $1,200 a year would have to pay $139.40, or 11% of his income, to be covered by the Service. One-half of the amount might be paid by the employer if he elects to do so.

Physicians would be limited to 1,000 patients under the plan so that the gross income of the general practitioner would be limited to $5,750. Provision is made for absolute free choice of physician, apparently without regard to whether the physician is a member of the Society or not. Direction of the plan would be vested in a committee of eleven of which three are physicians. Other members of the committee are one dentist, one pharmacist, one registered nurse, one hospital superintendent, two laymen representing industries, and two laymen representing recipients of the health services.

« « « PERFECTLY CLEAR » » »

In all the discussions relating to health insurance, the organized medical profession has contended that:

1. Voluntary insurance would be unable to interest sufficient people to secure the spread of risk that the very word "insurance" implies.

2. Plans for health insurance would have to include compulsion in one form or another.

3. Every voluntary scheme is but a stepping stone to state controlled compulsory insurance.

With the last thirty days each of these contentions have been fully admitted by advocates of health insurance.

1. "The fact is, I would be very fearful of leaving it on a purely voluntary basis * * * because what would be the result? A few people * * * who know that they need surgery, whose wives are going to have babies, who know they are going to have specific medical services within the next two weeks or next month, would sign up, and just after the service was secured they would sign off.

"So it is that in every system of volition, as industry is concerned, they always premise the system on the statement that it will operate or it will begin, whether it is old age pension, unemployment insurance, private unemployment insurance in the industry, when 75% of the workers are signed up or the system won't start. Otherwise, we will get a very dangerous selection in our group of population."—*Nathan Sinai, formerly with the Committee on the Costs of Medical Care, advocating health insurance before the Michigan House of Delegates.*

2. "Dr. Insley asks certain questions or made certain statements with respect to the matter of voluntary purchase, and stated that the history of voluntary insurance is the history of no insurance; that the people of their own volition will not purchase insurance. No one can disagree with that statement." *Nathan Sinai, formerly with the Committee on the Costs of Medical Care, advocating health insurance before the Michigan House of Delegates.*

3. "European experience shows clearly that every voluntary scheme is merely a bridge to a compulsory scheme. * * * Unfortunately many of the worst abuses which develop under voluntary schemes are carried over into the compulsory stage * * *." *John A. Kingsbury, Secretary, Milbank Memorial Fund, 40 Wall Street, New York City, advocating state compulsory health insurance before the Western Hospital Association.*

In a recent issue of this *Journal* [1] it was stated that the problem of the costs of illness is not a problem that can be divorced from all others of the day but is one that is inextricably a part of the whole pattern of our social life. In the same issue it was said [2] that in this time of changing social order the physician must exercise unusual care if he is not to be led into by paths by false prophets and quack economists who would accomplish their ends by dividing the unity of the profession. They seek to secure support by pointing out that their plan will yield an immediately larger cash return, which income, however, they are unable to guarantee.

We again suggest in the words of the title of the editorial quoted that this is an excellent time to "keep both feet on the ground."—Editor's Note.

(1) Wisconsin Medical Journal, March, 1934, page 227 ff.

(2) Page 214.

Elaborate provision is made for local and district supervision under the set-up of the plan. In a special committee report, adopted by the Michigan delegates, the plan is based on the belief that there will be a probable development in the United States towards some form of compulsory health insurance.

"If the experiment with Mutual Health Service is successful," says the Michigan report, "the profession will be in an exceedingly strong position to direct public opinion and thereby control legislative action in the interest of the public welfare."

"In the proposed experiment," said Mr. Sinai to the House of Delegates, "if an industry in some county in Michigan is interested enough to experiment with the medical profession, undoubtedly that industry would make the Service compulsory for the employes engaged. In that way it would get away from the question of volition. The fact is, we would be very fearful of leaving it on a purely voluntary basis to the members in that industry, because what would be the result? A few people in the industry who know that they need surgery, whose wives are going to have babies, who know they are going to have specific medical services within the next two weeks or the next month would sign up, and just as soon as

the Service was secured, they would sign off."

Mr. Sinai indicated his belief that while the Service would be voluntary in name it would not be operative unless made compulsory by employers and should not be made operative then unless 75% of the employes in any given industry came under the plan. "Otherwise," he said, "we will get a very dangerous selection in our group of population."

Following the one-day special session, the delegates adopted by a vote of 61 to 9 the following resolutions:

"That the House of Delegates of the Michigan State Medical Society approves the general principles of the plan for Mutual Health Service and directs the Committee on Medical Economics to undertake the following efforts:

"a. The discussion of the plan with employers and employes.

"b. The determination of the legal status of Mutual Health Service and the necessary legal actions for the organization of Mutual Health Service.

"c. The preparation of the final detailed plan for Mutual Health Service and its presentation to the House of Delegates for final action."

MELANOSARCOMA

(Continued from page 358)

uveae spoken of in the clinical picture. The sections also reveal that the entire ciliary body is invaded by sarcoma cells with a predominance of the round cell as compared to a predominance of oval shape cells in the iris. From the above stated facts, I believe the tumor is primarily in the iris, with secondary ring invasion of the ciliary body.

Tay reported the first case of primary sarcoma of the iris with microscopic examination in 1866. Casey Wood and Brown Pusey gave abstracts of eighty-three cases with microscopic examination in 1902. Since that time twenty some cases appear in the literature, including that of Meyer and Kubik reported in the October American Journal of Ophth. 1933. Pigmented tumor frequency of the uveal tract is by far the lowest in the iris, and rapidly increases in the posterior uveal tract. Fuchs found sarcoma of the iris 16 times in 259 collected cases of sarcoma of the uveal tract. Lawford and Collins found one of the iris in 103 cases of sarcoma of the uveal tract. The same is true of reports of others.

Clinically the problem is one of early diagnosis and removal of the eye. This is difficult because in the early stages the tumors are silent and usually the patient presents himself for examination when glaucoma has set in and vision is affected. After glaucoma has set in the tumor grows more rapidly, and soon gets over into the third stage, namely that of extra ocular extension. From this stage on the prognosis is much poorer and exenteration with follow-up radiation is indicated. The tumors tend to extend to the surrounding structures first and general metastasis are prone to appear first in the liver and lungs. The case reported has been in for recent examination, and there is no local recurrence, or any evidence for lung or liver metastasis in x-ray. The right eye appears normal and has 20/20 vision with a correcting lens.

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Tay: R. L. O. H. Report, V, 1866.
Casey Wood and Brown Pusey: A. of O., XXXI, 1902.
Lawford and Collins: R. L. O. H., XIII, 1893.
Fuchs: Das Sącom des Uvealtractus, Weim., 1882.
Meyer and Kubik: Am. J. of Ophth. October, 1933.
Fuchs: Text Book of Ophth.

Physicians' CWA Claims

DELAY in paying physicians' claims for the care of injured persons on CWA payrolls was explained by the Employees' Compensation Commission to the American Medical Association as result of complaint by the State Medical Society of Wisconsin. The Wisconsin Society declared that complaints had been received from members throughout the state that no payments had been received after weeks of delay. The Washington authorities stated that payments were now being made at the rate of 3,000 per week.

(Continued on page 387)

THE JOURNAL BOOK SHELF

BOOKS RECEIVED FOR REVIEW

Contagious Diseases. By W. W. Bauer, B.S., M. D., director of the Bureau of Health and Public Instruction, American Medical Association. Price $2.00. Alfred A. Knopf, New York, N. Y.

New and Nonofficial Remedies, 1934. By American Medical Association, 535 N. Dearborn St., Chicago.

Hypertension and Nephritis. By Arthur M. Fishberg, M. D., Associate physician to Beth Israel Hospital; Associate in Medicine, Mount Sinai Hospital, New York City. Third edition, thoroughly revised. Price $6.50 net. Lea & Febiger, Washington Square, Philadelphia.

The Management of Fractures, Dislocations, and Sprains. By John A. Key, B.S., M.D., clinical professor of orthopedic surgery, Washington University School of Medicine; Associate surgeon, Barnes, Children's, and Jewish Hospitals, St. Louis, and H. Earle Conwell, M. D., F. A. C. S., Orthopedic Surgeon for the Tennessee Coal, Iron and Railroad Co., Birmingham; orthopedic chief of the Traumatic and Orthopedic Services of the Employees' Hospital, Fairfield, Alabama. The C. V. Mosby Co., St. Louis, Mo. Price $15.00.

BOOK REVIEWS

Any scientific publication reviewed in this column may be obtained for inspection. Orders for such inspection should be directed to the Medical Library Service, 424 N. Charter Street, Madison, Wis.

A Diabetic Manual. By Elliott P. Joslin, M. D., clinical professor of medicine, Harvard Medical School. Fifth edition, thoroughly revised. Lea & Febiger, Philadelphia, 1934. Price $2.00;

This book is the fifth revised edition of the most widely known manual for the use of diabetics. In spite of the increasing experience of the author and medical profession, the book has been slightly abbreviated. It still reflects the author's keen personal interest in his patients. The sub-title "For the Mutual use of Doctor and Patient" epitomizes the thinking of the author when he inserts much information which could only be used by physicians or exceptionally experienced and intelligent patients. There is no attempt to segregate the suggestions for the patient and the doctor. It is, therefore, an abbreviated text in the management of diabetes together with numerous observations about the cause and the disturbances which may occur in diabetics. The book is obviously useful to anyone who chooses to follow Dr. Joslin's idea of the treatment of diabetes. E. L. S.

Nature, M. D. By Richard Kovacs, M. D., clinical professor of physical therapy, Polyclinic Medical School and Hospital, New York. Price $2.00. D. Appleton–Century Company, New York, 1934.

In this little book Dr. Kovacs gives in popular and interesting style a discussion of the healing forces of heat, light, water, electricity and exercise. Fallacies and fads are pointed out; the proven values of the agents are stressed and well explained. No attempt is made to enter into technical discussion of the energies used in physical therapy, but the main points of application and the physiological effects are well discussed.

The book seems well adapted to popular reading and fills a place in physical therapy literature. It is sane, informative and wholesome. J. C. E.

The Psychology of Sex. By Havelock Ellis., Ray Long and Richard R. Smith, Inc., New York, 1933.

This manual is a definite contribution to the field of Sex Psychology. Coming from such an eminent authority as Havelock Ellis it should be acclaimed by the medical profession. While the author states in the preface that the manual is not a summary of the seven large volumes, entitled "Studies in the Psychology of Sex", nevertheless the subject is handled almost as completely if not as voluminously, and incidentally, the material presented is more readily applicable in a clinical way, so that the medical student and physician will find this manual just as usable as any text book of clinical medicine.

That the psychology aspect of sex, both normal and abnormal, is essential knowledge for the physician need not be stressed. Any practitioner of medicine meets up with this problem almost daily.

The manual presents the case of the normal and the abnormal, the development of the sex impulse, its ramifications, its physiology and psychology. W. F. L.

The 1933 Year Book of General Medicine. Edited by George F. Dick, M. D.; Lawrason Brown M. D.; George R. Minot, M. D.; William B. Castle, M. D.; William D. Stroud, M. D.; George B. Eusterman, M. D. The Year Book Publishers, 304 South Dearborn St., Chicago.

An abstract of abstracts is rarely profitable. This volume of the Year Book of General Medicine maintains the high standard of previous years. The meticulous care in editorship is reflected in the notes of the several editors; this feature adds greatly to the value of the text, which grows in popularity from year to year. The Year Book should be a reference source for every medical library, private and public. W. S. M.

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PRINCIPAL OFFICES AND LABORATORIES, INDIANAPOLIS, INDIANA, U. S. A.

Mental Hygiene in the Community. By Clara Bassett, consultant to psychiatric social work, division on Community Clinics, The National Committee for Mental Hygiene, Inc. Price $3.50. The Macmillan Company, New York.

No one is in better position to promote mental hygiene than the family physician. Practically he accomplishes much in this field but the average practitioner is less versed in the basal scientific and social aspects of the subject than he should be. This is largely due to an over-emphasis on physical science as compared with social science in modern medical education. Although Pollock and Malzberg have estimated that in New York State one individual out of twenty-two during the lifetime of one generation becomes a patient in a hospital for mental diseases and more hospital beds are required for the treatment of such patients than for treatment of all other conditions combined, Ziegler found that only 12 out of 93 physicians interviewed expressed much interest in mental diseases and 46 out of 99 physicans admitted they knew nothing about mental hygiene, 48 knew very little and only 5 felt themselves to be well informed. These statements are cited from the book under review. In this book mental hygiene is considered in a clear and interesting manner not only from the point of view of medicine but also from that of nursing, various "social agencies" delinquency and the law, parental education, the preschool child, the school, the church, industry, recreation and psychiatric institutions and agencies. While written from the social rather than the essentially medical aspects of the subject it may be recommended to physicians desiring to acquaint themselves with the broader phases of this important field. C. R. B.

The Study of Anatomy. By S. E. Whitnall, M. A., M. D. Robert Reford Professor of Anatomy, McGill University, Montreal, Second Edition. William Wood & Company, Baltimore. Price $1.50.

This little book is written primarily for the medical student beginning the study of human anatomy. It treats the subject, however, from so broad a point of view and in so delightful a style as to make it of value to anyone interested in human anatomy and what physician is not. C. R. B.

The Foundations of Nutrition. By Mary Swartz Rose, Ph. D., professor of nutrition, Teachers College, Columbia University. Revised edition. The Macmillan Company, New York, New York. Price $3.00.

This is the second and revised edition of a very useful book prepared for reading by people who are not technically trained in the field of nutrition. The book is very readable, has a number of good illustrations and much conveniently tabulated material. It has been expanded from about 500 pages in the first edition to 630 pages at this time. The author is well equipped to write authoritatively on this field and the book may be confidently used as a source of ready information in the field of nutrition by the clinician, the teacher, or the parent. E. L. S.

Evolution Yesterday and Today. By Horatio Hackett Newman, Ph. D., Professor of Zoology, University of Chicago. Price $1.00. The Williams & Wilkins Company, Baltimore.

This adds another book to the very useful series of volumes on evolution and genetics for which we ought all to be grateful to Professor Newman. Within a compass of one hundred and seventy pages we find here what the average non-specialist wants to know and ought to know about organic evolution, the evidences for it, and the factors that probably brought it about. G. W.

The International Medical Annual. A year book of treatment and practitioner's index. William Wood & Company, Baltimore.

An excellent summary of recent progress in medicine and surgery. The subjects dealt with are arranged in alphabetical order and at the conclusion of each article is an excellent list of references to the current literature.

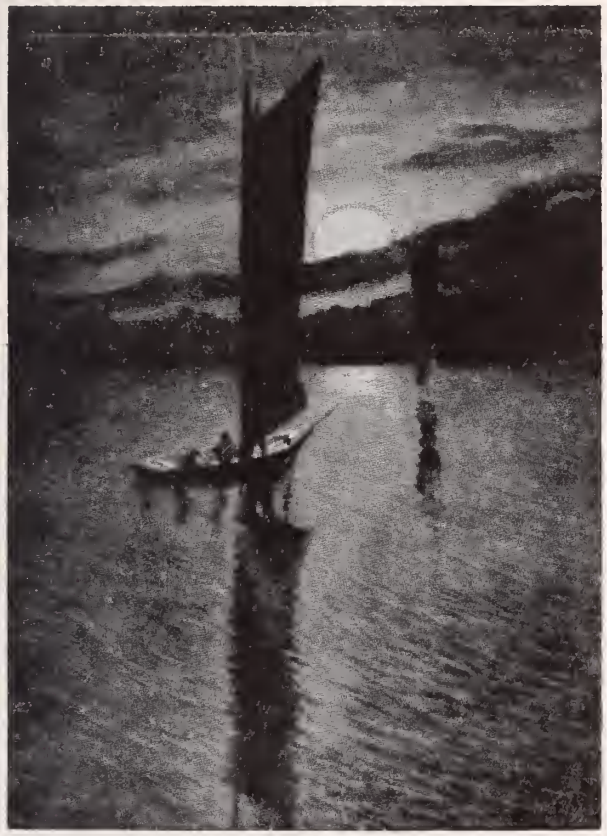
One of the useful and outstanding features of the book is the number and excellence of the illustrations—a feature not usually present in a work of this type. R. V. V.

Insanity as a Defense in Criminal Law. By Henry Weihofen. A study made under the auspices of the University of Chicago Law School, with the aid of a grant from the Legal Research Committee of the Commonwealth Fund, New York.

This volume summarizes an extensive study of the laws in the United States relating to insanity as a defense of crime, and is therefore of value both to the legal and medical professions. "The distinction of the volume lies in citing the exact number of jurisdictions which support each rule discussed, and in tracing the historical development of the rule in a given state." A summary is given of suggested reforms in legal procedure in this field. C. R. B.

An Outline of the Treatment of Fractures. By the Committee on the Treatment of Fractures. American College of Surgeons, Chicago, 1933.

The judicial omission of reference to bone grafts is highly commendable in this concise and practical "Outline of the Treatment of Fractures". The "Fracture Record" chart is particularly good. May I suggest adding to the "Aphorisms". Always compare injured extremity with opposite member for contour and alignment. The caption for figure 9 on page 26 states that the "Hand should be supinated" and the picture shows it to be pronated. It might be advisable to recommend an x-ray of the uninjured elbow in children as a comparative study to avoid the frequent confusion with normal epiphyses and the unnecessary treatment of them. R. P. M.



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Maternal Mortality in New York City. By the New York Academy of Medicine, Committee on Public Health Relations. Ransom S. Hooker, M. D., F. A. C. S., Director of the Study. The Commonwealth Fund, 41 E. 57th St., New York, N. Y. Price $2.00.

In 1930 a committee of the New York Academy of Medicine began the investigation of maternal mortality in New York City. During the three year period, 1930–1932, every maternal death was individually investigated within one week of its occurrence. The family of the patient, hospital records, physicians, and midwives were personally consulted and all the pertinent facts obtained. These records were then submitted to a committee of prominent obstetricians who attempted to determine whether the death was preventable or not and, if so, where the failure in prevention rested.

The results of this study of 2,041 maternal deaths show that at least two-thirds of them were preventable. Ignorance on the part of the prospective mother and lack of skill and judgment on the part of the attending physician or midwife were the predominant factors in a large majority of the preventable deaths.

The death rate from puerperal causes is appallingly high and there is no demonstrable decrease in the past twelve years. The layman has not yet an adequate appreciation of the value of prenatal care and the physician in turn is not entirely blameless in this regard, as this report shows that many deaths occurred among women who had consulted their physicians early and often but who had received care wholly inadequate to their needs.

More than 45 per cent of the deaths in the series, exclusive of abortion and ectopic pregnancy, followed operative deliveries. In many instances it was obvious that operations were injudiciously chosen and crudely performed by men whose training precluded the possibility of modern obstetric skill. This was particularly true as regards cesarean section.

The committee made a study of patients delivered by so-called specialists, and the results border on the amusing were they not so serious. Among the list of "specialists" conducting deliveries were otolaryngologists, dermatologists, ophthalmologists, radiologists, anesthetists, pathologists, and proctologists.

The committee recommends that the layman must be educated to the proper appreciation of the importance of prenatal care; that the obstetric education of the general practitioner, both undergraduate and postgraduate, must be vastly improved; that there must be some system of qualification and public recognition of obstetric specialists; that hospitals must furnish improved facilities for obstetric patients and must more closely supervise the quality of the work performed; that there is still a real place for the midwife in many communities and, therefore, she must be educated and supervised.

This report represents the most thorough study of maternal mortality with which the reviewer is familiar. It is to be hoped that it will receive the careful study by all interested in the problems of human reproduction which it so richly deserves. The reviewer cannot close without expressing his admiration for those men and women who labored so long and painstakingly in the conduct of this study. If we are to have better and safer obstetrics, undoubtedly it will come largely as the result of studies such as this. J. W. H.

Alcohol and Man. Haven Emerson, M. D., Editor, De Lamar Institute of Public Health, Columbia University. The Macmillan Company, New York. 1932.

This extraordinary volume has been written primarily for the unbiased layman and the general clinician, by physiologists, pharmacologists, psychologists and internists, all of the highest standing. A list of contributors reveals its authoritativeness:—

Himwich, physiologist at Yale; Wallace, pharmacologist, New York University and Bellevue; Hyman, pharmacologist, Columbia; Whitaker, biologist, Stanford; Stockard, anatomist, Cornell; Davenport, geneticist, Carnegie Institute; Bogen, pathologist, Olive View Sanatorium, California; Wilder Brooks, Jos. L. Miller, L. Brown, Christian, Langmead, T. C. Hunt, Adolf Meyer, Adler, and Miles as internists and psychiatrists.

In addition to the sound nonpropagandist discussion, there is given a voluminous bibliography, useful alike to clinician and non-medical scientist. The work is apt to be a disappointment to the so-called reformer but a joy to those who seek the best of scientific opinion. It merits a place in all general, scientific and medical libraries. A. L. T.

Recent Advances in Endocrinology. By A. T. Cameron M. A., D. Sc. (Edin.). Professor of biochemistry, Faculty of Medicine, University of Manitoba; Biochemist Winnipeg General Hospital. P. Blakiston's Son & Co., Inc., 1012 Walnut St., Philadelphia.

This volume was up-to-date at the end of 1932, when it went to press. The author realizes that the rapid expansion of the subject makes the textbook necessarily somewhat behind the most recent results of investigators. Nevertheless, this is probably the most authentic and useful book of comprehensive nature on endocrinology available in English. The author is a biochemist and, therefore, does not attempt to give directions for clinical diagnoses or therapy. He does succeed, however, in presenting a synthesis of pathology, physiology, and clinical aspects of the subject. This is very useful reading for either the student of medical science or the practitioner.

The organization of the book is excellent in that disturbances of the glands are taken up in logical fashion, the illustrations are well chosen, and the literature citations are sufficiently numerous to be

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* *Mendel, Lafayette B.: Vitamin A, published under the auspices of a joint committee representing the Council on Pharmacy and Chemistry, and the Committee on Foods of the American Medical Association.*

Verifine

a real guide to the student who wishes to pursue the subject further. The critical capacity of the author is evidently held in a judicious restraint. The very sane attitude is particularly evident in the last chapters entitled "Some Actual and Presumptive Endocrine Processes" and "Endocrine Inter-Relationships." In this latter chapter the virtual non-existence of a true pluriglandular syndrome is considered. The volume is only 365 pages and is heartily commended to those clinicians who want to understand the present status of endocrinology. E. L. S.

The Biochemistry of Medicine. By A. T. Cameron, M. A., D. Sc., Professor of biochemistry, Faculty of Medicine, University of Manitoba; biochemist, Winnipeg General Hospital, and G. R. Gilmour M. D., C. M., professor of medicine and clinical medicine, University of Manitoba; physician, Winnipeg General Hospital. Price $6.00. Wm. Wood & Co., Baltimore.

This volume represents another attempt to present the rapidly developing information in the field of biochemistry for the reading by clinicians who have not had special training in the chemical field. The first unusual feature of this attempt is its organization about the two commonly known urine tests, i.e., for sugar and albumen. This occupies half of the book, for under these leading ideas carbohydrate, protein, and fat metabolism are discussed. The authors then proceed to include the other features of the conventional inorganic salts, gases, vitamins, hormones, and some brief discussion of a few functional tests. The book is very readable. It is fairly well supplied with literature citations as a guide to further reading.

This volume is not as thorough-going and fine reference work as the excellent volumes by Peters and Van Slyke on Qualitative Clinical Chemistry. It attempts more to do what Macloud in physiology and biochemistry did in Modern Medicine, although the non-chemical parts of physiology are omitted from this treatise. It is a little difficult to know just what audience will approve of this book most thoroughly, since it is not elaborate enough for a reference work nor brief enough to be frequently turned to by the clinician. Neither is it an acceptable text book for medical students. It would, of course, be excellent material if it could have a wide circulation among men in general practice of medicine. E. L. S.

The 1933 Year Book of Obstetrics and Gynecology. Edited by Joseph B. DeLee, A. M., M. D., professor of obstetrics, University of Chicago, Medical School and J. P. Greenhill B. S., M. D., associate professor of gynecology, Loyola University Medical School; professor of gynecology, Cook County Graduate School of Medicine. The Year Book Publishers, 304 South Dearborn St., Chicago.

The Year Book of Obstetrics and Gynecology is a result of a most complete review of the literature in these two specialties reviewing only those articles which are outstanding of real value and should be reviewed. By editing such a year book the authors place before the medical profession the important articles taken from all the journals. This book can be highly recommended to the practitioner of medicine. R. E. C.

Human Embryology and Morphology. By Sir Arthur Keith, M. D., F. R. S., master of the Buckston Browne Research Farm; formerly conservator of the Museum and Hunterian professor at Royal College of Surgeons of England. Price $10.00. William Wood and Company, Baltimore.

Any contribution from the pen of Sir Arthur Keith attracts attention. This new edition of his text is like the earlier ones in that it gains and holds one's interest. With his broad background in medicine, comparative anatomy and anthropology he has been able to make interpretations and correlations not found in other texts. A series of notes appended to each chapter covers the literature adequately. Dr. Keith's real contribution is that he has made embryology vitally interesting. W. E. S.

The Technique of Contraception. By Eric M. Matsner. The Williams & Wilkins Company, Baltimore. This little book of thirty-eight pages is an excellent resumé of the modern methods of contraception and the author's evaluation of the various procedures is to be commended. This booklet should be placed in the hands of every physician and medical student. The bibliography which closes the text is excellently chosen and affords ready reference to the more complete works dealing with this little understood but vastly important subject. J. W. H.

Treatment of the Commoner Diseases. By L. F. Barker, M. D., professor emeritus of medicine, Johns Hopkins University; visiting physician, Johns Hopkins Hospital, Baltimore. J. B. Lippincott Company, Philadelphia.

Any contribution from a master of Dr. Barker's standing attracts attention. This text-book upon the Treatment of the Commoner Diseases will have a particular appeal to the general practitioner. As stated in preface, the author does not attempt an exhaustive discussion of any given subject, yet in general the therapeutic suggestions are direct and sound. His appreciation of the necessity of considering the human subject of disease as a live organism and his keen insight into human nature are reflected throughout the text.

The paragraphs on pages 8, 9 and 10 relating to the necessity for thorough history taking and examinations should be read by every practitioner of medicine. It is rather disappointing that the author should have become so diffusive in the chapters on Commoner Nervous and Mental Diseases and Commoner Diseases of Metabolism and the Endocrine System, since in so doing the chapters 9 and 10 resolve themselves into little more than the listing of

Section On Radiology

Janesville May 18-19

THE STATE MEDICAL SOCIETY OF WISCONSIN

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FOR NERVOUS DISEASES

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the diseases by name and very little attention is given to therapy in most instances.

Certain differences of opinion will arise in the minds of most readers as to the inclusion of disputed or discarded therapeutic agents. Repeatedly the author suggests the use of camphor as a cardiac stimulant. Influenzal vaccine is recommended without serious reservation. Contrary to the rule, digitalis is recommended from the outset of pneumonia and quinine is mentioned as a specific in the same without giving full force to the quoted experimental work of Reimann and Moen, which proved this drug to be without value. In the judgment of the reviewer too little attention is given to the antipneumococcic sera. The suggestion of neosalvarsan in the treatment of syphilitic aortitis without preparation by mixed treatment cannot be too severely condemned. In the discussion of anemias the utility of iron with hydrochloric acid and liver or liver extract has not received proper attention.

The proof reader has been peculiarly lax. On page 25 Schultz is spelled Schultze. Inattention to the proper names is noted also in the spelling of Sisk as Sick page 161 and Root as Rost on page 299. Sanatorium is repeatedly spelled sanitarium on page 78 and elsewhere. These minor criticisms and references to inaccuracies in proof reading should not be construed as serious deterrents to the usefulness of the text. Unquestionably it will find a place in the daily work of a majority of general practitioners. It, however, is not exhaustive enough for a student reference text or as a final court of appeal in practice. W. S. M.

Food-Borne Infections and Intoxications. By Fred Wilbur Tanner, B. S., M. D., professor of bacteriology and head of the department, University of Illinois. First edition. The Twin City Printing Co., Champaign, Illinois.

The aim of this book is to give a summary of the present literature on food-borne infections and intoxications. It contains an extensive bibliography. Subjects treated include food hygiene, metallic plant and animal toxic substances, food allergy, bacterial intoxications and infections and putrefaction. It contains a large amount of useful information relating to these subjects. C. R. B.

Modern Clinical Psychiatry. By Arthur P. Noyes, M. D., Superintendent of the State Hospital for Mental Diseases, Howard, R. I. Cloth, $4.50 net. W. B. Saunders Company, 1934, Philadelphia.

The author of this new text-book, Arthur P. Noyes, formerly Chief Executive Officer at the Boston Psychopathic Hospital is at present Superintendent of the State Hospital for Mental Diseases, Howard, R. I. While there he has given lectures during the summer months to groups of fourth year medical students who, for the sake of the experience, have spent their vacation at the institution. This book is an outgrowth of those lectures, and is written by one experienced in the art of presentation as well as in the art and science of psychiatry.

Specialization, both in the medical sciences and in medical practice, has tended toward dealing with a part of the sick individual rather than with the individual as a whole, including his complex social environment. The psychiatrist, however, is forced to deal with individuals as disturbed personalities and thus take a broader point of view. As the author states, any concept which deals with functions of personality must take into consideration not one set of facts but the integrated facts of biology—anatomical, physiological, chemical and psychological. His method of approach to the subject is therefore based on a psychobiological concept of human behavior. His book has value not only from the point of view of the specialty with which he deals but also from the broader one of adequate treatment of the sick suffering from other than purely mental disorders. There are well selected bibliographies relating to the various subjects treated in the text. C. R. B.

The Adrenal Cortex. By L. R. Broster, O. B. E., F. R. C. S. (Eng.). Surgeon to Charing Cross Hospital and H. W. C. Vines, M. A., M. D. (Camb.) Pathologist, Charing Cross Hospital Institute of Pathology. H. K. Lewis & Co., Ltd., London, 1933.

This 94 page booklet is really a monographic presentation of clinical and pathological research on a group of women exhibiting what the authors call the adreno-genital syndrome. The chief features are hypertrichiasis of the male type, menstrual dysfunction, chiefly amenorrhea, changes in bodily contour, changes in external genitalia of the female and changes in the voice and psychological outlook toward the male type. Cases are reported, the results of unilateral adrenalectomy are described, and the authors are inclined to believe that the adrenal occupies an important if not a primary position in the etiology of the condition. The pathological studies are centered about the discovery of a Fuchsin stain, which gives unusual results with the adrenals removed, with some fetal adrenal tissues and with some ovarian cysts and testicular tissues studied.

The volume is by no means a text for general reading, but is rather a report of investigation under way and is, therefore, of particular interest to those who are studying endocrinology and gynecology. E. L. S.

Acidosis and Alkalosis. By Stanley Graham, M. D., Leonard Gow Lecturer on the Medical Diseases of Infancy and Childhood, University of Glasgow, and Noah Morris, M. D., Lecturer in biochemistry, University of Glasgow. Price $2.75. William Wood and Company, Baltimore.

This volume of 188 pages presents an unusually readable and dependable account of acid base balance in the human. It is presented by two pediatricians who have a fine perspective on the clinical implications of the problem. The physical chemistry is presented in terms which are intelligible to any medical student of the present century without nec-

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essity for special chemical or mathematical training. The chapter on clinical applications is relatively brief but adequate for almost any clinician excepting the investigator. The book is not written as a reference work nor does it pretend to be exhaustive. It can be heartily commended for medical students or clinicians who desire a comprehensive general notion of the clinical manifestations of disturbances in the field of acidosis and alkalosis.

E. L. S.

The Treatment of Rheumatism in General Practice. By W. S. C. Copeman, M. A., (Cantab.) M. R. C. P. (London), Hon. physician B. R. C. S. Clinic for Rheumatism, Peto Place. William Wood and Company, Baltimore.

This text-book is a warranted effort by reason of the tremendous economic loss through rheumatic affections as stated in the foreword by Sir William Hale-White, even if the morbidity and mortality from these affections be overlooked. The author prefaces his effort by expressing a desire to organize the knowledge of the therapy of rheumatic and arthritic affections.

The clinical discussions of the several diseases included under rheumatic affections are lucid and the author takes the position that there is no justification at the present time to include the chronic arthritics as manifestations of true rheumatic fever altered by the conditions of age, etc. Exception is taken to the confusion that may arise from the rather more liberal classification of the chronic arthritics. The more recent classification accepted in this country to include under the infectious type all of the so-called atrophic or proliferative forms and under the traumatic, the degenerative and hypertrophic forms would appear to be more logical.

The reviewer finds some difficulty in reconciling the numerous proprietary preparations advised by the author to the orthodoxy of American therapeutics. As a matter of fact, many of the substances advised are not to be obtained in this country. In general, rationalism with extreme conservatism characterizes the therapeutic approach, aside for the polypharmacy above cited. It passes comprehension that the author countenances the ordinary charms which are worn or used by patients suffering from sciatica to prevent recurrences, as given on page 35. In general, his logic as stated by the following paragraph is much more wholesome: "Firstly that in chronic arthritis over-treatment is as undesirable as undertreatment; secondly, that the severity of any particular treatment must be tempered to the physique of that particular patient." Contrary to the general opinion in this country the author does not find a particular place for protein shock in the treatment of his arthritics, nor is his experience with intravenous vaccines extended.

By and large this small volume is an interesting and useful one from a clinical standpoint; but its therapeutic assistance is very doubtful aside from a general consideration wherein the author manifests a keen human and medical insight. W. S. M.

Voluntary Motherhood. By Antoinette F. Konikow, M. D., Buchholz Publishing Company, 11 Keswick St., Boston, Mass.

This pamphlet of 36 pages is an excellent discussion of the modern methods of contraception. As it is intended to some extent for the layman as well as the physician it is written in a simple non-technical language. The author's evaluation of recommendations regarding the various procedures are in accordance with those accepted by the medical profession in general.

This pamphlet should be recommended to every physician and medical student and through physicians to the interested layman as an adequate brief discussion of birth control. M. J. T.

Fundamentals of Biochemistry. By T. R. Parsons, B. Sc. (Lond.), M. A. (Cantab.) Sidney Sussex College, Cambridge. Fourth edition. Price $3.00. William Wood & Company, Baltimore, 1933.

To anyone somewhat familiar with the field of biochemistry, the new edition of Parsons provides a delightful survey. For the physician who would like to recapture his comprehensive view of chemical physiology and metabolism, it can be especially recommended. And to the elementary student in the field, struggling with the details of laboratory experimentation, it offers a birds eye view and a perspective which is at once difficult to attain and essential.

Those familiar with the preceding three editions of Parsons will realize that the volume has grown in size. The new edition is a third larger than the last. But growth of the subject has required the extra space. The recently elucidated mechanism of urea formation in the body will be found included. The newer terminology of the haem pigment systems has been adopted, and the relationships clarified. Much valuable material has been added to the chapter on enzymes, relating to oxidation catalysts. The discussion of the vitamins includes the more recent work on carotene, ergosterol, and ascorbic acid.

The new volume retains all of the unique values of preceding editions. The subject is presented as a narrative — a fascinating story of dynamic changes going on in the body, rather than a catalogue of compounds and their properties. H. C. B.

Sexual Impotence. By William J. Robinson, M. D., Eugenics Publishing Company, New York, 1933. Price $3.00.

This is a semi-scientific book dealing with the causes and treatment of sexual impotence. Apparently it is written more for the general public than for the physician. However, there are many portions of it which would be useful to the practitioner who sees this type of case. On the whole, however, the book is not one which the general practitioner would need very badly in his library.

J. B. W.

PHYSICIANS' EXCHANGE

Advertisements for this column must be received by the 25th of the month preceding month of issue. A charge is made of $2.00 for the first appearance of copy occupying 1 inch or less of space and $1.00 for each succeeding insertion of the same copy. Kindly accompany copy with remittance to cover number of insertions desired. Advertisements from members of the State Medical Society will be accepted without charge. Such copy will be taken out after its second publication unless otherwise requested. Where numbers follow advertisements replies should be addressed care Wisconsin Medical Journal.

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Rose & Carless' Manual of Surgery. Wakeley & Hunter. Fourteenth Edition—Wm. Wood and Company.

The fourteenth edition of Rose and Carless' Manual of Surgery maintains the well established reputation this volume has of being one of the leading surgical text books. Covering the field of surgery as it does, it must of necessity lack the detail included in more specialized works. This, it seems, would be a favorable criticism in a book designed to be the foundation of the principles and practice of surgery for the student. New material has been added, but only after its merit has been well established and accepted by the profession at large. This fact accounts for the absence of reference to a number of procedures and practices which have been accorded limited or doubtful acceptance. Less space is allotted to such subjects as pathological bacteriology and immunity, inasmuch as these subjects in the American curricula are taken during pre-clinical years. This change is due, principally, to the collaboration of an American editor in this revision. It is an outstanding single volume general surgical work. E. R. S.

Syllabus of Psychiatry. By Leland E. Hinsie, M. D. professor of clinical psychiatry, College of Physicians and Surgeons, Columbia University. Price $2.50. State Hospitals Press, Utica, N. Y.

This book which is marked as "a guide to general orientation", is in the reviewer's opinion, of definite worth to the graduate student or the physician with some experience in psychiatry. The first two or three chapters deal in a broad way with certain fundamental concepts — constitutional and psychic of the individual. A clear cut consideration of the various mental diseases is taken up in Chapter IV. This makes a good and rapid method of review.

It is felt that for the student approaching psychiatry for the first time, the book is too advanced.

A. C. W.

The Principles and Practice of Otology. By F. W. Watkyn-Thomas, F. R. C. S., surgeon, Central London Throat, Nose and Ear Hospital, etc., and A. Lowndes Yates, M. C., M. D., London, honorary assistant surgeon, Ear and Throat department, Prince of Wales Hospital. Price $8.25. William Wood and Company, Baltimore.

The author states that "In this short survey of modern otology we have tried to combine full detail of 'Practice' to help the general practitioner-surgeon, who treats his own ear cases, with enough discussion of 'Principles' to make the book an introduction to scientific otology for the intending specialist and for candidates for the D. L. O. and other higher degrees in surgery." The book is copiously illustrated and numerous references are given to the literature of the last ten years, especially to papers accessible to English readers. It gives a valuable summary of recent additions to otology. C. R. B.

CWA CLAIMS

(Continued from page 374)

In a letter to Dr. W. C. Woodward, Director of the Bureau of Legal Medicine and Legislation of the American Medical Association, the Employees' Compensation Commission stated with reference to the payment of physicians' accounts for services under CWA:

"These accounts are being audited and paid generally in accordance with the dates of filing the claims. There is no preference with reference to States.

"More than 100,000 claims have been presented to the Commission; about half of these are for physicians' accounts. The claims are being audited and completed at the rate of 3,000 per week. It was necessary to increase the number of employees at the Commission; fifteen auditors have within the last few weeks been added to the staff and all of these auditors have been assigned to the work of passing on physicians' claims. The Commission had no funds for this new work until Feb. 15th; and on that date there was a large accumulation of claims on which no action had been taken. Many of these claims dated back to November and December 1933.

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Courses in Nursing Courses in nursing are offered in the School of Nursing affiliated with the medical school. A residential course of 32 months is offered in the Wisconsin General Hospital to those who have completed a semester of specified work in the College of Letters and Science. This course leads to a certificate of graduate nurse. A residential course of 27 months is offered to those who have completed three years of college work in specified subjects either in the College of Letters and Science or in the Department of Home Economics. These courses lead to a certificate of graduate nurse and to a B. S. degree.

Graduate Courses Opportunity is offered for graduate work in the preclinical and the clinical medical sciences and in hygiene and public health. For further information address C. R. Bardeen, Dean, Medical School, Madison, Wis.

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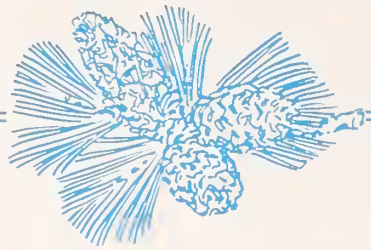

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Headaches of Toxic and Metabolic Origin*

By ARTHUR J. PATEK, M. D.
Milwaukee

I HAVE found this an exclusive and therefore difficult title to live up to because of probable overlapping of data with others in this symposium, and also because of a merging of symptoms in many instances that precludes an accurate analysis as to their etiologic relation. In addition, the breadth of the title and the limitation as to time will admit of but a cursory mention of a few high spots selected from those I have found of interest.

An apprenticeship of many years in clinical medicine should perhaps have crystallized one's views as to headaches: one should have developed definite impressions as to causation, and have adopted some principles as to treatment, based on the assumption of established diagnoses. But right here let me make a confession: I cannot to this day conceal the dread that comes over me when I see a case history introduced by the line: "Chief Complaint — Headache." I say this advisedly, because so frequently have the obvious causal trails already been followed and have led nowhere; and so one is confronted with the necessity of searching for unusual untrodden paths. And then, what a maze of possibilities confronts one!

It is not possible, nor even fair, to submit every patient to a detailed examination of every secretion and excretion; or to go into the blood chemistry, complete radiographic work, gall bladder visualization, etc., when a carefully made history does not point to trouble involving organs or functions justifying such diagnostic measures.

I would emphasize one point, and it is this: The diagnostic minutiae are as nothing compared to a well taken history. The latter frequently tells its own story; the former too often conceals obvious facts in the maze of unessential and unrelated accumulated data. Where, however, the history gives no clue, one is compelled to give careful heed to objective findings. For example, a young man was recently referred to me by an otologist. The latter found no cause in the nasal and accessory sinuses for the complaint of a persistent frontal headache of several weeks' duration, nor did a history carefully taken by me elicit any information. The patient was therefore stripped for a routine examination, in the course of which a skin eruption was seen. Lues was suspected, and its presence corroborated by a positive Wassermann reaction.

And now, after this digression, let me discuss headaches under my assigned title. Quite obviously only little can be touched upon.

MIGRAINE

First I wish to consider briefly the much discussed, ill understood subject of migraine in order to present a view as to its etiology that is at variance with the prevalent one—namely—that it is in by far the largest number of instances an allergic reaction. I wish to emphasize my belief that it bears a relation to endocrine dysfunction. Certain convictions as to migraine were formed many years ago in the course of attendance on a patient whose mother, a very intelligent lady, told me of her own early experience. She was then well over her menopause, but recalled how during her earlier years she had been a great sufferer from migrainous headache (I use the term "migrainous headache" here to indicate the intensity of the symptoms, of sudden onset, with the usually

* First of a series of papers presented at a symposium on headache. Mount Sinai Hospital, Milwaukee, January, 1934.

accompanying disabling features — gastric in particular). This lady had had a sizable family—5 or 6 children—or at least that many pregnancies, and gave me the interesting information that her migraine always disappeared the moment conception took place, and as promptly reappeared after her confinement. The information was too direct to be ignored, and, my interest having been aroused by this story, I followed the clue thus given with considerable profit in a number of cases that came under my observation. In these I used the few but impotent organic preparations, then marketed, with indifferent result. For want of any better known specific endocrine, I used thyroid extract with striking effect in a number of cases. Let me cite a recent experience:

A lady about 35 years of age was referred to me, complaining of headache. Possible obvious causes—such as sinus disease and upper respiratory affections—were eliminated; she was not constipated, and her digestion was good; her headaches were of migrainous character; they were severe and disabling—occasionally, but not always appearing at or about the menstrual epoch. Thus there was suggestive evidence of an association of her migraine with some endocrine dysfunction. Various remedies were used, but none gave the relief finally obtained through the administration of thyroid extract. I went a bit further with this patient: I predicted that if she became pregnant again (she had one child) her migrainous attacks would cease. This prediction came true. She was comparatively free from headache and in better health than during the years intervening between her first and this her second pregnancy. And later, during the entire period of observation and while remaining under treatment, she had more relief from her frequent unaccountable attacks of severe migraine than had been her lot during many previous years.

I could cite other instances unrelated to pregnancy in which I have had a similar result (there were failures too) but have emphasized the former because it at once suggests an etiologic factor of migraine which has been too little stressed by authors, and almost entirely hidden away under the sway of allergy exponents. Without denying an allergic basis for migraine in many instances, I ask that more attention be given its frequent endocrine origin. Of course, my use of thyroid extract was purely on an empiric basis. But it must be remembered that in those early years the thyroid gland was the only endocrine organ whose specificity was fairly well known and studied. With newer specific preparations of the female reproductive organs now in use, I am looking forward to results at least comparable with those obtained by allergists where they can prove a definite etiology, and far better than in those in whom they draw biased inferences.

I am aware of the hereditary tendency in allergic states, and of allergic equivalents in members of families. I am equally aware of the fact that migraine occurs preponderantly in females, and—by and large—spares the male. Does not this too suggest its frequent or possible endocrine character?

Thyroid dysfunction in myxedema may be an occasional cause of headaches of obscure origin. Thus, I may cite the patient, a lady of 40, who gave a history of long standing headache, but whose story gave no clue as to its cause. The only suggestive element in her history was a complaint of relative amenorrhea. Further examination revealed a dry skin and brittle hair, a tendency to heavy weight, some sluggishness — enough data for the establishment of a probable diagnosis of subthyroidism. This was corroborated by a low metabolic rate, and appropriate treatment resulted in prompt relief.

TOXIC HEADACHES

Toxic headaches form a huge chapter and consideration can be given to but a few types. They may be subdivided, as to origin, into the endogenous and exogenous. Among the former—the endogenous—I would cite the cephalalgia which may occur in the course of pregnancy, and which is further characterized by pre-eclamptic symptoms but without exhibiting the renal findings of uremia. Such a case was seen in counsel recently—a toxemia of pregnancy with cerebral oedema. Here it was important to distin-

guish the toxemia from uremia, with the latter's characteristic urinary and blood findings, all of which were absent; certainly the early headache and cerebral confusion strongly suggested a renal involvement.

Another not infrequent source of headache of toxic origin—perhaps one should more properly say metabolic origin—is that which ushers in a diabetic acidosis. The first indication of headache in a diabetic should prove a warning of impending danger.

It may be well to mention another toxic headache of endogenous origin, that due to obstipation. I refer here to that headache which is often the patient's earliest and daily morning greeting — at times frontal, at times occipital. This is a genuine autointoxication and cannot be relieved by mere laxatives I find this headache best succumbing to a preliminary mercurial purge followed by drastic saline purging, continued several days.

Among toxic headaches of exogenous origin I would merely mention those due to narcotics, nicotine and alcohol — in people who are using these to excess; also to the inordinate use of coffee and tea. Not to be overlooked is the occasional case of subchronic carbon monoxide poisoning—where a slow seepage of escaping gas finds its way into an automobile.

I have found it difficult to classify my thoughts on headaches with reference to their etiologic relationship, because of the interaction of toxic—whether of endogenous or exogenous origin—with metabolic changes and manifestations—the former so often merging into or actually passing into the latter. As illustrative of this I may allude to my having witnessed a typical outburst of hysteria, in a chronic nephritic, pass over in a short time into a fatal uremia — the hysteria being the first manifestation of the toxemia in a nervously unstable individual. And I have once encountered this also in a diabetic whose hysteria ushered in a fatal acidosis; and a third similar experience in a case of lead encephalopathy. And while these examples are not essentially in accord with a program on "headaches"—they serve to emphasize a difficulty encountered in placing, in their proper etiologic sequence, symptoms significant of aberrant bodily functions —of which headache is in so many instances a common denominator.

I am painfully aware of the fragmentary nature of this contribution. But its purpose may be served if it points out one direction for inquiry as to certain types of headache; and types and their etiology are legion. All of which brings me back to my original thesis; and I fear I shall continue to dread—to the end of time—seeing the first line of a patient's history read: "Chief complaint—Headache!"

Some Clinical, Pathological and Therapeutic Aspects of Cancer of the Breast*

By MAX CUTLER, M. D.

Director Tumor Clinic, Michael Reese Hospital, Consultant in Tumors, Edward Hines Jr. U. S. Government Veterans Hospital, Chicago, Ill.

IN ORDER to illustrate certain clinical and pathological aspects of the cancer problem, I shall begin with a discussion of tumors of the breast. There is, perhaps, no more fertile field for the study of tumors than the mammary gland. Surgical removal of the breast for benign tumors has presented ample material for gross and microscopical study of the breast before cancer begins. In this manner there has accumulated important data upon changes in the breast which precede cancer, i.e., potentially cancerous lesions. The fact that the mammary gland is so intimately related to ovarian activity, and the changes that it undergoes at birth, during menstruation, pregnancy, lactation and the menopause, give further opportunity to observe and study the physiology of this

* Presented before 91st Anniversary Meeting, State Medical Society of Wisconsin, Milwaukee. Revised to date of publication.

organ and its relation to pathological processes.

The technique of cutting whole serial sections of the breast by means of a giant microtome, first introduced by Sir George Lenthal Cheatle of London, has added greatly to our knowledge of the morphological changes associated with tumor formation. By means of this technique it is possible to study topographical relations which are otherwise incapable of detection and interpretation.

PATHOLOGICAL CONSIDERATIONS

Normal physiological activity of the mammary gland leads to a simple hyperplasia of the epithelium lining the ducts and acini. The newly formed cells fail to survive, desquamate and form debris which is absorbed or accumulated in the duct system of the breast. This epithelial change is accompanied by a hyperplasia of the pericanalicular and periacinous connective tissue and an accumulation of lymphocytes. The microscopic appearance thus created has given rise to the designation "chronic mastitis". Since it is now clearly understood that the presence of lymphocytes is not necessarily an indication of inflammation, and since these clinical and microscopical phenomena are directly related to physiological activity, we contend that the state is a physiological one and not one due to inflammation. For these reasons, Cheatle has suggested the term "mazoplasia" to emphasize the physiological character of this condition. The use of the term "chronic mastitis" under these circumstances should be avoided, not only because it is not a true description of the lesion but more particularly because of the vagueness of the term. As it is generally used in the literature the term includes not only the innocent physiological state which we have called mazoplasia, but also the more serious conditions, microscopic cysts and papillomata. The inclusion of such innocent and purely physiological states as mazoplasia with such dangerous lesions as Schimmelbusch's disease under one term, has led to a great state of confusion especially upon the question of the relationship between so called chronic mastitis and cancer. If by chronic mastitis one refers to mazoplasia, our evidence fails to show any relationship between the two states. If, on the other hand, one includes Schimmelbusch's disease under the term, the problem is different.

Our evidence indicates that cancer of the breast is not a sudden event or accident in previously normal tissues. On the contrary, it appears to us that cancer of the breast is the end result of a series of changes which may have begun in the breast many years before a tumor is discernible. There is much evidence to indicate that excessive epithelial hyperplasia under certain circumstances results in the formation of cysts. When this occurs the state is no longer a physiological one but a pathological one. Cystic disease of the breast is frequently diffuse and often bilateral. These facts were emphasized by Reclus and the condition is now frequently designated as Reclus' disease. In some instances one cyst outgrows its neighbors and reaches a sufficient size to be clinically palpable. In such cysts the epithelium is usually degenerated and cancer rarely complicates them. When cancer is discovered in the wall of a palpable cyst it has usually originated in the active epithelium of a duct which enters it.

It should be recalled that when a cyst is clinically palpable as a single lesion it is almost invariably surrounded by numerous smaller cysts which are too small to be felt. It should also be noted that the microscopic cysts are potentially more dangerous than the large palpable cyst. A common error that is committed in an effort to practice conservatism is to remove the large innocent cysts and leave behind the microscopic cysts in which the complication of cancer is more common.

Cystic disease of the breast may remain uncomplicated for many years or throughout the lifetime of an individual. More commonly, however, papillomata arise in the cysts and there results a state of the breast which is commonly known as Schimmelbusch's disease.

Again, the benign neoplastic process may remain uncomplicated for many years or throughout the lifetime of the individual.

Duct papilloma, or the more common state of multiple duct papillomata, often give rise to a hemorrhagic or serohemorrhagic discharge from the nipple. This sign may therefore indicate a benign neoplastic state. In a certain proportion of cases, however, the benign neoplastic state becomes complicated by carcinoma and unfortunately the transition from the benign to the malignant state is not accompanied by detectable clinical signs; nor is it possible to predict whether a benign papillomatous condition will regress, or remain stationary, or become complicated by the malignant state. We do know that a considerable proportion of carcinomata show evidence of having passed through these various states. In many carcinomata no evidence of pre-existing cysts or papillomata is discovered and it is not known whether they have developed in a different manner or whether they have developed so rapidly that they have left no traces of the pre-existing lesions.

Various classifications for cancer of the breast have been proposed and none has been altogether satisfactory. The older writers described two classes: medullary and schirrhus. The medullary type refers to the very cellular and highly malignant form to which the term anaplastic carcinoma is now so often applied. Schirrhus carcinoma refers to the less cellular and more slowly growing form to which the term fibrocarcinoma is now often applied. In the extreme form this type of cancer occurs in older women and progresses very slowly, often remaining localized over a period of several years without metastasizing to the axillary nodes.

The histogenetic classification that has been proposed by Cheatle and the writer divides cancer of the breast into three main varieties as follows: 1. Paget's disease of the nipple; 2. Duct carcinoma; and 3. Duct and acinous carcinoma. These three forms of cancer of the breast represent the only structures from which they can arise.

CLINICAL CONSIDERATIONS

On the whole, cancer of the breast is a highly malignant and treacherous disease. There are exceptions in which slowly growing and relatively benign forms remain localized for long periods, but they are unusual. The majority of cancers of the breast metastasize early in the course of the disease. It is an unfortunate fact that once the axillary lymphatic glands are invaded by carcinoma the chances of five year cure suddenly fall to about fifteen per cent in spite of the most radical surgical and complete radiotherapeutic procedures.

The early diagnosis of cancer of the breast is actually a more difficult matter than it appears to be. When a lump in the breast is large enough to be clinically palpable it is actually in a relatively advanced stage and has frequently already metastasized to the axillary nodes. The patient is unable to detect a lump in the breast until it has reached a certain size. If we take the position that all women should have their breasts examined at periodic intervals we are confronted with two difficulties. First, the examination would have to take place at least every three months; and second, the detection of early cancer on palpation by the physician is not an easy task. In spite of these difficulties, however, there can be no doubt that frequent examination of the breasts of women by physicians would lead, on the whole, to the detection of the disease in its earlier stages.

Another important measure that can help reduce the mortality of the disease would be the recognition, correct interpretation and prompt treatment of lesions of the breast that are suspected or known to be precursors of cancer. I refer to such states as "bleeding nipple", Schimmelbusch's disease and Paget's disease of the nipple.

SYMPTOMS AND SIGNS

Pain—is not a sign of early cancer as a rule. Pain usually appears in the later stages of the disease. Its absence in the early stages of cancer is an unfortunate circumstance as most women cite the absence of pain as their most important reason for delay. Under exceptional circumstances intense, sharp, persistent, localized pain may appear in the early stages of cancer. As a rule, however, the patients suffering from generalized pain in both breasts, particu-

larly when the pain is associated with the menstrual periods, are not suffering from cancer of the breast.

Discharge from the Nipple—A straw-colored discharge from one or both nipples is usually indicative of epithelial hyperplasia and cystic formation in the ducts and acini. The condition is abnormal but its relation to cancer is remote in that the absence of bleeding fails to show clinical evidence of tumor formation. A persistent straw-colored discharge may be associated with Schimmelbusch's disease and the color of the discharge may change from that of a clear straw-colored character to a frankly hemorrhagic one. A breast which is the seat of any form of discharge bears the closest observation.

A spontaneous hemorrhagic or serohemorrhagic discharge is indicative of: 1. Simple duct papilloma; 2. Multiple duct papillomata or 3. Early duct carcinoma. In the absence of a palpable tumor the possibility of duct carcinoma is remote although I have observed it in one instance. Under no circumstances should a spontaneous hemorrhagic discharge of the nipple be permitted to go untreated. A careful investigation of such a breast permits of a fairly accurate interpretation of the underlying pathological changes and the treatment indicated.

Palpable Tumors—The normal breast varies markedly in its anatomical structure in different women. In addition to these individual variations the breast undergoes pronounced changes associated with the menstrual periods, with puberty, pregnancy, lactation and at the menopause. The interpretation of "lumps" in the breast is actually a difficult matter for the experienced physician, hence quite a difficult problem for the patient.

Unless a single discrete mass is present, it is advisable to examine the patient during different stages of the menstrual cycle. Some "lumps" that are present in the premenstrual period will be found absent soon after the menstrual period.

The most important sign of cancer of the breast is the presence of a single discrete tumor or a localized nodularity in one breast. This finding, even in the absence of skin adherence or retraction of the nipple, must be considered as evidence of cancer until proven otherwise by microscopic examination if it occurs in the breast of a woman over the age of twenty years. The presence of skin adherence or retraction of the nipple or both constitute additional important evidence of the presence of cancer.

Fig. I. The appearance of a normal breast on transillumination.

Multiple tumors usually indicate multiple cysts or fibroadenomata. The one exception is when multiple nodularity indicates a widespread carcinoma. Under these circumstances, however, the presence of other signs establishes the diagnosis.

TRANSILLUMINATION

In 1929 the writer first described transillumination of the breast as an aid in the differential diagnosis of certain conditions of the breast. Since this report other observers have reported their experiences with this method and it is now generally agreed that this method has a definite field of usefulness and should form part of the diagnostic study of the breast. It is essential that the room in which the examination is made be totally dark. The transilluminating lamp must yield an intense light and must remain cool. A water cooled lamp of adequate intensity has been developed recently that is highly satisfactory for this

Fig. II. The appearance of a papilloma duct on transillumination.

Fig. III. The appearance of a solid tumor in the breast on transillumination.

purpose. Transillumination has been found to be of special help in the following three conditions:

1. Transillumination is of help in the differential diagnosis between cysts containing clear fluid and solid tumors. A deep-seated tense cyst in which fluctuation cannot be elicited simulates a solid tumor. Even in the absence of fixation and skin adherence the differential diagnosis between a tense cyst and an early duct carcinoma may be impossible. Both may be equally circumscribed and movable and unattached to the skin. Sometimes a cyst is complicated by an inflammatory process and exhibits the classical clinical signs of cancer. (Skin adherence and retraction of the nipple.) Actually this error in diagnosis has been made repeatedly and a radical mastectomy performed for a simple cyst.

Transillumination permits a differential diagnosis between a simple clear fluid cyst and a solid tumor, and, by permitting a preoperative interpretation of the underlying pathological process, indicates the line of procedure and assists in estimating the prognosis. Transillumination does not permit a distinction to be made between a benign solid tumor and a malignant solid tumor as, for example, between fibroadenoma and carcinoma. The ability to tell the apprehensive and nervous patient that the tumor in her breast is probably a cyst and not cancer offers an important psychological advantage and promptly releases the patient from a mental apprehension and anxiety which is indeed gratifying.

2. A trauma to the breast sometimes causes interstitial hemorrhage and a resulting hematoma. Sometimes the mass thus formed becomes attached to the overlying skin which it dimples, and the clinical picture presented is that of carcinoma. The similarity of the two lesions under these circumstances is so striking that errors have occurred in expert hands.

On account of the intensity of the shadow that is cast by blood pigment the appearance of a hematoma on transillumination is so striking as to be almost specific. When this appearance is noted one is justified in withholding surgical intervention. Transillumination at weekly intervals discloses, in cases of hematoma, a diminution in the intensity and extent of the opacity. This added evidence justifies further delay and careful observation until the mass in the breast on palpation and the opacity on transillumination have disappeared completely. By pursuing this policy I have avoided surgical interference in a small series of cases in which the absence of this diagnostic aid would have forced me to perform an exploratory operation in order to establish the diagnosis.

3. Perhaps the most useful field for transillumination is in breasts which are the seat of a hemorrhagic or serohemorrhagic discharge from the nipple. Education of the laity has had considerable influence upon the clinical picture presented to the physician particularly in lesions of the breast. Some years ago the majority of women who consulted their physicians for a hemorrhagic discharge from the nipple harbored an associated tumor of the breast. Under these circumstances the diagnosis was clear. The patient was suffering from duct carcinoma. Today the presence of a palpable tumor in a breast which first comes under observation for "bleeding nipple" is exceptional. The diagnosis, interpretation and treatment of a breast which is exhibiting a hemorrhagic discharge from the nipple in which palpation is negative is indeed a difficult problem. Thus the education of the laity has increased the difficulties of the physician in that it makes it necessary for him to interpret early signs and symptoms.

Transillumination of a breast which is the seat of a hemorrhagic discharge from the nipple may disclose no shadows. Such negative findings are exceptional and occur when the duct papillomata which cause this sign are microscopical in their proportions. Not infrequently a fine linear shadow can be discovered in the region of the areola which can be detected by very careful observation. This examination can be facilitated by gently pressing on the soft tissues of the areola so that the affected duct is brought closer to the surface.

In most cases transillumination discloses opacities that are easily visualized. These opacities represent dilated ducts filled with papillomata. In this manner one can usually determine the presence, position and distribution of such lesions. This visualization is of help in determining the therapeutic procedure. It is obvious that a single papilloma situated in the region of the areola constitutes a different therapeutic problem than multiple lesions scattered widely throughout the breast. Again it should be emphasized that transillumination cannot distinguish between benign papilloma and duct carcinoma.

TREATMENT

The accepted procedure in the treatment of presumably operable cancer of the breast is radical mastectomy. In many instances the surgical procedure is combined with advantage with radiotherapy. There is accumulating evidence which indicates the advantages of preoperative radiation in selected cases. I adopt this procedure under several circumstances. In very young women who frequently develop highly malignant anaplastic carcinoma of the breast, I utilize radiation as the initial procedure. The subsequent method of therapy depends upon the extent to which the tumor has responded to radiation. In very rare examples the lesion has been highly radiosensitive and disappeared under intense external radiation alone but this response is exceptional. In most examples the regression is partial and must be followed by interstitial radiation or by mastectomy. It is impossible to generalize in these cases. So many factors, particularly of a psychological nature, play a part in this problem that each case must be treated on its merits.

In lesions whose operability is questionable it is frequently advisable to adopt preoperative radiation as the initial procedure followed by radical mastectomy. There is considerable evidence to support the advantages of preoperative radiation over postoperative radiation.

The problem of prophylactic postoperative radiation remains unsettled. Many observers utilize it as a routine procedure and claim that by its use the percentage of cures is increased and the tendency to local recurrences is diminished. These facts are difficult to prove statistically although isolated observations would tend to confirm this position. With some exceptions I utilize prophylactic postoperative radiation.

In my experience, the most important defect in the present day treatment of cancer of the breast is the inadequacy of the surgical procedure that is practiced. The advent of radiation as an accessory therapeutic procedure has seemed to develop the tendency in certain quarters to reduce the extent of the surgical operation with the er-

roneous belief that radiation may be utilized to deal with those outlying portions of the tumor that are not removed. The tendency appears to me to be unsound. Any violation of the Halsted principle of block dissection of the breast, overlying skin, fascia, muscles, and axillary contents fails to give to the patient the maximum chance of cure that is available today. I perform the radical Halsted operation in operable mammary cancer. This wide surgical removal may be preceded by or followed by adequate external radiation as the special circumstances may indicate.

Recent efforts to treat presumably operable mammary cancer by radiation alone are of interest. No one who has seen many victims of this disease can deny that special circumstances arise, particularly in young women in whom the loss of a breast, even though leading to a cure of the disease, causes such changes in the mode of life of the patient and so affects her happiness that an alternative measure in which the loss of the breast might be avoided would be most welcome. In most instances the psychological shock of this procedure is soon overcome and the patient accommodates herself to her previously normal state. In some examples, however, the surgical procedure is refused. The writer has at present, under treatment by radium alone, a group of patients suffering from cancer of the breast who either refused surgical intervention or in whom such a procedure had to be eliminated. Until the results of these and other investigations are thoroughly known and adequate time has elapsed to insure their permanency, we must maintain our position that presumably operable mammary cancer is a disease to be treated by radical surgery usually combined with radiotherapy.

Roentgen Therapy in Giant Cell Tumors*

By BARTON W. JOHNSON, M. D.
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THE varied terminology applied to this tumor in the past has led to much confusion. The general opinion is that the ordinary giant cell tumor is considered to be benign in its clinical course, but the occurrence of rare types in which pulmonary metastases have been found cannot be denied.

This condition is usually known by the name of giant cell sarcoma. It is also called a myeloid sarcoma or myeloma. These names are not satisfactory. It is not a bone marrow tumor. Nor should it be called a sarcoma for this term suggests malignancy, and, while this tumor is locally destructive, it never or at least seldom presents the general features of malignancy. However, after repeated local irritation such as currettage it has been known to develop into a malignant spindle cell sarcoma.

A relationship appears to exist between giant cell tumors and ostitis fibrosa cystica. Giant cells are frequently found in this condition and often such a tumor will originate in the walls of one of the cysts.

The giant cell tumor is slightly more common in the female sex and shows a predilection for the age period 15–30.

A history of antecedent injury is usually obtained. In 80% of the cases the tumor involves one of the long bones and in the lower extremity twice as frequently as the upper. The femur, tibia and radius are the favorite sites, however, we are are showing a case occurring in the clavicle.

The typical giant cell tumor of a long bone commences as a central growth, and as it enlarges induces a slow expansion of the cortex. The tumor tissue is composed of friable material, reddish brown in color, some areas have a jelly-like consistency and there are clumps of tissue which are stringy and fibrous. The usual tumor is very vascular while in the interior of the bone shell there may be liquid blood. In the tumor mass cystic areas develop. Bone expansion occurs, the cortex continuing resistant during the early stages, however, in some cases

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perforation of the shell is found rather early in the course of the disease.

The tumor is composed of a cellular stroma in which large giant cells are scattered. The stroma is usually loosely packed with cells of round or polygonal type. Thin walled blood spaces and hemorrhages are present in the picture. In addition areas of fibrous tissue and osteiod bone may be seen. The giant cells are absolutely specific and are in striking contrast with the giant cells of sarcoma proper.

The histogenesis of the giant cell tumor is still the subject of much discussion and speculation. There are two theories: first, that both giant cells and stroma cells are actual tumor elements; and second, that the histological picture is simply the end result of an inflammatory process, the giant cells being of the foreign body type. The second conception is supported by the fact that giant cell tumor areas are found with unfailing regularity in ostitis fibrosa cystica, a condition which is known to be non-neoplastic.

The clinical picture is that of a localized expansion of bone involving usually one of the long bones. The swelling is generally painless, distended veins may be present but the soft tissues show no sign of matting or infiltration. In the radiograms a giant cell tumor shows a multicystic expansion of bone. Coarse trabeculation is generally seen, and the cortex is attenuated.

Under treatment Sir Robert Jones of England says: "Currettage with cauterization has become the operation of choice owing to the writings of Bloodgood. The bone shell is opened, the tumor contents evacuated and finally the interior cauterized with pure carbolic acid. Local resection is occasionally necessary."

On the other hand, Boyd, the pathologist of the University of Manitoba, says: "As the result, however, of repeated local irritation in the form of curettage giant cell tumor has been known to develop into a malignant spindle cell sarcoma."

These writers do not make any mention of roentgen therapy in the treatment of this condition. I wish to call your attention to certain biological laws of roentgen therapy as having a bearing on the treatment of this condition. Cell destruction may occur after heavy radiation, with the result that the function of certain organs is abolished or profoundly modified. Later effects, such as phagocytosis of necrotic material, connective tissue proliferation, strangling of malignant cell groups, or groups of hyperplastic cells, and their replacement by connective tissue follow the period of destruction.

It is again emphasized that embryonal undifferentiated tissues are more sensitive to radiation than those tissues which have acquired fixed, adult characters, and that cells in an active state of function and division are more susceptible than those in a more inactive or dormant state.

The knowledge of these laws explains the fact that roentgen therapy is a widely useful measure in the treatment of diseases in which there is pathological change in the cells and tissues, accompanied by active hyperplasia and mitosis.

ILLUSTRATIVE CASES

As illustrating the value of roentgen therapy in giant cell tumor of bone as against operative interference, I wish to call your attention to the following cases:

Case I. Mary B., young girl, aged 20 years, employed as physician's office girl, giving a history of previous excellent health, in March, 1931, noticed a slight dull pain in the outer half of the left clavicle and detected a small swelling in this area. A physician was consulted who painted the area with tr. iodine a couple of times without effect.

On July 11, 1931, she consulted a surgeon who advised x-ray examination and on this date the first film was made.

The rarefied nature of the pathology is well shown here, as is also the bone expansion on the superior surface.

On July 11, 1931, the diseased area was opened and a specimen sent to a pathologist who reported: "Giant cell tumor of bone."

Following this pathological report the patient received several x-ray treatments in July and the first half of August at the hands of a technician who used a KvP 85 Ma 5 F 2 mm. Al. Distance 16 inches and time 5 minutes.

The radiation from this therapy was so light that no reaction was produced in the cells of the tumor.

In October, 1931, the patient was referred to me for x-ray therapy. Three treatments were given at intervals of seven days. The patient was unable to return for a fourth treatment because of a journey.

Case I. 8–17–31 Before treatment.

Case I. 8–30–32 After treatment.

After an interval of six weeks the patient again came for treatment. Four treatments were then given within three weeks. These treatments consisted in the application of 250 r-units at each exposure with protection of the area around the pathology with lead.

On December 4 a film was taken. In this film the blister on the upper surface had disappeared and the rarefied area in the bone had been filled in by what appears to be approximately normal bone structure.

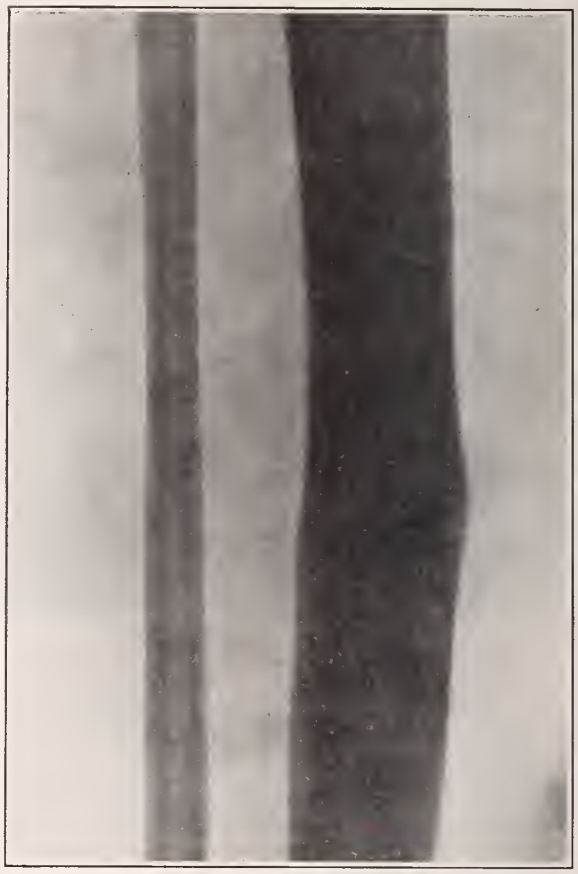
After eight months a follow-up film was made on August 30, 1932.

Case II. Eloise H., young white girl aged 13 years, living in Mansfield, Ohio, gives a history of having been kicked on right tibia in a game of basket ball in January, 1930. Late in the summer of the same year the mother noticed that the skin was swollen and had a bluish cast. There was no pain at any time. In October of the same year the patient saw a consultant in Mansfield who advised an examination by Dr. Joseph Bloodgood of

Case II. 11–7–30 Before treatment.

Johns Hopkins. The patient went to Baltimore and Dr. Bloodgood advised roentgen therapy but did not open the bone for a pathological examination. Dr. Bloodgood referred the case to me for therapy. Patient was seen by me for the first time on November 7, 1930, when the first film was made before treatment. You will observe the cystic areas in the tibia particularly on the inner lateral border, together with bone expansion which occurred during the early stages while the cortex was resistant, however, there is evidence of commencing perforation of the shell. Four treatments were then given within a period of three weeks.

A treatment consisted of exposure with KvP 135—Ma 5—F 1 mm. Aluminum and ¼ mm. of copper and a distance of 40 cm., which gave a skin radi-



Case II. 10–13–31 After treatment.

ation of 25 r-units per minute. The exposure time was 15 minutes at each treatment giving a total of 375 r-units per treatment. Two treatments being given anteriorly and two posteriorly with sides of leg protected by lead strips.

After a rest interval of eight weeks a second course of treatment was given and on May 2, 1931, a film was made.

In this film you can see that the bone expansion has largely disappeared but that there is some evidence of one cystic area on the inner lateral border. At this time, May 2, 1931, a third course of treatment was started and a total of four radiations made.

On October 13, 1931, the patient called at the laboratory and a film was made in which the cystic areas have completely disappeared, the bone expansion has been corrected and there is some evidence of thickening of the cortex.

These films were then sent to Johns Hopkins and under date of Dec. 31, 1931, Dr. Bloodgood wrote:

"I am looking at recent x-rays of Eloise H. The remarkable thing now is that under a course of deep x-ray therapy the pathological bone formation of the tibia has practically disappeared. It is controlling malignant disease and saving the patient from amputation."

Dr. Bloodgood continues:

"I am delighted with the result in this case. It is the best example of the value of x-ray treatment, either as a specific agent or a preventive of operation."

On April 1, 1934, a report was obtained on both of these cases which stated that there had been no return of the pathology.

CONCLUSIONS

1. The usual surgical treatment is curettage with cauterization following which a resection is occasionally necessary.

2. Surgical pathologists state that as a result of repeated irritation in the form of curettage, giant cell tumor has been known to develop into malignant spindle cell sarcoma.

3. In view of the above surgical treatment and the occasional transformation of giant cell tumor into sarcoma as a result thereof, proper roentgen therapy presents itself as the weapon of choice.

4. The use of roentgen therapy by those lacking proper instruments of precision, who give under-dosage and are always staying on the safe side and never doing any harm, will result in failure to check the pathology and necessitate a resort to surgery or a possible resection, whereby discredit will be brought on roentgen therapy.

5. When proper equipment is available and the radiation is measured by the r. meter thus enabling the operator to push the treatment with accuracy to the point where the diseased cells are destroyed, roentgen therapy is controlling disease which may become malignant and saving the patient from possible amputation.

Urinary Tract Infections and Urinary Antiseptics

A Special Article

By GEORGE H. EWELL, M. D.
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THE problem of internal urinary antisepsis is an extremely interesting and important one and difficult of evaluation since claims for new drugs which are introduced at intervals must undergo extensive clinical application. Therefore, the profession is forced to accept some of these products for clinical trial until their efficacy is proved or disproved if its patients are to be given the benefit of the doubt.

Davis and Sharpe recently reviewed the subject. In previous articles Davis has defined the experimental requirements of the ideal urinary antiseptic as a drug "which is chemically stable, nontoxic, and nonirritating to the lower urinary tract; which is antiseptic in high dilution (in urine as well as in water) and which is eliminated unchanged in high percentage by the kidney". Assuming that a drug fulfills these qualifications, it must be demonstrated that it will act in the human urinary tract, there being a marked difference between the urinary tract and the test tube. The problem is further complicated by other factors such as the various surgical lesions of the urinary tract and distant focal infections.

Davis and Sharpe conducted experiments to determine if the oral administration of a given drug in unit maximum dosage administered to normal persons would cause the secretion of antiseptic urine. After making antiseptic tests on urine specimens before and after taking the various drugs, they found that pyridium is practically inert, caprokol is slightly antiseptic, methenamine is quite efficient, and acriflavine (in alkaline urine) is unfailing. The latter drug is not ideal as in a great many patients it causes severe nausea and diarrhea.

Mitchell and Scott presented 75 cases of pyelitis and cystitis in which urinary antiseptics and acidifiers were used. They found ammonium phosphate and benzoate to be effective urinary acidifiers but concluded that a change of pH. of the urine has no influence on the infection. Hexylresorcinol, pyridium, and helmitol showed no evidence of being of value as urinary antiseptics. Methenamine in urine that was well acidified cured at least one-third of the non-sur-

gical cases of pyelitis and cystitis. Methenamine is liberated at the kidney pelvis and is equally effective for pyelitis as it is for cystitis. Resistance to formaldehyde is shown by some organisms and may be due to an individual characteristic of the organism. Focal infection such as colonic absorption seems to have a place in the etiology of some persisting infections of the urinary tract. Urinary infection in simple pyelitis of pregnancy persists and disappears only post partum. The conclusion of the British investigators that the pH. of the urine has no influence on infection is contrary to the opinion of many American investigators.

Crance points out that the Bacillus coli is undoubtedly the commonest organism to invade the upper urinary tract and is an extremely resistant one to all forms of treatment. Clark noted a difference in the response to treatment between the escherichia and the aerogenes types of this organism. Clark found a more satisfactory response to treatment when the organism was of the escherichia type.

Crance, by using autogenous vaccines in Bacillus coli infections in combination with other therapeutic measures, obtained very satisfactory results in approximately 80 per cent of a large series of cases. As the work was done prior to Clark's work and the cultures not subdivided, it may be that more could be expected from the vaccine treatment.

Shohl and Janney demonstrated that the growth of Bacillus coli in the urine is inhibited at a pH. of approximately 4.6 to 5.0 and that in highly buffered mediums such as urine, growth is inhibited at a higher pH. than in other culture mediums.

Helmholz noted that the urine of an epileptic patient on a ketogenic diet remained sterile after standing for a week. Clark and Helmholz have obtained remarkable results in both adults and children by employing such diets in the treatment of bacillus infections of the urinary tract.

The explanation of the favorable results is thought to be due to the ketone bodies present in the urine. Fuller has shown that the bacteriostatic or bactericidal effects are due largely to the beta-oxybutyric acid and its activity is increased in proportion to the acidity of the urine. By the addition of acidifying agents such as ammonium chloride and ammonium nitrate, they have been able to further lower the pH. of the urine and thus increase the efficacy of their treatment. Crance has been able to confirm their work.

Manwaring recently commented on the question of special diets that had for their purpose alteration in acid-base equilibrium which have been proposed as adjuncts in the treatment of certain chronic infections. The discussion concerned the immunologic effects of such diets. He states that the basis for such diets has been largely empirical and cites the work of Bonnano as the only current work in which an attempt to study the immunologic response of laboratory animals on such diets has been made. Bonanno used rabbits and guinea pigs and altered their normal acid base equilibrium by the addition of certain calcium or sodium salts to their routine diets. With the acid diets it was noted that within from 30 to 75 days there was a lowering of phagocytic power and of the bactericidal power of the blood stream, and later a reduced complement-titer. Specific antibody production was inhibited and anaphylactic susceptibility was increased. With alkaline diets Bonanno found that alkalosis was rarely if ever of immunologic benefit to the animal. In a group of guinea pigs fed on an alkaline diet which received an intraperitoneal injection of a dose of low virulent tubercle bacilli, death occurred on an average between the twentieth and forty-second day, while a control series on a normal diet which received the same dose of tubercle bacilli these guinea pigs survived on an average of ninety-five days.

Manwaring states that Bonanno's conclusions were to the effect that any experimental variation from the normal acid-base equilibrium is an immunologic disadvantage to normal animals and if this be equally true in clinical medicine, immunologic benefits can be expected only in cases in which the prescribed diets are aimed to correct preëxisting acid-base abnormalities.

While the works of Bonanno and Helmholz and Clark are not exactly comparable, it would appear that the clinical results of

Helmholz and Clark are somewhat at variance with the experimental work of Bonanno, and, as previously pointed out in the case of antiseptic drugs, clinical and laboratory results do not always entirely coincide.

In view of the fact that Helmholz and Clark have demanded a most crucial test, namely, negative cultures of the urine as a criterion of cure, their results assume more importance. Urine cultures should be made in all cases of urinary tract infection and where indicated the ketogenic diet be employed.

Miller and Chu recently studied the effects of urinary antiseptics with relation to fluid intake. Their studies showed that the restriction of fluids during the time of the administration of urinary antiseptics definitely enhanced the inhibitory effect of the drug on bacterial growth in the urine. They point out that such a procedure would be feasible for patients with chronic or lower urinary tract infections but the patient with acute renal infection with temperature should have an adequate supply of fluids to overcome toxemia.

In the treatment of urinary tract infections due to staphylococci and streptococci, neoarsphenamine intravenously in small doses has proved very satisfactory in the hands of many. The use of the drug is well known to most urologists although few reports concerning its use have appeared in the literature. Gaudy has also employed neoarsphenamine intravenously in the treatment of colibacillus infections of the urinary tract, and, while he does not consider it a panacea for such infections, he feels that it is a valuable adjuvant to the customary treatment of this type of infection.

Heckenbach has likewise employed neoarsphenamine intravenously in the treatment of urinary tract infections and it is his opinion that some of the results are traceable to the acidification of the urine which is thus produced. He also recommends it as an adjunct in the treatment of chronic infection of the male adnexa.

The writer has employed neoarsphenamine intravenously for the treatment of coccus infections of the urinary tract with good results and, more recently, in the treatment of colibacillus infections. While the results have not been brilliant they have been of such a nature as to warrant the continued use of this preparation.

It may be assumed that we have some effective means of treating urinary tract infections providing all such cases are given complete general and urologic investigation with the eradication of all surgical lesions and associated factors, the employment of drugs with known therapeutic value and the ketogenic diet, where indicated, as adjuncts.

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Analyzes Sickness Insurance

A preliminary report by the Bureau of Medical Economics of the American Medical Association entitled "A Critical Analysis of Sickness Insurance" is published in the April issue of the Bulletin of the Association. The Bulletin is mailed to all Fellows of the Association but this particular issue may be secured by members, even though not Fellows, upon request made to Dr. Olin West, Secretary, American Medical Association, 535 N. Dearborn St., Chicago.

The Bulletin of eighty pages discusses the conditions out of which the original insurance plans grew, the changes in institutions and objectives, medical services under the plans, the place of the physician in sickness insurance, the organization of medical services under sickness insurance and concludes with an analysis of some of the general professional and social effects. The Bulletin offers a very complete and authoritative analysis of the subject.

Headaches of Ocular and Nasal Origin

By W. E. GROVE, M. D.
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IN DISCUSSING headaches caused by pathology in the field of ophthalmology and oto-laryngology I shall use the term "headache" to include both the internal ache from changes within the cranium and its meninges and also the various neuralgic aches and pains about the face and head, local and referred manifestations, external to the brain and its envelopes.

As early as 1860 Hilton said, "If the hidden cause of pain be in any one particular spot it is only by tracing the nerve of and from that spot that we can hope to arrive logically at the real cause of the symptoms, and so divest the case of its obscurity. Applying this method to practice, it is through the medium of the distribution of the cerebrospinal nerves of sensation (the fifth being the true cranial sensation nerve), that we are enabled to explain those pains which are called sympathetic, but which result from a continuity of nerves between the cause and the effect, the disease and the symptoms." (1. Hilton, John, On Rest and Pain. N. Y. 1879 2nd Ed., p. 41, quoted by Ralph A. Fenton, Trans. Am. Acad. of O. and O. 1927).

If therefore, we would trace the mechanism by which headache is produced by pathology in the field of eye, ear, nose and throat we must have before our minds a clear picture of the fifth cranial nerve and its distribution to its complicated connections. Sensation from the eye and from the nose and its sinuses travels by way of the ophthalmic and maxillary nerves to the Gasserian ganglion. Pain impulses travel from the Gasserian ganglion to the nucleus of the Vth and thence to the optic thalamus and the cerebral cortex. (Hubert, L., in Fenton, see above).

Sensory nerves are found in the dura but thus far have not been demonstrated in the arachnoid or pia. (Tilney and Riley, Form and Function of the Central Nervous System, N. Y. 1921—p. 712–713).

The dura of the anterior fossa is supplied by the nasal branch of the ophthalmic division of the trigeminal. The middle fossa is supplied by extensive branches from the Gasserian ganglion and from the mandibular nerve near its origin.

The tentorium is supplied by the recurrent nerve of Arnold arising from the ophthalmic division of the Vth near its entrance into the orbit. The posterior fossa is supplied by, (1) a recurrent branch from the Vagus root coming back into the dura via the jugular foramen, (2) sensory branches from the loop between the hypoglossal and the I and II cervical nerves.

In the sphenopalatine fossa hanging from and connected with the maxillary branch of the Vth is the sphenopalatine ganglion. This probably is not a sensory but a sympathetic ganglion. It is the termination of the Vidian nerve which in turn is formed by a junction of the great superficial petrosal and the great deep petrosal. Through the great superficial petrosal the ganglion is in connection with the geniculate ganglion of the facial and through the great deep petrosal and its continuations, the small deep petrosal and the nerve of Jacobson, it is in connection with the glossopharyngeal. It is also connected with the cervical sympathetics by way of the carotid plexus connections.

Afferent impulses, arising along the sensory distribution of the Vth, are carried by the autonomic fibers back through the Vidian nerve and the geniculate ganglion and even on down to the cervical and upper thoracic ganglia. Herein is found an explanation of the referred pains in the ear, occiput and shoulder. These pain impulses are picked up by the posterior root ganglia and relayed on to the optic thalamus and cerebrum, where they are perceived as pain originating in the ganglionic distribution rather than in the nose or cheek. (Hubert, L., cited by Fenton, R. A.)

The headaches which can be attributed to the eye and its adnexa can be divided roughly into two general classes. In the

first class are placed those headaches which are due to actual pathology in the eye itself and in the second class those headaches which are due to errors of refraction or to muscular anomalies. It is well known that any inflammatory lesion in the anterior segment of the eye may cause a deep seated supra-orbital pain on the affected side. Among these lesions may be mentioned keratitis, corneal ulcer, iritis and iridocyclitis. The mechanics in the production of the headache in these conditions is the direct irritation of the terminal nerve endings of the ophthalmic branch of the Vth nerve.

The severe pounding, grinding pain in the eye and in the supra-orbital region occasioned by an acute inflammatory glaucoma is well known. This pain is at times so severe as to mask the real situation of the lesion in the eye and obscure its significance. On the other hand the pain of the acute glaucoma is often associated with nausea and actual vomiting and much valuable time may be lost in investigating the gastric phase of the situation before the eye is suspected.

In the second group of eye disorders causing headache the time factor in the onset of the headache is important, the headache usually coming on after prolonged and excessive use of the eyes. Here the headache is usually frontal and bilateral though in a few cases it may be occipital or nuchal. The pure myope rarely has ocular headache but any of the other causes of ametropia may cause headache either in childhood or in age due to a congestion of the ciliary circulation owing to excessive or unequal use of the accommodative mechanism.

The headache produced by muscle imbalance is not rare but often overlooked. Exophoria which is very common would seem to be the frequent cause of headache. Hyperphoria which is more rare almost invariably causes headache. An ordinarily normal accommodation weakened by prolonged illness or more specifically by the toxins of some septic focus may initiate severe headaches which will again disappear when the activating cause has been treated.

In thus hastily covering the headaches of ocular origin let us not forget the dull ache of retinal fatigue among those who, with normal eye function, do excessively fine work over long periods of time. Let us also not forget that, due to the very variable irritability of the nervous system in different individuals, a refractive or muscular error which might be insufficient to cause any headache in one individual might cause excruciating distress in another.

NOSE AND SINUS LESIONS

Lesions of the nose and the accessory sinuses are very frequently factors in the production of headache. The accessory cavities of the nose are lined by a mucoperiosteum closely attached to the underlying bone. The ostea of the various sinuses open into the several meati of the nose. Swelling and congestion of the mucoperiosteal membrane may occlude these ostea, arrest their drainage and interfere with their aëration. Stagnant secretions in these cavities and lowered air pressure within them irritate their sensory nerves and may produce pain in the head. This pain may also at times be referred to the eyeball.

When the various sinuses are individually infected the location and radiation of the pain produced is rather characteristic. Thus frontal sinusitis produces supra-orbital to parietal pain; the antrum produces supra-orbital and cheek pain; the pain of anterior ethmoidal infection is supra-orbital and at the inner canthus of the eye; the posterior ethmoidal and sphenoidal infections produce parietal, postauricular and occipital pain and also retrobulbar pain.

Greenfield Sluder in his book, "Headaches and Eye Disorders of Nasal Origin", was one of the first to clearly describe and elaborate a condition to which he gave the name of "the sphenopalatine syndrome". This syndrome has more recently been designated as a "Vidian Neuralgia" by H. H. Vail of Cincinnati. It is characterized by pain, often paroxysmal in character, in the distribution of the second branch of the Vth, radiating also to the side of the face, to the ear, to the neck, shoulder and arm of the same side and sometimes also to the throat on that side. Sluder believed that this pain was due to an irritation of the sphenopalatine ganglion by a vacuum condition in the

posterior ethmoid and sphenoid sinuses rather than being caused by actual infection in these sinuses. Vail, on the other hand, believes that it is due to irritation of the Vidian nerve which runs in a groove through the floor of the sphenoid sinus to end in the sphenopalatine ganglion and Vail also believes that it is due to actual suppuration in the sphenoidal sinus and not merely to a vacuum condition within it. The radiation of this pain to the various localities noted becomes more clear when we remember the connections between the nasal and sinus sensory nerves by way of the sphenopalatine ganglion and the Vidian nerve with the geniculate ganglion of the VIIth by way of the great superficial petrosal; with the petrous ganglion of the glossopharyngeal by way of the great deep petrosal and the small deep petrosal nerves, and with the superior cervical sympathetic ganglia by way of the great deep petrosal and the carotid plexus.

The time at my disposal permits only the scratching of the surface of this vast field and does not permit me to enter into the questions of differential diagnosis. In conclusion let me say that I have drawn freely on the publications and contributions of Sluder, Vail, Fenton, Jackson and Coates and others without making any specific references to them in my text.

The Treatment of Carcinoma of the Uterus

By JOHN TASCHE, JR., M. D.
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THE following is a short resume of the indications and methods of treatment of carcinoma of the uterus as practiced at the Deutsche Universitäts–Frauenklinik in Prague, Č. S. R. under the direction of Prof. Dr. Wilhelm Weibel, one of the foremost perpetuators of the Wertheim School, who, since the completion of this paper, has been chosen the new head of the II Universitäts–Frauenklinik in Vienna, Austria. I will reduce the theoretical and statistical aspects of the subject to a minimum, so that operative technique of the Wertheim–Weibel school may be discussed in greater detail. The roentgen-radium technique as employed at the above clinic is closely fashioned after that popularized by the roentgen-radium station at Radium–Hemmet, Stockholm, Sweden, and which will be described at the close of this paper.

Carcinoma of the uterus is usually classified as either collum carcinoma or corpus carcinoma. Over 96% of the former are epithelioma and the latter are practically always adenocarcinoma. Clinically, it is of importance to remember that adenocarcinoma of the body of the uterus is the least malignant of all malignant diseases of the female genitalia, while carcinoma of the cervix is considered to be the opposite.

The clinical classification of carcinoma of the collum uteri is practically identical in all leading European gynecological clinics. It is similar to the Greenough classification accepted by the American College of Surgeons. The following is the classification in use at the Weibel Klinik in Prague:

1. Cases in which the neoplasm is very incipient and can be differentiated frequently only microscopically.
2. Cases in which the neoplasm has spread out some, but is still confined to small areas of the collum. (Operable case, very good prognosis).
3. Cases in which the carcinoma has spread to the adjacent vaginal wall, or the parametrium. (Unfavorable case, but sometimes still operable).
4. Cases in which the urinary bladder, ureters, or rectum is invaded by the neoplasm. The uterus has become fixed. (Very unfavorable case, perhaps in some instances still operable).

The *inoperable case* which may often be successfully treated by irradiation, and finally, the *incurable case* for which there is up to the present no method of treatment available.

CHOICE OF TREATMENT

Operative treatment is the treatment of choice in groups 1-4, that is, if there is no contraindication to operation, such as marked senility, marked cardiac insufficiency, advanced arteriosclerosis, general cachexia, or extreme adiposity, or unwillingness of the patient to submit to an operation. If such contraindications exist the patient is subjected to irradiation with radium or roentgen or a combination of the two.

Before a date is set for the operation, the patient is carefully examined by an internist to determine whether the patient is in condition to undergo a radical abdominal operation, or whether the vaginal operation is to be resorted to. If the uterus is not movable and its neighboring structures decidedly involved, operative treatment is not considered. Since the radical vaginal operation does not involve as much handling of the abdominal viscera as the abdominal operation and consequently the patient suffers less shock during and after the operation, cases of beginning carcinoma collum uteri, cardiac cases, and cases of general debility are operated on after the technique of Schauta. Many of the technical difficulties encountered in operating very adipose patients after the method of Wertheim do not present themselves when operating after the method of Schauta.

If there are no contraindications for vaginal hysterectomy, such as large myoma and advanced adnexa disease, cases of carcinoma of the corpus uteri are subjected to simple vaginal hysterectomy.

After admission to the clinic and after careful examination, the patient receives frequent vaginal douches (mercury oxycyanid 1:10000). Cardiac cases are digitalized, digalen being the preparation of choice.

Every case is cystoscoped to test ureter function and to discover any existing ureter anomalies. Intramuscular injection of 10 cc. indigocarmin precedes ureteral catheterization.

The evening preceding the operation the operative field is shaved and disinfected, the rectum and sigmoid are cleaned with enemas, and veronal 0.5 is given to insure sound sleep.

In the morning before the operation, if any tumor mass presents itself in the vagina it is cleared away with a sharp spoon and then the bleeding surfaces coagulated with a hot iron coagulating device, after which the vaginal vault is disinfected with a green soap solution, and mercury oxycyanid solution, and then tightly tamponed with iodoform gauze. An anaesthesia for this procedure is not necessary, since manipulation of the portio does not cause pain. It is however necessary that the vaginal walls be protected from the heat during the coagulation by properly fitting vaginal retractors held by an assistant. One-half hour before the operation the patient is given 1 cc. pantopon (Roche) intramuscularly.

ANAESTHESIA

Lumbar anaesthesia is almost exclusively used in preference to other anaesthetics in the Weibel Klinik. The anaesthetic agent is 10% tropococain (Merck) which is marketed in 1 cc. ampoules. It is of interest to note that a new preparation, namely, Panto–Spinocain (I-G. Farben-industrie A. G. Leverkusen a/R Germany) is being used extensively at present in the Weibel Klinik. This newer preparation produces analgesia for more than three hours. Injuries from its use have not as yet been observed. The point of injection is either between the second and third or between the third and fourth lumbar vertebrae. Time does not permit to explain in minute detail the exact technique of spinal puncture, but I do wish to state that this method of anaesthesia has rarely met with failure, provided there is no break in technique. After the 10 ccm. Rekord syringe containing one ccm. of 10% tropococain is fastened to the correctly placed lumbar puncture needle, spinal fluid is permitted to flow into the syringe up to the 10 ccm. mark, and thereby the tropococain is mixed with the spinal fluid. The entire contents of the syringe is then slowly injected into the spinal canal. Analgesia is complete within a few minutes, meanwhile preparation of the operative field is completed. Duration of analgesia averages one hour. If the operation is not completed before the effects of the anaesthetic have worn

off, a few drops of ether on the anaesthetic mask may be necessary.

THE WERTHEIM OPERATION

After completing the lumbar anaesthesia the patient is placed in the lithotomy position on the Ihle operating table, the legs in slight abduction are strapped to the leg rests. The abdomen and external genitalia are washed with soap and water, dried, and then sponged with a 10% iodin-benzine solution. After catheterization and draping, the table is so adjusted that the patient is in an exaggerated Trendelenburg position.

After midline laparotomy incision the Wertheim operation is begun with partial detachment of the urinary bladder, with the help of a long curved blunt dissecting scissors which is utilized in part to push and in part to cut the bladder from the collum uteri. Blunt dissection is greatly aided by the use of a small sponge grasped in a long dressing forceps. It is not always easy to keep the right plane of dissection between bladder and collum uteri in position, but this maneuver is simplified if the bladder is held up and against the symphysis with an anterior vaginal speculum. The bladder is dissected from the collum uteri to the vaginal wall. Complete dissection of the bladder from the uterus is possible only after the mobilization of the ureters and uterus.

Now the ligamentum infundibulopelvicum and rotundum are transfixed and severed bilaterally. The two surfaces of the ligamentum latum are separated with the aid of long dissecting forceps and the ureters sought. To accomplish this a long dressing forceps grasping a sponge is used for dissection by stroking in the direction of the long axis of the ureters. If this procedure does not bring the ureters into view the connective tissue of the ligamentum lata is dissected carefully, a millimeter at a time, with the dissecting scissors, interrupting every now and then to attempt to bring the ureter into view by blunt dissection. The ureter, which is not always constant in its course, can often be detected by its peristaltic contractions, which contractions always progress toward the bladder.

The exposed ureter is now followed to the point where it enters the parametrium. The operator now passes his forefinger along the course of the ureter, gathers the uterine vessels on the tip of his finger, which vessels he has in the meantime exposed with the aid of a tissue forceps in the other hand, double ligates, transfixes, and severs them. The course of the ureters in the true pelvis is now completely exposed and can easily be dissected free distally to the bladder. After the ureters have been so mobilized bilaterally, attention is directed to the pouch of Douglas where the rectum must be separated from the vaginal wall. The fundus uteri is firmly grasped in a strong bullet-forceps and drawn sharply upward and forward against the symphysis so that the peritoneal covering over the junction between vaginal wall and rectum may be easily approached. The assistant now draws the rectum ventrally so that the peritoneum may be easily grasped in long hooked forceps, and cut through with the dissecting scissors. Further dissection of collum from rectum is accomplished with the aid of a sponge in a dressing forceps and with the long curved dissecting scissors. It must not be forgotten that the rectum must also be carefully dissected laterally from the parametrium and sacro-uterine ligaments for if this is not done carefully and completely, the rectum may be seriously injured.

The parametrium has been dissected free anteriorly and posteriorly, the ureters have been mobilized in the true pelvis; now the removal of the parametrium is begun, for which purpose the curved Wertheim parametrium clamps and parametrium curved dissecting scissors are used. The clamps are easily applied to the parametrium close to the pelvic wall. Next the sacro-uterine ligaments are clamped as far from the uterus as possible and severed, by which maneuver the uterus is more freely mobilized. To further remove the parametrium it is necessary to draw the uterus upward and strongly to the side, thereby obtaining a good view of parametrium on the one hand, and bladder and ureter on the other. In this position the above mentioned parametrium clamps are applied to the remaining parametrium

close to the pelvic wall and the amputation of parametrium completed.

The uterus and its adnexae remain attached now only to the vaginal wall. The bladder and ureters are now dissected free from the vaginal wall using sharp and dull dissection as previously described. The vaginal wall is dissected free for at least 3 ccm. below the portio. An assistant now removes the vaginal pack previously placed in the vaginal vault and the vagina again swabbed dry. The vaginal canal is now hermatically sealed by means of a Wertheim vaginal knee forceps. By such means contamination of the operative field is prevented. The vaginal tube is amputated by means of a strong curved scissors below the Wertheim vaginal clamps, the cut edges of the vagina are clamped with long Ségond forceps. The cut end of the vaginal wall is sewed with interrupted catgut sutures in such a way that arrest of hemorrhage and a reefing effect of the cut edge of the vaginal wall is obtained. The ends of the sutures are left long so that the position of the stump may be more easily controlled, and so that the parametrium stump which still is clamped in the parametrium forceps is more accessible.

After transfixation with silk number 2-3, the parametrium clamps are removed from one side and stryphnon gauze (Pharmazeutische Industrie A. G. Vienna, Austria) applied to the stumps to stop parenchymatous bleeding. The same procedure is repeated on the other side and then the stryphnon gauze removed. Small bleeding points remaining are transfixed with fine catgut.

The end of a piece of iodoform gauze is now pushed through the opening in the vaginal stump, and then the sutures reefing its edges are cut; the remainder of the iodoform gauze is loosely packed against the parametrial stumps. The entire raw surface is peritonealized, using interrupted silk sutures No. 1. Only in cases complicated with ruptured pus tubes, or if a pyometra has been opened during the course of the operation, is a small opening left in the peritoneum and drainage maintained for several days after operation.

If any regional lymph nodes appear to be enlarged they are removed after the uterus has been amputated. Such enlarged glands are most often found at the division of the iliaca com. less frequently at the foramen obturatorium and even less frequently along the iliaca externa and iliaca communis. On account of the danger of infection and implantation the fingers are used as little as possible, dissection being done instrumentally, using a long tissue forceps and a long curved blunt scissors.

The abdomen is closed in layers in the usual manner, using interrupted silk sutures throughout, the skin sutures being removed after eight days.

THE SCHAUTA OPERATION

The patient is prepared as for the Wertheim operation. Here also the primary tumor is removed with a sharp spoon and then coagulated, and the operative field prepared as above described. Also, lumbar anaesthesia with eventual ether anaesthesia is the anaesthetic of choice. The patient is placed in the lithotomy position.

It is self evident that an operation by the vaginal route cannot be as radical as the Wertheim operation, but if the paravaginal incision of Schuchardt is used it is possible to remove a very large amount of parametrium. Here also one sees less of the ureters than when employing Wertheim's technique, it being remembered that frequently it is very difficult to expose the ureters during the course of this operation.

The Schuchardt incision is an exaggerated episiotomy incision which begins on the sinistrolateral aspect of the vaginal wall, extends through the introitus, courses around the anus in the shape of an arc, and ends short of the tip of the coccyx. This incision includes the deep muscles of the pelvic floor and when it is completed the vagina gaps widely, permitting a better view of and easier accessibility to the operative field. It is self evident that when operating per vaginum the regional lymph nodes can not be removed, which is a serious disadvantage of this procedure.

The course of the operation is as follows: More to lessen hemorrhage than to act as an analgesic, approximately 100 ccm. ½%

adrenalin–novocain solution is infiltrated into the perineal vaginal wall and around the portio vagina. Approximately 4 cm. from the portio 4-6 Kocher clamps are attached so as to circumscribe the cervix. At their periphery a circular incision is made. By blunt and sharp dissection a vaginal manchette is formed which is stuffed with iodoform gauze and closed with heavy silk sutures. The carcinomatous portio is now well covered and the danger of autoinfection and carcinoma implantation is lessened markedly. The operation in the main can now be carried out. The sutures on the vaginal manchette remain long so that the uterus can be directed in any direction desired by the operator.

The field of operation is now cleaned with alcohol, drapes, instruments and gloves are changed for sterile ones.

The above described Schuchardt incision is now made and after careful ligation, a sponge is placed under a broad Martin self-retaining speculum posteriorly and a short broad anterior vaginal speculum is placed anteriorly.

It is advisable to first loosen the rectum from the uterus without opening the pouch of Douglas and ligate and sever the sacro-uterine ligaments. Then the urinary bladder is dissected free. The lower edge of the latter lies in view and is at first dissected from the uterus only in the middle for if dissection is carried out laterally it will be difficult to establish the exact position of the ureters later. The portio is now drawn upward and to one side. At the uterine angle thus formed will be found the uterine vessels. With the aid of the blunt, curved dissecting scissors, the bladder, the uterine portion of the ureter, and the uterine vessels are exposed. The ureter will be more accessible if the uterine vessels which traverse the ureter at this angle of the uterus, are grasped and drawn to the opposite side. The uterine vessels are now doubly transfixed and severed, thereby the remainder of the parametrium becomes more accessible. The plica vesicouterina is now opened and held in place with sutures. With the aid of long fine hooks the fundus uteri is gradually brought to the front. The adnexae stumps are sutured to the cut edge of the vagina with heavy catgut. The opening in the parametrium is brought together with a few silk sutures in the center, and iodoform gauze strips are pushed through the lateral openings.

The Schuchardt incision is now closed in layers with buried catgut sutures, care being taken not to permit the formation of any pockets. The vaginal wound is closed with catgut and the skin with silk sutures. An iodoform gauze drain is left at the lower angle of the Schuchardt incision which, as the drain left in the lower pelvis, is shortened on the third day and entirely removed on the fifth day.

POSTOPERATIVE CARE

If the blood pressure drops, the pulse rate increases, and the temperature rises, the patient will receive at three-hour intervals 1 ccm. each of cardiazol (Knoll) and caffein subcutaneously or intramuscularly, and later per mouth (15-20 gtts. each t.i.d.) If the postoperative progress of the patient is stormy she will receive drop infusion intravenous of salt solution containing cardiazol, caffein, glucose, and ephetonin. Intestinal atony is combated with pituglandol and prostigmin.

On the first day, and if necessary on the second day, 1 ccm. dilaudid (Knoll) subcutaneously. After either of the above operations 36-48 hours after operation the patient receives an enema of 80 ccm. glycerin in 800 ccm. water.

A frequent complication after gynecological operations is bladder atony. It is almost always necessary at least during the first three days postoperation to catheterize the patient three times daily. As a prophylactic against cystitis hexal and cylotropin are administered. Very often a bladder atony may be successfully combated with a bladder installation of 100 ccm. of a 10% boroglycerin solution. Cystitis often follows frequent catheterization despite the observance of the strictest aseptic technique, and if it does appear it is treated with bladder irrigations of 3% boric acid and later with 1:1000 silver nitrate irrigations which are continued until there is no more residual

urine and until the urine becomes clear. On the first day postoperation the patient receives no nourishment. On the second day a small amount of liquid food is given, mostly unsweetened tea. After the first bowel movement she is placed on a light diet, which is later gradually changed to a normal diet.

RADIUM-ROENTGEN TREATMENT

Every case of carcinoma of the uterus is treated with radium-roentgen if there are either local or general contraindications for operation. The technique of treatment is briefly as follows:

Before the first radium treatment the patient is purged, bathed, and the external genitalia shaved and washed. The vagina is douched with 1:10000 sol. mercury oxycyanid under low pressure. Just before treatment the patient receives 1 ccm. pantopon and another vaginal douche as above. After cleaning the tumor surface with benzine and dilatation of the cervical canal to Hegar No. 8 the intra-uterine radium carriers are passed to the fundus uteri. Every intra-uterine carrier has a very strong silk thread attached to it so that it can be easily withdrawn after the treatment. The intra-uterine carriers contain 20-40 mg. radium element, the flat vaginal applicators contain 60-70 mg. radium element. The infrequently used needles contain 5 mg. radium element. Filtration usually consists of 2 mm. brass, and a rubber finger cot.

After the intra-uterine carriers have been inserted the flat vaginal carriers are placed against the tumor surface and tightly held in place by gauze tamponade. The entire vaginal vault is tightly packed with gauze with special care to maintain good distance between radium and bladder and radium and rectum. It is advisable to place a retention catheter before the vaginal carriers are applied.

During the treatment the patient lies quietly on her back in bed, she is given no nourishment, and every eight hours 5 drops tinct. opium are administered per os. The intra-uterine radium carrier remains in place from 24-28 hours, the vaginal carriers are frequently removed a few hours before the intra-uterine radium. The exact dosage of the first treatment of course varies with the general condition of the patient, the extensiveness of the tumor, and her reaction to the treatment. If possible, 3000 mg. el. h are given at the first treatment, that is, approximately 1000 mg. el. h intra-uterine and 2000 mg. el. h vaginally.

If there is no rise in temperature two or three days after the first radium treatment, the first roentgen treatment is begun. The usual roentgen series consists of four fields —one abdominal, two hip, and one dorsal field. The size of each field is 10/15 cm. Filtration consists of 1 mm. aluminum and 0.5 mm. copper. The target skin distance is 40 cm. The power is 180 KVP at 4 ma. The dosage at each field is 600 r. The time required to administer the above dosage with the above specifications with the Coolidge tube now in use is approximately 21 minutes. During the course of the treatment the dosage is carefully watched by means of the Mekapion dosimeter (Siemens A. G., Vienna).

Three months after the first radium treatment the patient is given the second radium treatment. The technique and dosage are the same as in the first treatment, the total radium dosage is therefore 5800-6200 mg. el. h.

Three months after the first roentgen series the second roentgen series is administered. The dosage and technique are the same.

Fat patients with a thick anterior abdominal wall are given two instead of one abdominal and dorsal fields, thereby receiving six instead of four fields. The dosage is the same per field as above.

As previously stated, every patient operated upon for carcinoma of the uterus is postoperatively irradiated. Three weeks postoperation each patient receives one series of roentgen irradiation, the same dosage as described above.

Every treated carcinoma case is reexamined at three-month intervals. If there is a recurrence she receives at each interval of three months a roentgen series the same as previously described until there is no evidence of recurrence. If the recurrence is local and accessible, radium needles (5 mg.

el. h each) are introduced into every 3 ccm. of carcinomatous tissue for a period of ten hours.

If for any reason hysterectomy is contraindicated in cases of carcinoma of the corpus uteri it is treated as soon as possible with radium. The dose consists two times 1400 mg. el. h intra-uterine and once 2000 mg. el. h per vaginum.

In case of fever during the course of the radium treatment the radium is at once removed. Nausea and vomiting and even sometimes collapse, which in German is termed "roentgen or radiumkater," is combated with nautisan suppositories (Chemosan A. G., Vienna), with 10 cc. 10% natrium chloride intravenous and with cardiaca. The most serious but infrequent complication following radium treatment is peritonitis which is combated with intravenous drop infusion of natrium chloride, glucose, posterior pituitary extract, and eventually with operative drainage.

DISCUSSION

At the present time some European Kliniks (Doederlein in München, Wintz in Erlangen, Radium-Hemmet in Stockholm) treat all stages of carcinoma uteri with irradiation alone, and it is gratifying and surprising as to the good results that they obtain, which results approach those obtained after surgical treatment, and in some instances equal them. However, it seems that today the majority of European gynecologists feel that operation followed with postoperative irradiation is the treatment of choice in cases of carcinoma uteri. Until three years ago carcinoma uteri cases were treated only after the surgical method of Wertheim in the German University Gynecological Klinik. Since Weibel has taken over the Klinik, the Schauta technique and roentgen radium have been introduced there. A statistical report of the results obtained in this Klinik are in the process of preparation. A few years ago Prof. Weibel reported a statistical study of 1500 cases treated at the Vienna Klinik. 1000 of these cases were observed for more than five years. The primary mortality ranged between nine and ten per cent. Recurrences and permanent (5-year) cures were observed in 40 and 47% in all groups.

That postoperative irradiation is of great value is well demonstrated by the 1000 cases reported recently by Adler of Vienna. All of Adler's cases were operated on after the method of Schauta. 58% relative cures were obtained in cases which were irradiated after operation, and 42% in those cases which received no postoperative irradiation.

The extreme radical therapy with postoperative irradiation as practiced in the Weibel Klinik and other leading European Gynecological Kliniks accounts for the relatively high percentage of cures (5-year) obtained there. Healy reports that in a series of 1531 cases in New York but 22% five-year cures were observed.

In the choice of treatment of cases with carcinoma uteri it is well to recall the words of Victor Bonney: "That which is beyond the scope of radium includes certain cases not beyond the scope of surgery, and that which is beyond the scope of surgery includes certain cases not beyond the scope of radium".

I do not feel it out of place to warn the general practitioner who reads the above technique and feels that after so doing he is qualified to perform these operations with success. Only after appropriate postgraduate and personal instruction from a master in this field of surgery and perhaps practice on the cadaver should he attempt to take the responsibility of such an operation.

The same holds for radium and roentgen treatment, which it is admitted is a powerful weapon in combating carcinoma, and which self-evidently requires a thorough, theoretical and practical knowledge of it for its operator to obtain the desired result.

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Generalized Edema After Surgery; With Case Report*

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IN RECENT years the role of plasma proteins in sustaining a normal colloidal osmotic pressure within the body and thus a normal water balance has become more clearly appreciated by clinicians. It is recognized generally that the edema associated with renal disease, such as so-called nephrosis and many cases of nephritis, is largely due to a lowering of the osmotic pressure because of a low plasma protein. The loss of albumin in the urine is in part the explanation offered for the lowered protein of the blood. Also, the production of edema because of inadequate protein food intake with consequent lowering of the serum proteins has been recognized. The edema which occurred during the war in many Europeans, and the starvation edema of China are explained on this basis. Incidentally there is in these instances an associated anemia commonly. Many animal experiments have been done by Leiter,[1] Frisch, Mendel and Peters,[2] Barker and Kirk,[3] Shelbourne and Egloff[4] and others that show clearly the effect of lowering the plasma protein upon the accumulation of fluid in the body, particularly when large amounts of salt and water are administered.

The critical level of total protein, below which edema develops, has been shown by Moore and Van Slyke,[5] and repeatedly confirmed, to be about 5.5 grams per 100 c.c. of blood plasma, though Weech and Ling[6] have noted that there are some exceptions to this. The normal level of total protein is between 6.3 and 8 grams per cent with 7 as an average. It has been shown[5,6] quite conclusively that of the two major components that make up the total protein, a deficiency of albumin rather than globulin is chiefly significant. The critical level for the albumin is 2.5 grams per 100 c.c. of plasma, irrespective, within wide range, of the globulin level. It is true that ordinarily subnormal globulin levels are found in patients with edema for it is probable that a low protein diet tends to reduce both the albumin and globulin. Barker and Kirk,[3] however, suggest from their work with animals that globulin of the plasma is replaced by the body more readily than the albumin. The quantity of serum albumin in normal individuals is about 4.5 grams per 100 c.c. and the globulin 2.5 to 3.

Two reasons are probably of major importance in making the albumin the chief factor in the production of edema. Govaerts[7] has calculated that one gram of albumin in 100 c.c. of plasma exerts an osmotic pressure about four times as great as the same quantity of globulin. Thus, obviously, when the albumin is decreased a given amount, the lowering of the osmotic pressure is much greater than when the globulin is reduced equally. It must be appreciated that fundamentally it is the lowering of the osmotic pressure that is of prime importance in permitting fluid accumulation in the tissues though other factors are associated. Fahr and Kerkof[8] have recently shown that edema could be prevented in dogs after plasmapheresis if gum acacia was administered to keep the osmotic pressure level high. They conclude that the lower osmotic pressure leads to salt and water retention, and this is of major importance, not the level of plasma protein per se.

The albumin molecule is smaller than the globulin molecule and thus more easily lost. This is important when the major cause for the lowered serum albumin is protein loss, as in renal disease, rather than insufficient protein intake. Peters[9] and his associates have shown however that the serum albumin deficit is not directly related to the amount of albumin lost in nephritis. Some of their patients with great albuminuria had relatively high serum protein levels. Thus, albuminuria is not solely responsible for the low serum protein in the nephritic with edema. The nutrition is important, for it is often possible to prevent the edema

* From the University of Wisconsin Medical School.

if sufficient protein is added to the diet to keep the serum proteins at a normal level.

CASE REPORT

It is the purpose of this paper to present a case with a composite of circumstances that has been largely ignored until recently.[10] That is, a patient who developed massive, fairly generalized edema after an abdominal operation, which could be easily and logically explained upon the basis of undernutrition, protein loss and the administration of large quantities of salt and water in the form of normal saline.

Case H. W. A white male of 54 was first admitted to the State of Wisconsin General Hospital in January, 1926, for diabetes mellitus. He returned at irregular intervals for a check-up of his diabetes, and twice for abdominal pain previous to the present admission, July 11, 1933. On this later admission the patient complained of right lower quadrant pain, dating its onset to the preceding night. The physical findings other than abdominal were essentially unimportant. There was no edema. The lungs were clear. The blood pressure was systolic 110 diastolic 70. There was an absence of ketosis. A diagnosis of acute appendicitis was made and operation was done on the day of admission. A ruptured appendix and an appendiceal abscess were found. Before operation the laboratory examinations showed a urine with ++++ glucose and a slight trace of albumin. The red blood cells numbered 4,550,000 with 70 per cent hemoglobin (Tallquist), the white blood cells 34,400 with 94.5 neutrophiles. Blood sugar was 142 milligrams and the nonprotein nitrogen 35 milligrams per 100 c.c. of blood. Previous to this admission the patient had been ordered to use a diabetic diet which furnished 50 grams of protein, 70 grams of carbohydrate, and 165 grams of fat, though it is not definitely known that he kept rigidly to this diet. He took 15 units of insulin in the morning and 10 units at night.

Following operation the patient was given nothing by mouth, but was given large quantities of normal saline and 5% glucose solution subcutaneously, intravenously and by proctoclysis. The total amounts of fluid administered each day ranged between 3500 and 4600 c.c. Insulin was given to control the hyperglycemia and throughout the postoperative course the diabetes was well controlled.

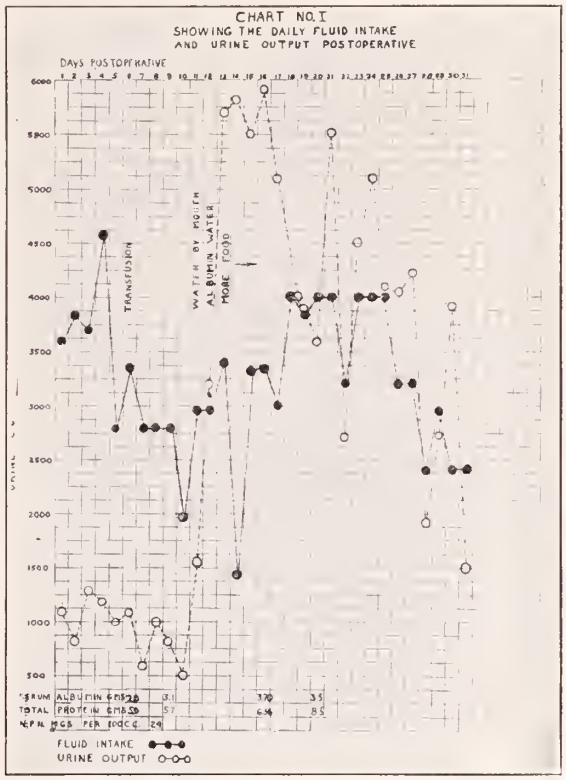
On the fifth postoperative day edema was noted over the right chest, some pitting edema of the right lower extremity and over the sacral region, and the scrotum was between 15 and 20 centimeters in diameter, due to edema. On this day there was delay in the absorption of the subcutaneous infusion. The next day the edema was much more pronounced, both lower extremities were involved, edema was greater in the back, and there were many rales in both lungs below the angles of the scapulae. A test for saline absorption time was found to be 45 minutes. The progression of the edema was rapid, but there were no signs of cardiac failure. The fluid intake and output for the days after operation are shown in the accompanying chart. When the edema was noted, normal saline administration was reduced but not stopped. Fluids were also administered in the form of tap water by rectum and glucose solution was continued by various routes. The morning of the sixth postoperative day, the day after the edema was noted, the serum proteins were measured. The total protein was 5 grams per 100 c.c., the albumin 2., below the critical level, it will be noted. Because of this low level of protein and since nothing could be given by mouth, a transfusion of 500 c.c. of whole blood in citrate was given to furnish protein. It was appreciated that this amount of blood furnished but 35 grams of serum protein, but it was hoped that that would be enough together with its effect upon the osmotic pressure to tide the patient over until food could be given orally. It is generally agreed now that protein in rectal feedings is not absorbed and thus such feedings would have been useless as a source of protein.

The patient had a severe chill and febrile reaction after the transfusion, consequently it was not repeated. Previously he had had a chill after the administration of glucose intravenously. Because of these chills and because the patient was in a very precarious state, it was deemed wiser not to repeat the transfusion or to give gum acacia intravenously as recommended by Hartmann, Senn, Nelson and Perley[11] in the treatment of edema. The edema was not progressing further and the day was approaching when something could be given by mouth. Unfortunately the level of serum proteins was not determined the day after the transfusion, but on the third day after, the total protein was 5.7 grams and the albumin was 3.1, thus above the critical level. There had been no food taken in the interval, the fluid output had not increased and the edema had not appreciably increased or decreased. Throughout the postoperative period, drainage of pus from the abdominal wound had been profuse and much protein was lost by this route, and, of course, this tended to lower the serum proteins.

On July 22nd, the eleventh postoperative day, the patient received 500 c.c. of water by mouth in small divided doses. On this day, for the first time, an increase in the output of urine was noted. This increase can be explained by the fact that it is possible for water, administered without salt, to be excreted through the kidneys rather than adding to the edema, even though the serum protein be low. The next day the patient was given albumin water and thereafter the diet was increased gradually, without attempt at salt restriction but with consideration for the diabetes. The results as

to fluid output are graphically shown in the chart. As might be expected, the edema rapidly disappeared and by August 8th, about two weeks after food was started, the patient was free of edema. On July 27th, the sixteenth postoperative day, the total serum protein was 6.36, the albumin 3.74 and the globulin 2.62 grams per 100 c.c. The blood chlorides were 388 milligrams per 100 c.c. of blood. Four days later the blood chlorides were 413 milligrams and the albumin level was similar to that of the last determination. (See chart)

The patient was discharged on August 28th, having been up and about for days and edema free for three weeks.



COMMENTS

This case well illustrates in its course the production of edema due to several factors that are commonly associated in many surgical cases. That is, a state of malnutrition due to inability to take food, particularly protein food, for periods of days after operation, the loss of protein by drainage, and the administration of large quantities of salt and water parenterally. The subnormal osmotic pressure as a result of the low serum protein permitted flow of fluid to the tissues. Furthermore, it is probable that the large quantities of water permitted dilution of the blood and thus lowering of the serum protein and the osmotic pressure still more. Experimental work of Beard and Blalock [12] tends to show that this is a factor. There are some indications that intravenous administration of fluids particularly, under certain conditions, produces a rapid fall in serum protein and thus a more rapid passage of fluid into the tissues.

Then the salt itself is of importance for it is difficult to retain water without salt. Unfortunately it is impossible to calculate accurately the amount of salt that this patient received in the form of saline solution because it was mixed with glucose, but we do know that each day after operation, before the edema became pronounced, normal saline was given in large quantities. As each liter of this solution contains nine grams of salt, the patient repeatedly received more than eighteen grams in a 24 hour period. Of course, where much vomiting exists there is great loss of chlorides and then much salt administration is indicated to combat the chloride depletion, but this patient had no emesis. The level of chlorides was not known at the time the edema was great but presumably there could not have been great depletion in view of the amounts administered and the lack of cause for unusual loss of chlorides. Furthermore, there was no great shortening in the saline absorption time.

Aside from the loss of protein by drainage, the lack of food after operation and the administration of the large quantities of salt and water, another element must be considered in this particular case. The patient was a diabetic. This factor is of importance here but not a necessary concomitant for the production of the edema, and the same state of edema might arise without this complication. Its importance lies in the fact that diabetics not unusually suffer from malnutrition and particularly protein malnutrition. Thus commonly they have a low level of serum protein and with recovery from ketosis, mild edema. Probably, in this patient, that state of protein malnutrition made it more easily possible for him to develop the edema after operation. However, it is obvious that any other chronic condition,

particularly if the disease produces gastro-intestinal complaints and intolerance for food, might lead to a state of malnutrition and subsequent edema under the same circumstances.

The lesson that this case teaches is clear. The diagnosis of the cause for the edema is simple, particularly when the etiological factors which usually will be obvious are kept in mind. Confirmation will be possible if the serum proteins are measured, especially the albumin. The technique for determining the proteins, which is used here, is the colorimetric method of Greenberg.[13] Other methods are described in text books of biochemistry. This method of Greenberg is not chemically difficult but a Duboscq colorimeter such as is used for blood sugar determinations is necessary.

The importance of making the correct diagnosis cannot be overemphasized for the subcutaneous edema may become of sufficient degree to cause much discomfort to the patient. Furthermore, according to Jones and Eaton,[10] much edema of the gastro-intestinal tract may exist and may cause distressing symptoms such as vomiting. In one of their cases death was directly caused by partial intestinal obstruction due to edema of the intestinal wall. In most instances the edema is not a grave complication. However, pulmonary edema may be marked and may be a cause of death. Always the edema makes an additional load for the heart.

Most often perhaps the edema will be thought to be due to cardiac decompensation or nephritis. However, the differential diagnosis is important for digitalis administration in these cases, according to Jones and Eaton,[10] is of no value and this might be anticipated. If the edema of the lungs is pronounced, the differential diagnosis might be difficult for then dyspnoea probably would be a prominent symptom. This patient did not present any of the clinical features of cardiac decompensation.

The treatment of this patient is briefly described above. The ideal therapy, of course, is protein food by mouth when possible, but in this case it was necessarily postponed and this will be true in many of the cases seen. When it is possible to give food by mouth, milk, egg albumin and gelatin are recommended by Jones and Eaton.[10] Repeated transfusions or the intravenous administration of gum acacia in six per cent solution as advised by Hartman [11] and his associates are indicated when adequate food cannot be given and when the edma is considerable. Limitation of the salt and water, particularly the former, is advisable and this was done in this case. Jones and Eaton [10] recommend this or the production of diuresis with mercurial diuretics or by giving very concentrated solutions of glucose intravenously. Peters [9] and his associates recommend acidifying salts and urea for promoting diuresis in the edema of nephrosis, but only as "temporary palliative measures". It is ordinarily advisable to avoid the use of mercurial diuretics unless one is certain of the state of the kidneys and knows that they are not diseased in any major degree. Obviously one is merely temporizing, when using these latter methods, until such time as it is possible to adequately treat the underlying cause of the edema. The most important therapeutic measure is the prophylactic one. That is, when possible, states of malnutrition should be avoided previous to operative procedures where it is anticipated that postoperative fast will be necessary. Furthermore, salts and fluids should be administered with discretion, keeping in mind the possible harmful effects as well as the well known beneficial effects.

SUMMARY

A case with massive edema occurring after operation, due to malnutrition, protein loss and the administration of large quantities of normal saline, is reported. The etiology, diagnosis and therapy are discussed.

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One Case—Or Many?*

A Study of Tuberculosis Contacts in a Home and Rural School

By R. H. STIEHM, M. D.
Madison

A TEACHER in a Wisconsin rural school noted in the fall of 1932 that a 12 year old school girl did not appear well. Her illness was manifest by her apparent unwillingness to play. She complained of being chilly and usually sought a seat near the school stove.

Following the Christmas holidays her illness was made evident by a persistent cough, weight loss, and a short time later by a severe cold that caused her to be put to bed. Her father and step-mother then consulted the family physician who diagnosed the illness as advanced pulmonary tuberculosis. Her sputum was persistently positive for tubercle bacilli and the x-ray film of her chest showed cavitation. She was placed in a sanatorium.

In questioning the father and step-mother, these pertinent facts were brought out: The child's mother died of tuberculosis in 1930, leaving three children to be cared for by the father. The following year the father married a widow with four children—making a total of seven children in the family. Because of the close contact with this sputum-positive case, tuberculin tests were done on the other members of the family, all of whom reacted. The x-ray films of the father and step-mother showed no evidence of active tuberculosis, but the films of the children showed a childhood type in each instance with one exception, in which a soft infiltration was noted. These children were placed in sanatoria for further observation, and treatment if necessary.

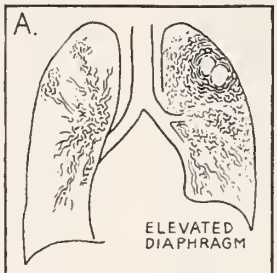
Because of the patient's close contact with 16 other pupils, the entire group was given a physical examination and the intracutaneous tuberculin test. The physical findings of their chests were negative in all instances on examination. Those showing tuberculin reactions were again examined but none showed positive findings.

Four of the sixteen, or 25%, showed a reaction to tuberculin. X-ray films taken of

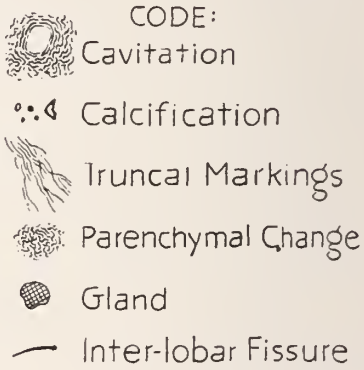
* From the Medical Department—Wisconsin Anti-Tuberculosis Association.

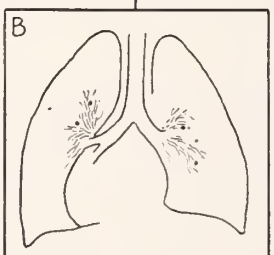
X-RAY STUDY OF TUBERCULOSIS CONTACTS
Diagrammatic Presentation

FAMILY HISTORY
Mother of three children: A, B and C, died of tuberculosis in 1930. Father of A, B and C, married a widow with four children: D, E, F and G, in 1931.
(A) noted ill at school and home since October, 1932. Diagnosis made January 1933. Contacts studied in March, 1933.

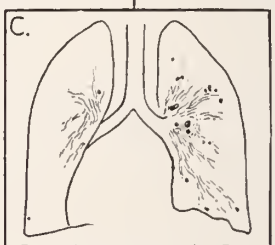


Schoolgirl, aged 12. Far advanced tuberculosis, cavitation. Many tubercle bacilli in sputum. Symptoms four months. Mother died of tuberculosis in 1930.

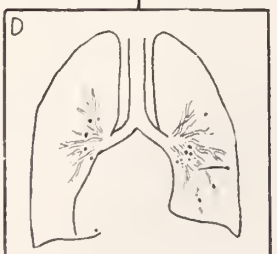




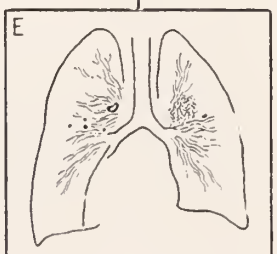
Sister, aged 4
Tuberculin 4++++
Childhood type tuberculosis.



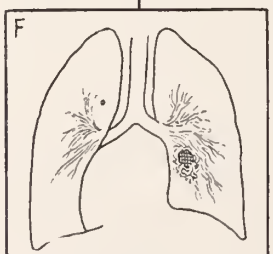
Brother, aged 10.
Tuberculin 3+++
Calcified glands, healed childhood type tuberculosis.



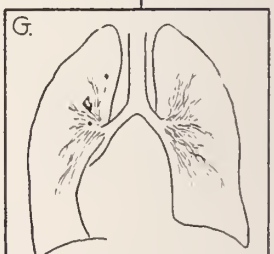
Stepsister, age 6.
Tuberculin 3+++.
Childhood type tuberculosis.



Stepbrother, age 6.
Tuberculin 2++.
Childhood and adult tuberculosis

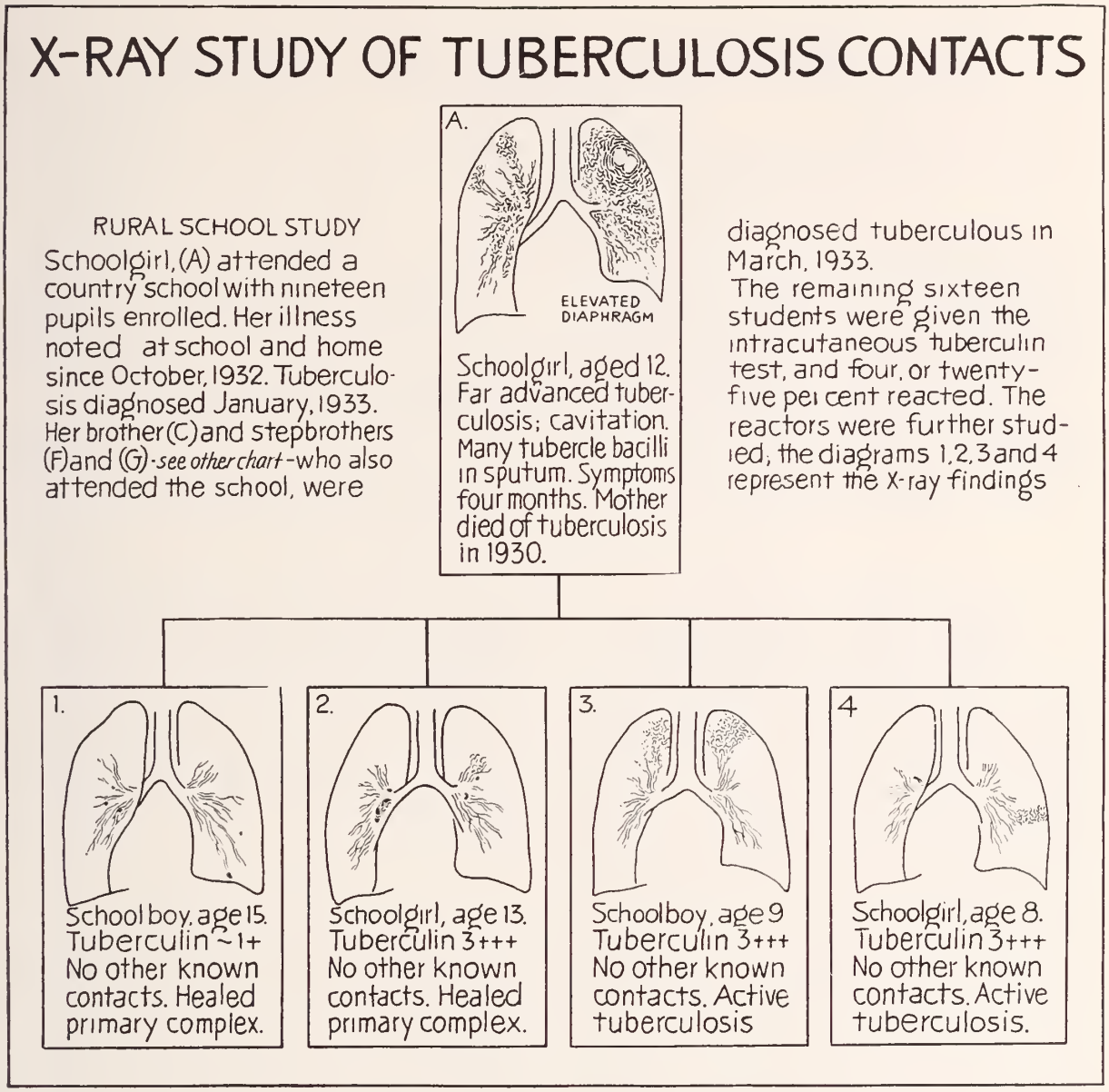


Stepbrother, age 9.
Tuberculin 3+++.
Childhood type tuberculosis.



Stepbrother, age 11.
Tuberculin 3+++.
Childhood type tuberculosis.

R GODERS



these reactors showed a soft infiltration in two instances, and childhood tuberculosis, probably healed in the other two. Sanatorium care is being provided for the two suspiciously active cases. The cases showing healed tuberculosis will have periodic examinations.

This study has shown, as others have, that tuberculosis is highly communicable from a sputum-positive case. Close contacts of the patient, therefore, should have thorough study. The family physician should insist that the intracutaneous tuberculin test be given to the members of the patient's family and also to close associates. Those who react to the test should have a roentgenogram of their lungs, even though the physical examination of the chest may have been negative. That x-ray findings are absent in early cases is evidenced by the observation made at Trudeau Sanatorium in which 204 of 264 minimal cases showed no rales on physical examination, though the lesion was at once apparent on the x-ray film. Studies among students at Yale and Pennsylvania Universities likewise showed that physical findings were usually absent in early cases.

(Continued on page 464)

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« « « EDITORIALS » » »

Primary Granulocytopenia (Agranulocytic Angina)

EVERY physician should read carefully the article on this subject by Madison and Squier in the Journal of the American Medical Association for March 10. The article appears to be an outstanding contribution on the subject and Wisconsin physicians should feel pride in this contribution by their Milwaukee fellows.

Cases of this disorder are coming more and more to the attention of the profession and there have been several different theories advanced as to its cause. However, none of the various theories has offered a satisfactory explanation. The work of Madison and Squier support the theory originally advanced by Schultz that it might be a result of the depressant effect on the bone marrow of an unknown microörganism or an unknown chemical agent.

The observations of Madison and Squier concerning the relation of the development of agranulocytosis in their cases following the use of amidopyrine and the barbiturates are certainly well founded. The oft repeated objection to many theories advanced in medicine that deductions are drawn from the results obtained by laboratory experiments and not from clinical observation certainly cannot be raised against this paper as their observations are based upon clinical cases and supported by some experimental investigations on animals.

It is well known that the treatment of this condition is at the present time very unsatisfactory and it may be that the treatment in the future will lie in the prevention of the disorder rather than in the treatment of it.—G. H. E.

Stemming the Tide

THE rising tide of deaths from heart disease is a matter of concern to all and its explanation is something we seek. In the last twenty years in Wisconsin the increase has been so startling as to seem very alarming. The figures show that the death rate has almost doubled since 1919 and that by far the greatest increase falls in the age group of individuals past sixty years.

The ordinary explanation for these figures is that people must die of something and as more people are living to an age when cardiovascular accidents are to be expected we get the expected rise in mortality. The same reasoning is applied to the increased incidence of cancer. Whether this reasoning is sound or not we must leave to the statisticians and they tell us that only a slightly greater proportion of people are living past fifty-five years than in the time of Pharaoh!

Other factors may be operative in increasing the mortality. Since the increase in mortality is very largely in the late decades of life most of the deaths are not of the rheumatic type of heart disease which takes its toll earlier in life and of which there is no evidence of increase.

The increase is in diseases of the degenerative type dependent upon arteriosclerosis. This is seen particularly in the incidence of coronary disease. Here it is not just the better recognition of the disease which adds to the incidence but an actual increase.

Take diabetes for example—the incidence of coronary disease in diabetics is seven times as great as in the population as a whole, when one compares age groups. Of course it is well known that in diabetes arteriosclerosis occurs much earlier than in other individuals. Children dying of diabetes at autopsy have shown advanced sclerosis of arteries generally in direct relation to the duration of the diabetes and the cardiovascular heredity. The actual figures of coronary disease in autopsied diabetes runs as high as 35% in some clinics.

But we must look further than this for an explanation. We may group diabetes, obesity, cardio-vascular disease either with or without hypertension, and probably cancer as true degenerative disease. By degenerative disease we mean the premature loss of normal function of cells and their replacement by other cells or fibrous tissue. The degenerative diseases accompany the march of what we are pleased to call our civilization. A single factor common to all, but not invariably present, is the condition of overweight. Even the disease cancer is more common in individuals who are over-weight than in those of normal weight or in those who are under-weight.

The incidence of diabetes, obesity, heart disease, cancer and vascular degeneration are all higher today than ever before in our history in the registration area. Urban populations suffer more from these diseases than rural populations do.

The situation is too complicated and too full of variables to give a simple answer. Food habits, focal infections, heredity and the preservation of the unfit and our general way of life with its high tension and acceleration are all factors to be taken into consideration.

One or two simple rules of hygiene might act as a curb on the rising mortality. Muscles were made to contract yet we allow them to atrophy; all except the muscles of mastication and digestion. If we gave our stomachs less to do and our bodies more to do we might see the rising curve of deaths from degenerative disease flatten and fall.

H. P. G.

Ninety-Third Anniversary Meeting, Green Bay, September 12–14.

Why An Auxiliary?

THE question "why an auxiliary" is not infrequently asked. The question "why a wife" constitutes as good an answer as any.

Medical organization went on for nearly a century in a state of single blessedness. Like an old bachelor it never seemed to realize that it was doing many odd jobs which could be done by a helpmate and that its standing in the community was being sorely neglected. Then one spring morning some ten years ago came a comely miss, who announced herself as Mrs. Auxiliary, rolled up her sleeves, nudged Mr. Medicine in the side, and said "shove over—I'm going to pitch in, help get your house in order, and I'm going to be your partner."

The old fellow, unaccustomed to team work, grumbled and still sputters at times, but down in his heart realizes how efficient she has been. During the years she has grown and developed into a buxom housewife, on whom he has learned to depend more and more. She has been helpful in more ways than he realizes and she can do more and more for him as time goes on and he learns more to rely on her. Her main job is to improve his standing in the community. He has been a hermit and has covered up his sterling qualities and his good deeds. He has had few contacts with others and she can do much in bringing about a better appreciation of his work and of his worth. R. S.

Society Proceedings

CHIPPEWA

The Chippewa County Medical Society held its May meeting at the Hotel Northern on Tuesday, the 8th. An unusually large number of physicians from Chippewa and adjoining counties were present to view moving pictures shown by Mr. L. J. Indebritzen, the Milwaukee representative of Mead Johnson and Company. These pictures showed gallbladder and other operations; examination of the infant, and of difficult obstetrical presentations.

The June meeting will be devoted to discussion of questions concerning obstetrical problems. M. F.

DANE

The Dane County Medical Society held a meeting on May 8th in Turner Hall, Madison. A symposium on cancer constituted the program.

Dr. E. F. Schneiders, Madison, chairman of the Dane County Cancer Committee, read a report of the work of his committee; Dr. W. D. Stovall, Chairman of the Committee on Cancer of the State Medical Society, discussed the State Society's program for the control of cancer; Dr. Joseph Dean, Madison, read a paper on "Cancer of the Gall Bladder" and Dr. R. H. Jackson, Past President of the State Society, gave a talk on "Methods of Diagnosing Cancer of the Breast in the Early and Curable Stages."

MANITOWOC

The members of the Manitowoc County Medical Society entertained their ladies at a dinner Thursday, May 24th, at seven o'clock at English Lake.

Dr. Ralph G. Mills of Fond du Lac addressed the group on his experiences in Korea.

Dr. A. H. Heidner, Councilor of the Fifth District, was present and spoke of the forthcoming district meeting to be held in Sheboygan on May 31st.

Bill and Helen Louise, children of Dr. and Mrs. W. E. Donohue, Manitowoc, entertained with tap dances. T. H. R.

MILWAUKEE

The May meeting of the Medical Society of Milwaukee County was held in the Elizabethan Room of the Milwaukee Athletic Club, on Friday, May 11th.

The speaker of the evening was Dr. Hugh Cabot of the Mayo Clinic, who spoke on "War Experiences with the Royal Medical Corps."

This was followed by the social hour.

ROCK

The Rock County Medical Society was held at the Hotel Hilton, Beloit, on April 24th. Thirty members were present.

Miss Gladys Stillman, nutritional expert of the University Extension Division, addressed the Society on proposed diets for those on poor relief and asked the cooperation of the physicians in their program.

Dr. Sproat Hervey, Rush Medical College, showed a two reel film which portrayed his technic for vaginal hysterectomy. Following the film, he gave an interesting talk on the indications, dangers and postoperative care of vaginal hysterectomy.

A resolution giving endorsement to the proposed prosecution against the unlawful use of the title "doctor" was adopted.

A committee was appointed to organize the physicians of Rock County for the purpose of giving health talks to lay groups. T. F.

SHEBOYGAN

The regular April meeting of the Sheboygan County Medical Society was held at the St. Nicholas Hospital in Sheboygan on the 17th.

Dr. Walter P. Blount of Milwaukee, who held an orthopedic clinic that day, gave an instructive talk on "Lesions of the Knee Joint" illustrated with lantern slides.

Dr. Ray F. Wagner of Howards Grove was admitted to membership. A. C. R.

WINNEBAGO

Thirty members of the Winnebago County Medical Society attended the monthly dinner meeting at the Valley Inn, Menasha, on April 27th.

Dr. Byron J. Hughes of Winnebago read a paper on "Epilepsy" which was discussed by Dr. Gilbert E. Seaman, Superintendent of Northern State Hospital. A paper entitled "The Relation of the General Practitioner to Psychiatry" was presented by Dr. J. M. Conley of Oshkosh.

Dr. S. E. Gavin, Councilor for the District, discussed current problems confronting the physician.

SEVENTH COUNCILOR DISTRICT

The tenth annual meeting of the Seventh District Medical Society was held at the Village Hall at Whitehall on May 16th.

The meeting opened at two o'clock with an address of welcome by the President, Dr. R. L. MacCornack of Whitehall. This was followed by the scientific program:

"The Present Day Management of Prostatic Obstruction" was the subject of an address by Dr. Fred R. Thompson of the Section of Surgery of the Mayo Clinic.

Dr. Elmer Sevringhaus, Madison, spoke on "Glandular Therapy."

Dr. T. J. O'Leary, Superior, President-Elect of the State Society, talked on "Surgery of the Gall Bladder."

Members and guests present at the Seventh District meeting at Whitehall, Wednesday, May 16th.

Dr. Joseph G. Mayo, Section of Internal Medicine, Mayo Clinic, read a paper on "Secondary Anemias."

At five-thirty, a dinner was served which was followed by an address by Mr. George Crownhart, Secretary.

Officers elected for the ensuing year are Dr. R. L. Eagan, La Crosse, President; Dr. Paul Gatterdam, La Crosse, Secretary-Treasurer. La Crosse was selected as the place of the next meeting. Upwards of seventy-five physicians attended the Whitehall meeting.

NINTH COUNCILOR

The annual meeting of the Ninth Councilor District Medical Society was held at Stevens Point on May 10th, at Hotel Whiting. Following dinner at six-thirty o'clock, a program was presented as follows:

"The Classification of the Blood Dyscrasias" by Dr. Maurice Rice, Stevens Point.

"Back Injuries, With Special Relation to the Lumbosacral Region" by Dr. Fremont A. Chandler, Chicago.

"The Surgical Treatment of Pulmonary Tuberculosis" by Dr. J. W. Gale, Madison.

"The Economic Status of Medicine in Wisconsin" by Mr. George Crownhart, Secretary of the State Society.

Officers elected at this meeting were: Dr. Fred A. Marrs of Stevens Point, President, and Dr. Joseph F. Smith, Wausau, who was re-elected secretary.

GREEN BAY ACADEMY OF MEDICINE

Dr. Richard E. Scammon, dean of medical sciences at the University of Minnesota, was the principal speaker at the 10th annual dinner meeting of the Green Bay Academy of Medicine held in the Beaumont Hotel on May 12th. The subject of his address was "The Plague."

MILWAUKEE ACADEMY OF MEDICINE

A meeting of the Milwaukee Academy of Medicine was held on May 22nd. The program consisted of the following:

I. Presentation of two unusual cases.
   A. "Filaria Loa" by Dr. Claude S. Beebe.
   B. "Snake Bite in Milwaukee" (Live Snake, and Lantern slides), by Dr. M. Fernan-Nunez.

II. "Cardiac Pathology" by Dr. Otto Saphir, Chicago, pathologist at Michael Reese Hospital.

MILWAUKEE NEURO-PSYCHIATRIC

The May meeting of the Milwaukee Neuro-Psychiatric Society was held at the University Club on the 24th at eight o'clock. The program was as follows:

"Convulsions in Infancy and Childhood", illustrated with motion pictures and lantern slides, by Dr. M. G. Peterman.

"School Psychiatric Work", by Dr. R. D. Bergen.

MILWAUKEE OTO-OPHTHALMIC

The May meeting of the Milwaukee Oto-Ophthalmic Society was held at the University Club on Tuesday, May 22nd.

Dr. Frederick A. Davis of Madison presented "Modification of the Jameson Recession and a Discussion of the Reese Resection in the Treatment of Squint".

Dr. J. Y. Malone of Milwaukee spoke on "New Theory of Vision."

UNIVERSITY OF WISCONSIN

An illustrated lecture by Dr. Fred O. Tonney, director of the Technical Service and Research, Chicago Board of Health on "The Diagnosis of Amebic Dysentery" was presented on Tuesday, May 8th, before the University of Wisconsin Medical Society.

The Woman's Auxiliary

Mrs. Eben J. Carey, Milwaukee, *President*
Mrs. Rock Sleyster, Wauwatosa, *President-elect*
Mrs. George H. Ewell, Madison, *Secretary*
Mrs. R. G. Arveson, Frederic, *Treasurer*
Mrs. Walter A. Ford, Sheboygan, *Press and Publicity Chairman*
Mrs. James Blake, Hopkins, Minn., *National President*

County News Items

NEW AUXILIARY ORGANIZED

The organization meeting of the Woman's Auxiliary to the Outagamie County Medical Society was held at the Hearthstone Tea Room, Appleton, Wisconsin at one o'clock Friday, May 25th. Mrs. Eben J. Carey, state president, and Mrs. Rock Sleyster, state president-elect, were present. Mrs. Joseph L. Benton was Chairman of the Organization Committee as chosen by Dr. E. H. Brooks of the Outagamie County Medical Society.

Twenty-nine ladies were present and the following officers were elected: Mrs. E. F. McGrath, Appleton, president; Mrs. J. J. Laird, Black Creek, vice-president; Mrs. Albert Leigh, Kaukauna, secretary; Mrs. J. L. Benton, Appleton, treasurer.

DANE COUNTY

Objectors to vivisection, calling the work needlessly painful, useless, and degrading, were discredited by Prof. Walter J. Meek, of the university physiology department, in an address at a luncheon meeting of the Dane County Medical auxiliary at the College Club on May ninth.

DOUGLAS COUNTY

At the May meeting of the Douglas County Auxiliary, Mrs. J. W. McGill and Mrs. V. E. Ekblad gave an interesting discussion of the Tugwell Bill. At each meeting an article from Hygeia is read and discussed. The Auxiliary was very successful in placing HYGEIA in schools. A particularly worthwhile piece of lay educational work is being done by Douglas County Auxiliary,—through the efforts of the Auxiliary, authentic health articles from HYGEIA are reprinted in local papers.

KENOSHA COUNTY

Speaking on "Ductless Glands", Dr. A. L. Mayfield addressed the Kenosha Auxiliary at a meeting at the home of Mrs. I. E. Bowing on May seventh.

MANITOWOC COUNTY

The members of the Manitowoc Auxiliary were guests of the Sheboygan Auxiliary at a luncheon meeting on May second.

MARINETTE–FLORENCE COUNTY

Fifty-four doctors and their wives were present at a dinner given at a joint meeting of the Auxiliary and the Menominee and Marinette County Medical Societies at Hotel Marinette on April 24th.

The speakers of the evening were Mrs. Eben J. Carey, president of the State Auxiliary. Her subject was "The Activities of the Woman's Auxiliary in Wisconsin and in the United States." Dr. Eben J. Carey, dean of Marquette Medical School, addressed the joint meeting on the subject of "Scientific Medicine and the Public," with lantern slides. Both speakers received an enthusiastic ovation at the close of their efforts.

Many guests from outside Marinette and Menominee were present: Oconto, Powers, Stephenson, Niagara, Green Bay and Peshtigo.

On May 11th a meeting was held at the home of Mrs. T. J. Redelings, Marinette. The object of the meeting was to extend the membership and to amalgamate with Menominee and Oconto Counties.

MILWAUKEE COUNTY

A Mother's Day program with the mothers of the Auxiliary members as guests was the feature of the meeting of the Woman's Auxiliary to the Medical Society of Milwaukee County held at the Y. W. C. A. on May 11th. One hundred forty-three people, about thirty of whom were mothers attended the luncheon meeting. The tables were adorned with flowers and each mother was given a rose, the gift of the Board of Directors. Dr. Isaac Abt, Professor of Diseases of Children at Northwestern University read an interesting paper on "Maternal Instincts". Mrs. John W. Truitt, winner of National music contests, accompanied by Mrs. Joseph Tolan, sang a group of songs. Both musicians are members of the Auxiliary.

The membership committee introduced four new members to the Auxiliary and together with the social committee presented plans for the dinner dance given by the Medical Society and the Auxiliary at the Wisconsin Club on June second.

The President, Mrs. J. Gurney Taylor, made a brief summary of work accomplished by the Auxiliary since January 1934,—The Public Relations committee placed 50 speakers with lay organizations and 22 more are scheduled to fill engagements in the fall. The Hygeia committee placed 82 yearly subscrip-

tions. The Flower and Courtesy committee raised forty dollars on their tea at the Art Institute. Forty-four ladies joined the Auxiliary since January.

The Visiting Nurse Association invited the Auxiliary to attend their luncheon meeting on May 25th.

RACINE COUNTY

Forty-one members and Milwaukee and Kenosha guests of the Racine County auxiliary enjoyed an unusually delightful afternoon Thursday, April 26th, beginning with luncheon at Hotel Racine.

"Travelogues on Spain and Spanish America" was the subject of the illustrated talk which Dr. M. Fernan-Nunez, professor of tropical medicine at the Marquette University School of Medicine, gave before the Auxiliary. The program also included musical numbers. Members of the Kenosha Auxiliary were guests.

On May 22nd the Auxiliary met at the Lincoln Hospital to hear Dr. I. F. Thompson in an address on "The Control of Communicable Diseases".

An open meeting on Friday evening, May 25th, sponsored by the Auxiliary with Dr. W. W. Bauer of the A. M. A. as speaker was well attended.

ROCK COUNTY

Thirty members of the Rock County Auxiliary heard Dr. H. C. Bradley of the University of Wisconsin on April 24th. He discussed the Tugwell Bill.

SHEBOYGAN COUNTY

Mrs. Eben J. Carey, state president, addressed the Sheboygan County Auxiliary on "Auxiliary Objectives". Other guests at the May meeting were: Mrs. Rock Sleyster, state president-elect; Mrs. J. Gurney Taylor, president of the Milwaukee Auxiliary and Mrs. Malcom P. Andrews, president of the Manitowoc County Auxiliary. Twenty members and twelve guests attended the enjoyable luncheon and program. Mrs. Wesley Van Zanten, president of the Sheboygan Auxiliary, presided at the meeting.

WAUKESHA COUNTY

Appearing under the auspices of the Woman's Auxiliary to the Waukesha County Medical Society, Dr. Arthur J. Cramp of the A. M. A. gave an interesting lecture at the Waukesha High School Auditorium on Tuesday evening, April 24th, to which the public was invited. Dr. Cramp's subject was "Pink Pills and Panaceas" and he warned his audience of cure-alls which make wild promises of quick cures. Many people from Waukesha, Oconomowoc and nearby towns attended the entertaining and enlightening lecture.

WINNEBAGO COUNTY

The Auxiliary to the Winnebago County Medical Society met for luncheon at Steins Tea Room, Oshkosh, on Monday, April twenty-third. There were nineteen ladies present. After the business meeting a very interesting talk was given on "The History of Anaesthesia" by Mrs. Henry Kleinschmit of Oshkosh.

NATIONAL DELEGATES

The following members have been chosen delegates to the National Convention in Cleveland: Mrs. George H. Ewell, Madison; Mrs. Philip Eisenberg, Milwaukee; Mrs. J. Foster McNary, Milwaukee; Mrs. Fred Nause, Sheboygan; Mrs. J. Gurney Taylor, Milwaukee; Mrs. T. Ochsner Nuzum, Janesville. The following are alternates to the meeting: Mrs. W. H. Bennett, Kenosha; Mrs. Elston L. Belknap, Milwaukee; Mrs. James V. May, Marinette; Mrs. Lester McGary, Madison; Mrs. Wm. P. O'Malley, Milwaukee; Mrs. Harry E. Kasten, Beloit.

THE WORK OF THE COUNTY HISTORIANS

Towards the end of our years work, an article regarding the work of our county historians perhaps might serve as an inspiration to the sixteen county historians in our state of Wisconsin, and as an aid in improving our work for next year. Perhaps some counties feel that there is not a great deal to report, but it is from some of these smaller counties that some of the most valuable and novel suggestions have come. There are many ways in which the different county auxiliaries can be of service, and a suggestion from one county may be of great help to another county.

The state history is absolutely dependent upon the work of the county historians. Except for the history of the state organization, as such, and in its beginnings, the state history is the history of the accomplishments of the various counties. The state historian is handicapped in compiling the state history when there are certain counties from which there is no report, and no record sent in regarding their organization and projects. This year records have been kept by most of the 16 counties. We all know what inspiration we receive from attending a convention—either district, state, or national—of the various organizations to which we belong. Is this not due mainly to listening to the account of the achievements of other interested members? We could have this same inspiration, in a small degree, perhaps, if the county historians could send in regularly some news of special interest, or some unusual project. Through the press and publicity chairmen of each county this news can be published in the Auxiliary section of the Medical Journal and through the county historians a permanent record of these achievements can be kept.

For the benefit of those county historians who

have recently been appointed, a list of the requirements of a county history may prove helpful.

1. An interesting account of the circumstances surrounding the early organization—by whom organized, others cooperating, time and place of meeting, as well as officers elected, membership or charter members.

2. Record of each subsequent year—officers, members who have held district, state or national offices, activities, health education, Hygeia activities, special projects and significant dates.

3. A brief summary of each annual meeting—time, place, special speeches, outstanding reports, budgets and registration.

MRS. FRED A. LEIGHTON,
State Historian and Archives Chairman.

NEWS ITEMS AND PERSONALS

The Hudson Sanitarium, operated by Dr. E. B. Bradford at Hudson, Wisconsin, was totally destroyed by fire on May 10th. All of the patients were rescued. The fire which broke out shortly before 1:00 P. M., was believed to have been started from a short circuit.

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On April 21st, Dr. O. H. Foerster of Milwaukee, was honorary guest of the Minnesota Dermatological Society at the annual meeting held in Minneapolis, and presented a paper on "Blood Changes Produced by Organic Arsenicals in the Treatment of Syphilis."

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Dr. W. A. Niebuhr of Madison, has become associated with the staff of the Spa Clinic, Waukesha. Dr. Niebuhr is a graduate of Rush Medical College and served internship at the Presbyterian Hospital at Chicago and at the Jackson Clinic, Madison.

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A number of Wisconsin physicians are on the program of the annual meeting of the American Medical Association to be held in Cleveland, June 12th to 15th.

Dr. Chester M. Echols, Milwaukee, will present a paper on "Comments on One Hundred Cases of Ectopic Pregnancy Encountered in Private Practice" with lantern demonstration.

Dr. William S. Middleton, Madison, is joint author of a paper on "Clinical Experiences with Thevetin, a Cardiac Glucoside" with lantern demonstration.

"The Relief of Menopause Symptoms of Follicular Hormone Therapy" (Lantern Demonstration) will be presented by Dr. E. L. Sevringhaus, Madison.

Dr. E. L. Belknap, Milwaukee, will read a paper on "Control of Lead Poisoning in the Worker (Lantern Demonstration)".

Those who are scheduled to discuss papers are: Dr. K. L. Kassowitz, Milwaukee; Dr. Hans H. Reese, Madison; Dr. Ira R. Sisk, Madison and Dr. George H. Ewell, Madison.

In the Scientific Exhibit in the Section on Dermatology and Syphilology, Dr. R. L. McIntosh, Madison, and Mr. M. E. Diemer, University of Wisconsin, Madison, will present delochrome prints from a large collection of photographs of living patients with dermatologic diseases.

Dr. Stanley J. Seeger, Milwaukee, will present an exhibit on the prevention and treatment of burns, as part of the Symposium on Treatment of Burns sponsored by the Section on Surgery, the Section on Practice of Medicine, and the Section on Pathology and Physiology. Dr. Seeger will also present a motion picture entitled "The Prevention of Burns."

Wisconsin physicians who are serving as officers of various sections are: Dr. F. W. Madison, Milwaukee, is vice-chairman of the Section on Practice of Medicine; Dr. Harry R. Foerster, Milwaukee, is secretary of the Section on Dermatology and Syphilology; Dr. John P. Koehler, Milwaukee, is vice-chairman of the Section on Preventive and Industrial Medicine and Public Health and Dr. W. M. Kearns of Milwaukee is vice-chairman of the Section on Urology.

—△—

Dr. Thomas Flarity, Beloit, Dr. C. M. Smith, Beloit and Dr. Wayne A. Munn, Janesville, are three of five members of the Welfare Committee of the Rock County Board of Supervisors for the ensuing year. The Welfare Committee makes all recommendations with reference to medical services for the indigent and in the county institutions.

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Drs. Henry B. and John B. Hitz, Milwaukee, have announced their withdrawal from association with Drs. J. S. Gordon and Ralph P. Sproule, and removal of their offices to Suite number 1241 Bankers Building, Milwaukee.

—△—

Dr. J. Fred W. Clark, formerly associated with Dr. E. G. Ovitz at Laona, is now located at 864 Hamilton Avenue, St. Louis, in the offices of Dr. George Parke, who is retired. Dr. Clark has been at Laona for the past thirteen years.

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On April 25th a dinner honoring the Past Presidents of the Medical Society of Milwaukee County was given by Drs. J. C. Sargent, E. L. Tharinger, and P. M. Currer of Milwaukee. Present were the following:

Drs. W. P. Jobse, L. G. Nolte, W. H. Washburn, A. J. Patek, J. J. McGovern, R. G. Sayle, Franz Pfister, G. H. Feilman, F. A. Stratton, S. J. Seeger, C. H. Stoddard, A. W. Gray, H. J. Gramling, R. P.

Sproule, E. L. Tharinger, P. M. Currer, James C. Sargent, Charles Fidler, Rock Sleyster, H. E. Webb, U. A. Schlueter, Dexter H. Witte, and Mr. Theodore Wiprud. Because of illness Dr. J. W. Coon (1905) and Dr. L. F. Jermain (1910) were unable to attend.

Dr. Morris Fishbein, was the guest speaker.

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Dr. L. V. Littig, Madison, was elected state chairman of the Section on Radiology of the State Medical Society for the ensuing year at its annual meeting held in Janesville on May 18th and 19th. Other officers elected are: Dr. H. B. Podlasky, Milwaukee, vice chairman; Dr. R. F. Wilson, Beloit, Secretary-Treasurer; Dr. I. G. Ellis, Madison, and Dr. R. L. Troup, Green Bay, executive board members. Milwaukee will be the meeting place in 1935.

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Dr. Otto Stockinger, 46, brother of Dr. R. E. Stockinger of Milwaukee, died at Asheville, North Carolina, on May 12th.

—△—

Mrs. G. E. Moore, wife of Dr. G. E. Moore of Antigo, died on May 13th as result of an automobile accident on the same day. Dr. Moore was seriously injured and was confined to Langlade Memorial Hospital but is presently recuperating at his home.

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Dr. Carl Henry Davis, Milwaukee, left on May 16th as a member of the European assembly of the Interstate Post-Graduate Medical Association of North America for Europe to attend clinics and meetings in Rome, Milan, Berne, Zurich, Munich and Vienna.

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Dr. E. E. Neff, Madison, attended clinics in Baltimore and New York City the early part of May.

—△—

Dr. Carl Harper, associated for many years with the Jackson Clinic, Madison, announces that he has opened offices in Room 605 First Central Building, Madison. Dr. Harper's practice will be confined, as in the past, to the field of obstetrics and gynecology.

—△—

Dr. R. C. Buerki and Mr. J. G. Crownhart, Madison, were re-elected President and Secretary respectively of the Wisconsin Hospital Association at its annual meeting held in Chicago the first week in May. Miss Grace Crafts, of the Madison General Hospital, was elected First Vice-President, and Sister Felecian of St. Joseph's Hospital, Milwaukee, was elected Second Vice-President.

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Dr. and Mrs. F. E. Turgasen of Manitowoc sailed from New York on May 27th for Europe, where Dr. Turgasen will spend some time visiting various places of interest.

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Mr. George F. Meyer, business manager of the Medford Clinic Hospital, has resigned his position to become candidate for Congress in that district. Mr. Meyer has been manager of the hospital since 1930.

PROPOSED AMENDMENT

The following proposed amendment to the Constitution of the State Medical Society of Wisconsin was offered by Delegate H. P. Bowen of Jefferson County at the 1933 meeting of the Society. The amendment will be before the House of Delegates for action at the September, 1934, meeting. The amendment follows:

> "The terms of Councilors shall be for three years and all officers shall serve until their successors are elected and installed. The terms shall expire in the following order: seventh, eighth, ninth, tenth and thirteenth in 1935; first, second, eleventh and twelfth districts in 1936, and third, fourth, fifth and sixth districts in 1937, and thereafter shall be elected in this order.
>
> "This amendment, offered in 1933, to be acted upon in 1934, shall upon adoption be effective on January 1, 1935."

BIRTHS

A son to Dr. and Mrs. J. Fred W. Clark, St. Louis, formerly of Laona, Wisconsin.

A son to Dr. and Mrs. S. H. Wolter, Milwaukee, on April 18th.

DEATHS

Dr. Isaac G. Babcock, Cumberland, died on May 9th of heart disease.

Dr. Babcock was born in the year 1864 and was a graduate of Bellevue Hospital Medical College, New York, in 1888. For the past forty years he had practiced in Cumberland, Wisconsin.

He was a member of the Barron–Washburn–Sawyer–Burnett County Medical Society, the State Medical Society, and the American Medical Association.

Survivors are his widow, one son and three daughters.

Dr. Damon A. Brown, Madison, died on May 14th following an illness of six months.

Dr. Brown was born in Spring Green, Wisconsin, January 15, 1890. He was a graduate of the University of Wisconsin and received his medical degree from Washington University School of Medicine, St. Louis, in 1915. He practiced in St. Louis and Peoria, Ill., several years before coming to Madison.

He is survived by his widow, two daughters and one son.

Dr. George W. Harrison, Ashland, died on April 29th of a heart ailment.

Dr. Harrison was born in Ashland, November 20, 1885. He was a graduate of the University of Illinois College of Medicine in 1911. Following graduation he practiced at Rib Lake and came to Ashland in 1912. During the World War, Dr. Harrison served overseas as a captain and batallion surgeon and was awarded the Croix de Guerre for his work in caring for the wounded during a conflict at Mt. Fancoup, Sept. 30, 1918.

He is survived by his widow and one son.

Dr. Harry C. McCarthy, Richland Center, died on May 14th of pneumonia.

Dr. McCarthy was born in Richland Center in the year 1880 and was a graduate of the University of Illinois College of Medicine in 1903. He had practiced in Richland Center since graduation. During the World War, he served as captain in the medical corps.

Dr. McCarthy was a member of the Richland County Medical Society, the State Medical Society, and the American Medical Association.

He is survived by his widow, two sisters and one brother.

Dr. Joseph Sanders, Portage, died on May 3rd.

He was born in the year 1861. He was a graduate of the Medical College of Indiana in 1884 and had practiced in Illinois before coming to Wisconsin. He also maintained an office in Beaver Dam.

SOCIETY RECORDS

New Members

Erwin P. Ludwig, Berlin.
Lester M. Woodford, Care of CCC Camp, Brule.
Adellon Andrus, Ashland.
John A. Schindler, Insurance Bldg., Monroe.
LeRoy F. Morneau, Bear Creek.
Milton Trautmann, Prairie du Sac.
H. G. Pomainville, Pittsville.
Sherburne F. Morgan, 4019 N. Oakland Ave., Milwaukee.
Sylvester E. Coffey, 3006 W. Michigan St., Milwaukee.

Change in Address

W. E. Allen, Albany to Rock Island Bank Building, Rock Island, Ill.

CORRESPONDENCE

"UNFAIR COMPETITION"

Milwaukee, Wis., May 24, 1934.

Wisconsin Medical Journal,
119 E. Washington Ave.,
Madison, Wis.

Gentlemen:

I am enclosing herewith copy of a resolution adopted by the Milwaukee Pathological Society which consists of the following members: F. E. Dickelman, M. Fernan-Nunez, E. F. Barta, Norbert Enzer, John Grill, C. E. Oesterlin, J. J. Seelman, and Dr. E. L. Tharinger.

Will you be good enough to print this resolution in the next edition of the Journal?

Very truly yours,

J. J. SEELMAN.

RESOLUTIONS ADOPTED BY THE MILWAUKEE PATHOLOGICAL SOCIETY

WHEREAS, The American Society of Clinical Pathologists, at its annual meeting, in New Orleans, adopted the following recommendations of its Public Relations Committee:

"The present situation as regards standardization of hospitals needs stimulation for betterment. The tendency of lay hospitals to commercialize their laboratory by entering into competition with private laboratories for outside work is wrong in principle.

"Although it is realized that in communities where private laboratories are not available, the hospital laboratory must be utilized, yet it should be a cardinal principle that hospital laboratories should not enter into such competition with private laboratories, for by so doing they are invading the domain of medical practice. The clinical pathologist in charge of a hospital is usually on salary and does not share in fees thus collected, and this amounts to commercializing him at the expense of his fellow pathologists. This competition is most unfair to both the hospital pathologist and the private laboratory, especially when the outside work is done at special hospital prices. This is a growing evil and some remedy should be found. As an instance, one physician in the same office building as your chairman stated he would rather have his work done close at hand if the hospital laboratory prices would be met. Too often the hospital, instead of being a place where physicians take patients for better care and treatment under his order, is in active competition with one or more branches of medicine, and dictate to the physician instead of being subservient to him" and

WHEREAS, A number of hospitals in Milwaukee are now practicing out-patient medicine for remuneration in the field of laboratory diagnosis, and

WHEREAS, This service competes with the practice of members of the State Medical Society of Wisconsin, and

WHEREAS, This competition is unfair by reason of the fact that these hospitals are endowed institutions, pay no taxes, and much of their work is done by underpaid help, all of which enables them and has, in fact, caused them to reduce fees for this type of work far below the fees which must be charged by the members of the medical profession who specialize in laboratory diagnosis and who must pay their rent, taxes and overhead, and

WHEREAS, It is inimical to the future welfare of Medicine to condone the participation of hospitals in the practice of Medicine insofar as it relates to out-patient pay work, therefore, be it

Resolved, That the secretary of the Milwaukee Pathological Society respectfully petition the County

Medical Society to take such steps as may be necessary to terminate the unfair practices herein complained of, and be it further

Resolved, That a copy of these resolutions be sent to the Council of the Medical Society of Milwaukee County and that a copy also be sent to each hospital in the city of Milwaukee and the staffs thereof, and to the Wisconsin Medical Journal and the Milwaukee Medical Times for publication therein.

Economic Survey of Wisconsin Hospitals Made by Wisconsin Hospital Association

THAT Wisconsin hospitals operated at an average of 45% of their bed capacity during the year 1933 as compared with 65% during the year 1930 was disclosed by an economic survey of Wisconsin's hospitals made by Dr. R. C. Buerki, President of the Wisconsin Hospital Association. It is reported, however, that the bed occupancy has risen sharply the first four months of 1934.

In making the survey it was revealed that ten hospitals with less than fifty beds reported an average bed occupancy of 44% in 1933 as compared with 66% in 1930. Eleven hospitals with a bed capacity of fifty to one hundred beds reported an average of 44% in 1933 as compared with 60% in 1930. Fifteen hospitals with more than one hundred beds reported an average occupancy of 48% in 1933 as compared with 70% in the calendar year of 1930.

The number of obstetrical cases in Wisconsin hospitals declined sharply during the same period 1930–1933. Hospitals with less than fifty beds that reported an average number of obstetrical cases of 83 for the year 1930, reported but an average of 43 for 1933. Hospitals having more than fifty but less than one hundred beds that reported an average of 225 obstetrical cases in 1930, reported but an average of 126 in 1933 and hospitals with more than 100 beds that reported an average of 442 obstetrical cases in the year 1930 reported 352 for the year 1933.

As might be anticipated, loss by bad debts showed an increase during the three year period. In the case of hospitals with less than fifty beds, the average of 1930 was 15.4% while the average in 1933 was 23.3%. Hospitals with more than fifty but less than one hundred reported an average loss percentage of 6.7 in 1930 and 18.5 in 1933, while hospitals with over one hundred beds reported a loss percentage average of 4.58 in 1930 and 9.16 in 1933.

Free work in the hospitals with less than fifty beds represented 11.08% of the total in 1930 and 20% in 1933. Hospitals in the fifty to one hundred bed group reported an average of 3.9% in 1930 and 19.9% in 1933 while hospitals with over 100 beds reported 12.2% in 1930 and 24.7% in 1933.

The economic survey was based on data furnished by forty-three of the 127 Wisconsin hospitals. The data plainly indicated the effect of the federal government's policy under the federal emergency relief administration which denies any responsibility for the hospitalization of the indigent. Under this Washington policy, medical care is furnished in homes or at the physician's office but no allowance is made to any concerned from federal funds in event that the patient is hospitalized. The effect has been to throw the care of the indigent entirely upon the charity of hospitals in most hospital centers in the state for local funds have been exhausted in meeting the percentage of the total required for care of the indigent under the federal government's matching of funds agreement.

All hospitals reported drastic economy measures and with but one exception all reported that no additional building was contemplated in the immediate future. Rates have been quite generally reduced throughout the state and several hospitals have instituted flat rates for obstetrical cases on the basis of ten days' hospitalization.

The survey was reported by Dr. Buerki with the warning that it was based on averages. Differences of location and methods of accounting do not permit of an exact picture, he said.

Present Status of Appendicitis in Wisconsin

By C. A. HARPER, M. D.
State Health Officer, Madison

RECORDS in the office of the State Board of Health show that the highest mortality for appendicitis over a period of 26 years was in 1930, 534 deaths, a death rate of 18.2 per 100,000 population. The lowest was in 1910, 251 deaths, a rate of 10.3 per 100,000 —a little more than half the death rate of 1930. There has been a gradual increase in the death rate the past 26 years. The 1933 rate, however, is 13.7 compared to 18.2 for 1930. The increase is found to be in ages up to 8 years, lower from 8 years to 29 years, then a continuous increase up to 60 years where a 40% increase is in evidence. The death rate in males is constantly higher than in females. Urban death rate is higher than rural.

In the United States registration area in 1931 there were 18,113 deaths from appendicitis or a rate of 15.2 per 100,000. Barton's analysis shows that of 219 cases operated in less than six hours from onset there was not a death. On the other hand, there was an 8% death rate in cases that had continued "between 49 and 72 hours."

In 1910 there were 1,629 deaths in Wisconsin from five communicable diseases: typhoid fever, measles, scarlet fever, whooping cough and diphtheria, and 241 deaths from appendicitis. In 1933 there were 158 deaths from these five communicable diseases and 416 from appendicitis.

Sir James Berry, London, in part says of the "you-must-do-something" school that "bad results were attributed to (1) feeding the patient when he should have been starved, (2) giving purgatives and enemas to get the bowels to move when it was of importance that they should be kept at rest so long as there was danger of abscess forming, and (3) attempts by drugs or otherwise to relieve the abdominal distress which was really protective and curative, not harmful in itself."

The most serious factor in appendicitis is a delay on the part of the patients in seeking immediate medical advice for acute pain in the abdomen. Second, eliminate prescribing over the telephone for abdominal pain. Third, greater care in examining the patient and transporting him to a hospital. Fourth, better trained surgeons on the part of many engaging in this field of work, especially as it pertains to judgment, technique and trained assistants.

The warning posters on the opposite page were originally designed by the Medical Society of the State of Pennsylvania. As in Pennsylvania, we suggest that these be attached to magazines in physicians' offices and to statements.

In 1901 the writer saw the celebrated surgeon, Kocher, of Berne, refuse to operate on a patient who was prepared, anesthetized and wheeled into the operating room when upon examination a tumor in the appendix region was outlined, on the basis that the patient's chances of recovery would be better if operation were performed 24 to 48 hours later. Right or wrong, there was no doubt but the welfare of the patient was receiving first consideration. Kocher was exercising his judgment to the best of his ability.

The death rate varies greatly in different cities of the country. In Milwaukee the death rate was 12.9 in 1932 while in Minneapolis it was 22 per 100,000 population. In Oak Park, Illinois, a city of 69,000 population, the rate was 40.4, while in Madison, Wisconsin, with a similar population, the rate was 32.7 per 100,000. In Chicago the rate was 14.1 and in New York City, 14.8. The highest death rate appeared to be in Salt Lake City which was 46.9 per 100,000. On the other side of the ledger we find that Union City, New Jersey has a death rate of 1.5, Pasadena, California, 3.6, and Akron, Ohio, 3.0 per 100,000 population.

The prophecy of Dennis in 1904, when he laid down the principle "that modern surgery has almost completely gained mastery over the disease since a mortality of about 2% can hardly be expected to be improved

upon in the future" is not fulfilled. Dennis' views show remarkable conformity to those of Sir James Berry, summarized in the statement that "the mortality of the simple operation is appalling in the hands of an inexperienced surgeon." It must be admitted, however, that there are involved in appendicitis some extremely difficult decisions. Abdominal pain lasting for several hours must receive greater consideration on the part of the public and those interested in lowering appendicitis mortality.

Scientific Medicine and the Public*

By EBEN J. CAREY, M. D.
Dean, Marquette University School of Medicine, Milwaukee

THE time has come when the people of this nation are eager to have a common knowledge of what scientific medicine, through its proper application, can accomplish for every individual in the prevention of disease and defectiveness. How can this information be made available to the public at large?

The city of Chicago has a civic institution for students of art, a museum setting forth the attainments of the sciences and their application to industry, a museum for the study of natural history, an aquarium for the exhibition of aquatic animals, a planetarium for the study of the stars, an opera house where the musical drama may be studied. Chicago is a community of great cultural attainments. Yet there is a subject of far greater importance to every individual —whether he be artist, scientist, historian, astronomer, musician, or whatever his classification — that has not yet been given its rightful place in this enlightened community. This has possibly been due to a lack of publicity. But this condition can no longer stand because the American public is becoming health-minded. It is beginning to seek knowledge by which to prevent ill health.

Health work during the past fifty years has consisted of involuntary and unconscious public co-operation under the guidance of a collective control. Plagues, pestilence and epidemics, led to the organization of state, county and city, public health departments for the control and enforcement of sanitary measures and the promotion of health. Constant public vigilance has been maintained to prevent the spread of contagious diseases, and quarantines have been enforced by these public health institutions in co-operation with the physician. Isolation and immunization have taken their places in the control of disease. Antitoxins have been made available for the masses in the control of contagious diseases, thereby wiping out plagues, pestilence and epidemics. Inspections are now made under governmental supervision of all supplies of water, milk and food. The use of safety devices has become compulsory in order to prevent accidents and the loss of human lives. The disposal of sewage is supervised and strict chemical and bacteriological sanitation enforced. The spread of disease by animal vectors is controlled.

Vital statistics, as compiled from the records of public health institutions and organizations, have aided materially in the health work carried on during the past half century. Success in co-operative efforts to combat disease is illustrated by the change in the main causes of death between the present date statistics and the early health records. A study of the results of these statistics gives direct evidence of the greatest causes of mortality. These early and late records point out the future course of health education. They show in a very definite manner that the improvement of conditions leading to the prevention of disease in the future will rest largely with the individual. They also show that decrease in the rate of mortality will be in direct proportion to the comprehension of the subject of prevention by the individual and to the degree of his co-operation with the physician.

The next one hundred years of advance in the practice of medicine will emphasize

* This paper was delivered before the Marinette and Menominee Medical Societies, April 24, 1934, and the Fond du Lac County Medical Society, May 9, 1934, illustrated with lantern slides.

the field of prevention, rather than that of cure. All of the major health betterment improvements will be made by an enlightened public. The individual will be educated in the manner in which he should live—to attain the greatest degree of health. He will seek the eradication of disease and he will demand early periodical health examinations. He will avoid deficiency diseases caused by childhood malnutrition and resulting in deformities later in life.

Primitive man had six great fears regulating his environment. These were: Fire, Flood, Famine, Filth, Flies and Fellow Man. The occurrence of things which he feared was considered to be a sign of the anger of the Gods toward men for offenses either prearranged or intentional. Coping with environment was a great stimulus to the evolution of the human mind. Conditions of living have now been improved in such a manner that the six great fears of environment are employed by man for his own use and they have been so regulated that they serve the needs of man—thus robbing them of their terror.

Man has diminished his fear of the conditions regulating his environment, yet, turning our range of vision from the field of environment to the field of disease, we find that these same six great fears are still existent in our present day life.

Fire—in the form of inflammation and fever, both to a large extent preventable and both resulting in damage to their host.

Famine—in the form of malnutrition.

Flood—in the form of a swelling, oedema or tumor.

Filth—a culture medium for the breeding of disease producing bacteria and the contamination of food.

Flies—carrying sickness such as the sleeping sickness distributed by the Tsetse fly, animal parasites and the mosquito, carrier of malaria and yellow fever.

Fellow Man—spreader of communicable diseases.

Yet man is showing very little intelligence in overcoming these fears of disease. Perhaps this is because they are not as evident as the fears of environment. If this is the case, it is even more urgent that the subject of prevention be kept in evidence in a visual way before the people of this nation. It is hard to change the mind of man, yet this must and will be done. We are an intelligent but ignorant people. We are slow to realize our needs but quick in remedying the situation when it is brought to our attention. When the benefits to be derived through the application of preventive measures becomes common knowledge, medical facts will speedily be put to wide practical use. To see the need for applying the facts that the medical scientist has discovered, one must be somewhat familiar with the mechanism that requires attention. He must be educated to pay for advice, rather than for prescriptions to control results that could have been prevented and which might possibly result in loss of life. Each individual must acknowledge to himself and to others that the physician, by virtue of his knowledge of research and investigative work, is an expert detective in the early signs of disease, and is best able to translate and interpret human disorders. The public must recognize the value, for every individual, of medical advice in its present capacity to prevent disease even though no further medical discoveries be made. It must be brought to the realization of the fatality of delay.

THE REAL GOAL

In the past, voluntary requests by the individual for medical services have been limited to seeking the advice of a physician when in great pain, and when there were broken bones or swellings. The average individual has been indifferent to preventive measures. Apparently healthy children receive no medical attention. This is brutal neglect which is not recognized as yet by even the most devoted of parents. Defects in speech, sight, hearing, and bodily deformities are not evident in the early stages to an untrained observer, yet their presence is easily detected by the physician who is trained in the structure of the body and the functioning of its various organs. It is inevitable that the blame for this neglect must be placed where it rightly belongs — upon each and every individual as well as the community that harbors such neglect.

In Berlin, Germany, in the year of 1931, the minister of health had greater police power than any other man in Germany.

The Pasteur Exhibit.

Police powers have heretofore been used for the control of diseases that were externally apparent. This form of control will continue to be exercised. Yet power can never take the place of co-operation. Only the individual concerned can aid in the prevention of an unsuspected malady and this aid will be manifested in the seeking of periodic health examinations. Early discoveries of disorders can be exposed by an early diagnosis and they can be eradicated when discovered before too great a period of time has elapsed. And this early diagnosis can only be secured by a very close co-operation between the individual and the physician in the form of periodic health examinations by a trusted medical adviser. The patient must have confidence in his physician and the physician must have continuous knowledge of the person whom he is treating if the best results are to be obtained.

It is the duty of the physician, individually and in groups, to educate the public by all ethical means at command to prevent disease, thereby relieving suffering and saving human life. The learned professions have for their main object the services they can render to humanity, and the greatest future service that a physician can render is to give increasing emphasis to the teaching of health. The responsibilities and opportunities for public service in the medical field are not limited. The ultimate goal of medicine is prevention. The significance of this statement must be set forth in an understanding way. Man is less confused by mystery he cannot explain than by an explanation he cannot understand. Prediction of a need is the first step toward its fulfillment. It is the stimulus that will effect the desired reaction.

Voluntary consciousness must be exerted to effect prevention of disease, thus to a large extent avoiding the necessity of alleviating pain. This can only be done by extending the knowledge of individuals.

The mechanism of the human body is more complex and of more vital interest to every individual than is the mechanism of an automobile or radio. Yet a mechanic or technician is consulted at once in the event there is any disorder, while the tendency is to delay calling upon the physician but rather to let the human mechanism adjust itself through time. The average individual does not recognize the similarity of these situa-

Marquette University and Milwaukee County Hospital Exhibit—Bright's Disease.

tions. He does not know as much about the human mechanism as he does about vibrations and amplifications, about ignition and gears. Yet the human mechanism is much more closely related to the individual. Medicine has been practiced since the early days of primitive peoples; the radio and the automobile are comparatively new.

It has been said that the quality of medical care is an index to civilization. How then shall the practice of medicine be kept abreast with these progressive times? The individual must accomplish this by the realization that the physician has the knowledge to detect disease in its early form and thus affect its control. The value of the co-operation between the individual and physician cannot be stressed too much.

SECURING CO-OPERATION

How can we encourage the individual to seek this co-operation voluntarily? To obtain the greatest profit, knowledge regarding health must be disseminated over fertile fields. The written word by the use of popular books, pamphlets and columns in the newspapers has been in the vanguard of educating the public about scientific medicine. The spoken word is now being used as a publicity feature by means of lectures in the schools, in the movies, and by being broadcast over the radio.

The very nature of these programs limits the individual from obtaining a complete mental concept of the health program. All means at our command should be used to extend knowledge for the prevention of disease by the maintenance of health. Where then can one go to absorb a complete picture of the problem of health—to absorb this knowledge at one's own rate of reception and assimilation—to learn of the external and internal structure of the human body, its form and functions in health, and the diseases affecting health? How can this knowledge be visualized so that one can observe the start and development of a normal and healthy individual; where he can study the cause of disease—upon which all prevention is based?

A great stride toward this goal was made in the medical section of the Hall of Science at A Century of Progress in 1933. Just as the Museum of Art aids the artist and the Museum of Science aids the scientist, so does

The Robert Koch Exhibit.

the Truth about Health aid the doctor. Appreciation of the benefits to be derived from periodic health examinations will aid the physician to approach the ultimate goal of medicine—prevention of disease. Great expositions show not only the material and spiritual progress of the past but reveal the tendency of development for the future. The popular appeal of the exhibits of scientific medicine was surprising to many. The public is greatly interested in how they got here —the start and development of the human being. The popularity of the embryo exhibit proved this to be so. They are also interested in the architecture of the bodily machine, in how they are constructed, in the form and function of the human body in health. They are interested in the relation of the internal organs to each other and to the skin surface as demonstrated by the Transparent Man. Diseases affecting health and causing sickness, and their relation to the perfect functioning of the human mechanism, proved to be next in popularity. They are familiar with the Biblical expression that man is "fearfully and wonderfully made," yet they know little about the internal mechanism of man or his engine trouble —disease. The relationship of these exhibits to one's own life has a definite appeal for the masses and these exhibits can and will be understood when clearly presented.

Medicine—the science and art of dealing with prevention, cure or alleviation of disease—includes dentistry, pharmacy, surgery, care of the mother during childbirth, and all of the practices and activities of the physician. Social conditions are constantly changing and medicine will change with them. To secure perfect confidence in the scientific practitioner, the practice of cults and quackery must be eliminated. The individual and individuals in great numbers, must be shown what medical care costs — but that lack of medical care and medical care by unscientific persons including self-medication, costs more.

What then will become of this public interest in the science of medicine? How can this interest in the start and development of life and disease be increased to the point where the individual will willingly and consciously and voluntarily co-operate with the physician for preventive health measures? The way which suggests itself is to maintain

University of Wisconsin Exhibit.
William Beaumont.

a permanent record of these medical exhibits in an institution designated for that purpose —to display material in fact and model that will delineate scientific medical progress from the days of primitive people, through the present day advance and foretelling the course to be followed in the future. This will require patient and persevering effort.

In every World's Fair, in spite of the mob psychology which leads people to assemble in increasing numbers in a place already crowded, to seek pleasure and diversion from the problems of everyday life, a trend or tendency may be detected that will prognosticate future action for America.

In 1876, the year of the Custer Massacre in Wyoming, there was a great centennial exposition held in Philadelphia. The exposition marked the transition from an agricultural to an industrial period in the United States. To the superficial and casual observer some would bewail the fact that people were wasting their money by patronizing the amusement section completely overlooking great contributions of science and industry. This exposition clearly portrayed the lines along which future dominant growth would take place in the United States.

In 1893 the World's Columbian Exposition in Chicago celebrated the discovery of America by Columbus four hundred years before. This magnificent exposition predicted the cultural and natural scientific lines of growth that influence activities today. The Wild West had arrived at a stage of appreciation of beauty: architecture, sculpture, painting, symmetrical forms in varying degrees of light and color.

Newspaper accounts over-emphasized and denounced the Midway and the pernicious influence on the morals of youth by the presence of Little Egypt, a dancing girl. This same cry is heard today. We read denunciations of the New Midway and of Sally Rand and her fan dance. The Midway served its function by diverting the minds of millions of people from the despondency and bitterness of a black depression and money panic. That the people patronized these zones of amusement, willingly led on by blatant barkers in a carefree carnival spirit, is evidence

American College of Surgeons.

enough that they wanted to forget the trials and disappointments of three and a half years of material losses and to recharge their depleted spirits to a more buoyant state.

AWAKENING LAY INTEREST

In spite of the crowds scattered along three miles of Chicago's Lake Michigan shores, there was one focus where people from all walks of life gathered in increasing numbers as the Exposition progressed. This place was the Hall of Science. Somehow the people realized that here was revealed in objective form something that intimately affected the life of each man, woman and child. The exhibits of the Hall of Science touched a sympathetic vibrant string in the common warp and woof of human nature to which the Exposition visitors responded. The sciences of physics, chemistry, biology, geology and even mathematics were attracting the people because the exhibits had a content and sequence that a child could understand and a relationship of this material to his or her own life that they could appreciate.

Here was a place where the Christmas lectures founded by the great electrical wizard, Michael Faraday, were crystallized. These lectures, started in London over one hundred years ago by Faraday himself, are given each year by some great British scientist. These lectures on science are so demonstrated that a child of twelve years of age can grasp the concepts expressed. The lectures are designed for children and if adults attend, they must leave outside the doors of the lecture hall their previous sophistication, with no manifestation of unchangeable hard-headedness, and they must become a child again. Here is a scientific practical application carried out each year in London of the Biblical expression "Unless ye become a child again ye shall not enter the Kingdom of Heaven". This is practically paraphrased by the statement that "Unless ye become open-minded (unprejudiced) ye shall not enter the Kingdom of Science."

A minority of adults studied the vast number of scientific exhibits. This opportunity was completely lost to the majority of grown-ups. It was the older generation of fathers and mothers who patronized the frivolous side of the World's Fair and not the younger generation. On the contrary, it was per-

fectly obvious that the real serious students in the Hall of Science were the young boys and girls who came in great numbers with their notebooks in order to jot down statements of fact, principles, relations and aphorisms. Their natural curiosity was whetted and satiated by sights of science revealed by static and dynamic means. Their curiosity was not harshly suppressed as is too often the case by parents and teachers in order to hide their own ignorance. Sally Rand appealed to the parents—the Hall of Science to their children. In another generation these children will be the real citizens of America and will mould her tendencies and direct her destiny. What children learned in the Hall of Science will not be forgotten and they will not tolerate this method of teaching science to the masses to remain only a memory. They caught the challenging note in these exhibits and their fertile minds began at once to absorb their impressions and to make them a part of their lives.

HALL OF SCIENCE EXHIBITS

These exhibits were different in character and interest from anything the visitors had previously encountered. The enthusiasm spread. Man is daily readjusting himself to his environment and among the activities being gradually dispensed with is that of observation. These exhibits invoked observation. They not only gave pleasure but also imparted knowledge to the observers. They conveyed impressions through the eye and reached the emotions as well as the intellect. It made the spectators want to know more about those subjects. "Doing what one must is work, but doing what one wants is play." This voluntary acceptance of the exhibits is not only recreational but it creates a receptive mood for the observer. It formulates a new method of interesting the public, offers pleasure with knowledge. These exhibits attracted the attention and also held the attention of the visiting public.

Their attention was attracted by the subject matter and the method of its presentation. Themes of common interest which relate to every individual, young and old, such as origin—the embryo exhibit; structure—the Transparent Man; dentistry; diseases of the heart and hearing; were popular subjects. The names of the various diseases, whether they were of common disorders—not fatal but causing extreme distress, well-known subjects, well-known names of diseases that are not yet fully understood in regard to their cause and effect and about which investigative research is being continued, or unique exhibits, attracted the attention. The familiarity of the names of the sponsors, such as the various universities, invited many persons to stop and examine the contents of those particular exhibits. In addition to the subject matter, a symbol substituted therefor, as exemplified by the use of a flame in the cancer booth, was effective as an attracting item.

The methods of presentation, as means of attracting attention, involved the use of auditory and visual stimuli — the latter comprised of light, color and motion, in various combinations. Accessibility of the exhibit was also a factor. It was noted that the aisle space continuous within the booth invited and favored inspection, while the exhibits shut off from the aisle were often passed by. The same amount of effort was required in entering the two types of exhibits but in the one instance it was more obvious. The scope of the Exposition was such that the smallest additional exertion seemed greatly magnified. Visitors walked for many miles and stood for many hours and saw so many novelties that they did not feel recompensed by going out of their way to examine or to take the time required to study the exhibits.

The location of the exhibits aided in attracting attention. Especially in the medical section the location of the exhibits lent dignity to their display and avoided any aspect of morbidity. The location by classification within the section, although not essential, aided in the attractiveness of their presentation. The popularity of the various exhibits attracted attention. Visitors recommended that their friends see such exhibits as the Transparent Man, the embryos and "The Doctor". The same persons also visited these exhibits time and again. Crowds attracted even greater crowds.

Then came the greater problem—that of holding the attention of the visitor within

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the booth a sufficient length of time so that he would absorb and take with him at least a part of the information therein displayed. This was accomplished in two ways: by the content of the exhibit and by the presentation of the content of the exhibit.

TYPES OF EXHIBITS

The kind of material contained in the exhibit was of two types. First, material of a natural appeal—material creating the aspect of reality—such as actual charms and amulets used by the Indians, medicine bags made out of animal skins, and water drums used for beating time in the Medicine Dance. These items were more or less worn and showed that they had actually been used. Another example of the strong appeal of reality was noted in the contrast between the wooden body-books and the prepared anatomical specimens. The third dimensional diorama had more appeal than the two dimensional picture and the motion picture had more appeal than the third dimensional diorama. Thus the closer the material approached reality the greater was its appeal.

Another item under the heading of natural appeal is the type of exhibit in which the visitor can participate, where he can set in motion the stimulus and measure the reaction, as shown by the circulation of a blood corpuscle. Exhibits that can be examined such as the respirator and exhibits that can be operated such as the model of the various kinds of joints, have a natural appeal for the visitor.

In addition to this natural appeal, there can be exercised a stimulated appeal, obtained by arousing the curiosity and then focusing the attention. Various methods may be employed to arouse the curiosity but they eventually revolve about the theme of presenting a problem or considering some question.

There are definite steps which may be followed in focusing the attention. First, creating the proper atmosphere by a dignified exhibit. This eliminates an improper response and establishes the desire to improve our acquisition of facts, thereby adding to the value of all effort which is expended.

Second, by arranging the exhibit, based on the knowledge of human reactions, so as to secure the proper response. This involves the principles of design based on color and form, and the qualities of design which are harmony, balance and rhythm, thereby adapting the booth to its contents.

Third, by eliminating annoyance and disuse. This includes planning the exhibit so that it can be seen by the greatest number of persons in the shortest amount of time and with the least amount of effort. This should eliminate the item of fatigue due to stooping over the material or any other strain unnecessary in examining the exhibit. Disuse can be eliminated by avoiding an unconnected sequence and by arranging the exhibit content so that an examination will follow the obvious route, in each particular exhibit.

Fourth, by the means of fixation or strengthening the meaning of the exhibit with the use of vividness in presentation.

Fifth, by integration and organization. This is accomplished by the relation of the parts to the whole, whether it be the relation of the exhibit to the subject of medicine or the relation of the units of a particular exhibit to the one main theme. A smaller number of units means a greater comprehension of the subject itself.

Sixth, by retention of the exhibit material which is partially the effect of the number of associations which are made and partly the number of repetitions used with variations. Associations are the connections between the unknown and the known. Through the use of these associations the unknown gradually merges into the known.

The presentation of the content of the exhibit must, first of all, appeal to the observers, both of the laity and of the profession. All exhibits should be so prepared that a twelve-year-old child may understand them. Then comes the factor of the duration of the exhibit. Because of the tremendous scope—not only of the Exposition itself but also of this one building, the Hall of Science—and even resolving it down to the medical section alone, any exhibit should be so arranged that a general knowledge of its contents can easily be obtained within a short period of time—not more than ten minutes. Simplicity of presentation might well

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State.....

be included under the above heading, but is sufficiently important to warrant a separate caption. Simplicity of presentation necessitates that the exhibit be readily seen and therefore not cluttered although well lighted, and easily understood through the exploitation of definite form, logical sequence and thorough explanation.

There are two phases to the problem of thorough explanation. One is to obviate the necessity of written explanation by skill employed in installation; the other is that the explanation depends on the character and purpose of the exhibit. If the exhibit is of a historical nature a considerable part of the value would be lost without an adequate explanation. Yet if the exhibit in itself shows growth and development the presence of a label would detract from vividness of the exhibit obviating the necessity of making a personal observation and thereby decreasing the value of the exhibit.

Through the presentation of the exhibits in the Medical Section at A Century of Progress there evolved a status of mutual appreciation between the public and the medical practitioner. The public had the advantage of appreciating the work of the doctor in the development and use of preventive methods. The doctor had the advantage of presenting his work to the general public and he will be aided by the appreciation which the public acquired of the cause of disease and the change which takes place resulting in a pathological condition.

These exhibits encouraged the public to seek advice and to seek advice early, thereby eliminating the necessity for extensive and expensive care, a condition which is too often accompanied by complete neglect.

The next step toward presenting the problem of health to the masses will be through a coordinated plan—possibly a Museum of Medical Research. But a plan with provision for the preservation of the unity and coherence of these medical exhibits is essential. Too much has already been achieved to permit its influence to become void. The goal is in sight and it must be kept in view.

By the promotion of health, a tremendous civic obstacle will be overcome and the way will be paved for the future generations. The importance and the precedence of seeking medical advice will be passed on, gathering force as it proceeds. In this way only will prevention, which is the ultimate goal of medicine, be achieved.

THE EXHIBITS OF MEDICINE IN THE HALL OF SCIENCE A CENTURY OF PROGRESS, 1934

England.—The Wellcome Research Institution of London (Sir Henry Wellcome): Tropical Medicine.

France.—Institut Pasteur (P. Lecomte du Nouy and W. Roux, deceased): Work of Pasteur.

Germany.—Robert Koch Institut (F. Neufeld): Work of Koch.

Public Health Exhibit of Berlin. (von Drigalski): Recent advances of public health in Berlin are portrayed.

The Deutsches Hygiene Museum, Dresden, Saxony. (Exhibits purchased by A Century of Progress): Dynamic Anatomic Models.

Italy.—Medical exhibits from the Italian government. (E. Bompiani): Fathers of Medical Science.

Holland.—Central Institute for Brain Research, Amsterdam (C. U. A. Kappers): Neuro-Anatomy.

American College of Surgeons (Franklin Martin): Progress in Surgery.

American Hospital Association and Chicago Hospital Association.—(Paul H. Fesler and Bert W. Caldwell): Photographs and charts showing A Century of Progress in Hospitalization.

The American Institute for the Deaf-Blind.—(Robert H. Gault): The Teletactor.

American Medical Association.—(T. G. Hull): Progress in Medicine.

American Pharmaceutical Association.—(H. C. Christensen): Progress in Pharmacy.

American Society for the Control of Cancer.—(James Persons Simonds and A. H. Estabrook): Progress in prevention of cancer.

American Urological Association.—R. H. Herbst and H. S. Kretschmer): Progress in Urology.

American Veterinary Medical Association.—(H. Trenton Hoskins): Progress in Veterinary Medicine.

Cleveland Clinic Foundation.—(George Crile): X-ray.

Committee on Diabetes.—(Rollin T. Woodyatt and Morris Fishbein): Progress in Diabetes.

Chicago Board of Health.—(H. N. Bundesen): Chicago Health Department.

Dental Health Exhibit.—(Arthur Black): Progress in Dentistry.

Chicago Goodwill Industries.—(W. C. Loague): Rehabilitation of the Cripple Child.

Chicago Medical, Dental and Allied Science Women's Association.—(Lena K. Sadler, Bertha Van Hoosen and Katherine K. True): Maternal Hygiene.

If this tired, worried, over-worked mother were using Pablum for her babies' cereal feedings, she could have slept that extra much-needed hour instead of losing her temper while her children clamor for breakfast. For she can prepare Pablum in an instant, directly in the cereal bowl, simply by adding water or milk of any temperature—salt, cream and sugar for the older child and herself.

GETTING up an hour earlier in the morning is an inconvenience for most persons, but for the mother of young babies it is a hardship, sometimes almost tragic, frequently nullifying the best-planned pediatric advice.

This is especially true in the case of the nursing mother whose supply and quality of breast milk are affected by emotional shocks resulting often in agalactia and sometimes giving rise in the baby to diarrhea, colic, and even convulsions. Furthermore, the mother's emotional stress brings about a train of behavior on her part which is reflected in the child's psychologic reactions so that a vicious circle of bad habit formation is set up.

From this angle, the recent introduction of the pre-cooked form of Mead's Cereal, known as Pablum, assumes new importance in the doctor's psychological handling of both mother and child, quite aside from its nutritional value.*

Because Pablum can be prepared in a minute, the mother can sleep the extra hour she would otherwise be compelled to spend in a hot kitchen cooking cereal. Added rest means better poise, so that petty annoyances do not bring jaded nerves. Prompt feedings prevent many childhood tantrums, and a satisfied baby usually eats better and enjoys better digestion and growth.

*Like Mead's Cereal, Pablum represents a great advance among cereals in that it is richer in a wider variety of minerals (chiefly calcium, phosphorus, iron, and copper), contains vitamins A, B, E, and G, is base-forming and is non-irritating. Added to these special features, it is adequate in protein, fat, carbohydrates, and calories. Pablum consists of wheatmeal, oatmeal, cornmeal, wheat embryo, yeast, alfalfa leaf, and beef bone.

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Chicago Municipal Tuberculosis Sanatorium—(Allan J. Hruby): Progress in the Prevention of Tuberculosis.

Chicago Rapid Transit Company—(Hart E. Fisher): Evolution of Resuscitation.

Chicago Medical Society and Woman's Auxiliary.—(C. H. Phifer and Sophia Brumbach): History of Chicago Medical Society and Woman's Medical Auxiliary.

Chicago Roentgen Society.—(Hollis E. Potter and Benjamin H. Orndorf): Progress in Roentgenology.

Henry Ford Hospital.—(Frank W. Hartman and Roy D. McClure): Tannic Acid Treatment of Burns.

Hot Springs National Park.—(Thomas J. Allen, Jr.): The Value of Rest.

Institute of Medicine of Chicago.—Medicolegal.—(Oscar T. Schultz): The Medical Examiner vs. the Coroner.

Loyola University of Chicago.—(J. M. Essenberg): Sectional Human Anatomy.

Marquette University and the Milwaukee County Hospital.—(Francis D. Murphy and John Grill): Bright's Disease.

Mayo Foundation.—(Walter Alvarez): Goiter, Appendicitis, Diabetes and Diseases of the Sympathetic Nervous System.

Northwestern University Medical School.—(James P. Simonds; Leslie B. Arey; Andrew C. Ivy): Medical History.

Ovarian Hormones and Human Eggs.—(Edgar Allen and G. W. Corner): Eggs—Man and Monkey.

Tomas Henry Simpson Memorial Institute for Medical Research. University of Michigan.—(Cyrus C. Sturgis and Raphael Isaacs): Pernicious Anemia and Physiology of Blood.

U. S. Public Health Service, Federal Building.—(J. G. Townsend): Work on pellagra, tularemia, undulant fever, typhus fever, spotted fever and psittacosis (parrot's disease).

University of Chicago.—(E. L. Compere): Rehabilitation of Cripple Child.

University of Georgia School of Medicine.—(George Lombard Kelly and Mrs. Eugenia Long Harper): Crawford Long's priority in the discovery of ether anaesthesia.

University of Illinois College of Medicine, College of Dentistry, Department of Animal Husbandry, and the Illinois Department of Public Health.—(D. J. Davis and Tom Jones): The relation of focal infections, to systemic diseases, hay fever, tuberculosis, pneumonia, hemophilia and rabies.

University of Wisconsin.—(C. R. Bardeen and William Snow Miller): This is the centennial of the publication of the work of the first American physiologist, conducted on the French voyageur Alexis St. Martin, who had a permanent gastric fistula, the result of an accidental gunshot wound.

FAIR'S FEATURES OF 1934

There will be a fountain two blocks long and having a forty foot dome. It will spout 6800 gallons of water every minute into outlines similar to those of the Navy pier, and it will be the outstanding feature of the 1934 Chicago World's Fair.

The fountain will stretch 670 feet south from the center of the 12th street bridge, which connects the mainland with Northerly island, into the north lagoon. The rumble of the falling water, enough to service a city of one million population, will be audible for a half mile. Spectacular lighting effects will be obtained by the graduation of five colors—green, red, amber, blue and white—through thyraton tube controls.

There is being constructed at the present time at a cost of one million dollars, the new building of the Henry Ford Motor Company of Detroit, Michigan. This colossal structure will be an entire exposition within itself on the history of transportation. The exhibits alone within the Ford Building are valued at three million dollars.

In addition to the Belgian village, there will be Italian, Swiss, Old English, French, German, Spanish and Holland villages. Going from one village to the other will be comparable to a trip through Europe. The Midway is being moved from its present location to Northerly island.

The traffic manager of the Exposition estimates that there will be an attendance at the 1934 Exposition of over twenty-five million.

CONGENITAL MALFORMATIONS

The Gynecean Hospital Institute of Gynecologic Research of the University of Pennsylvania, is conducting an intensive study of families into which congenitally malformed individuals have been born.

Special interest centers in families in which malformations have appeared in two or more children. Physicians who have knowledge of any such families are urged to communicate with Dr. Douglas P. Murphy, Gynecean Hospital Institute, University of Pennsylvania, Philadelphia, Pa.

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All correspondence should be addressed to Kenilworth Sanitarium, Kenilworth, Ill.

THE JOURNAL BOOK SHELF

BOOKS RECEIVED FOR REVIEW

I Know Just The Thing for That! By J. F. Montague, M. D., medical director, New York Intestinal Sanitarium. Price $2.00. The John Day Company, Inc., New York, N. Y.

Diseases of the Skin. By Oliver S. Ormsby, M. D., clinical professor and chairman of the Department of Dermatology, Rush Medical College of the University of Chicago; dermatologist to the Presbyterian and St. Anthony's Hospitals, and the Home for Destitute Crippled Children. Fourth edition, thoroughly revised. Price $11.50. Lea & Febiger, Philadelphia.

Modern Drug Encyclopedia and Therapeutic Guide. By Jacob Gutman, M. D., Phar. D., F. A. C. P., consulting physician, Manhattan General Hospital, New York; the Riverdale, Shore Road, Williamsburg, Maternity and Borough Park General Hospitals of Brooklyn. Price $7.50. Paul B. Hoeber, Inc., New York.

Corrective Physical Education. By Josephine Langworthy Rathbone, M. A., instructor in physical education, Teachers College, Columbia University, New York City. Cloth $2.50 net. W. B. Saunders Company, Philadelphia.

BOOK REVIEWS

Any scientific publication reviewed in this column may be obtained for inspection. Orders for such inspection should be directed to the Medical Library Service, 424 N. Charter Street, Madison, Wis.

Demonstrations of Physical Signs in Clinical Surgery. By Hamilton Bailey, F. R. C. S. (Eng.) Surgeon, Royal Northern Hospitals, London; Surgeon, Battersea General Hospital; Consultant Surgeon, Essex County Council; Fourth Edition, revised and enlarged. Wm. Wood & Company, Baltimore, Md. Price $6.50.

The fourth edition of this volume has been revised and enlarged. The changes which have been made have all added to the value of this book. There are innumerable photographs which add materially to its value. The material is presented in a very condensed form, and all branches of surgery are touched upon. It is an extremely valuable book for any surgeon to have in his library. J. W. G.

Man and Microbes. By Stanhope Bayne-Jones, M. D., professor of bacteriology, School of Medicine and Dentistry, University of Rochester, Rochester, N. Y. Price $1.00. The Williams and Wilkins Company, Baltimore.

"Man and Microbes" by Stanhope Bayne-Jones is a brief readable presentation of the more important relations of micro-organisms to man. The part these minute creatures play in the fertility of the soil, in industry, in redistributing important elements such as nitrogen throughout the ages, and in the causation of disease in plants, animals and man is entertainingly told. Numerous well-chosen illustrations aid in making this story of bacteriology interesting to the layman. P. F. C.

New and Nonofficial Remedies, 1934, containing descriptions of the articles which stood accepted by the Council on Pharmacy and Chemistry of the American Medical Association on Jan. 1, 1934. Cloth. Price, Postpaid, $1.50. Pp. 510; lx. Chicago: American Medical Association.

New and Nonofficial Remedies, 1934, has the same pleasing format and helpful mechanism that has characterized it in past years. The enrichment of the indexing started a few years ago is continued and its value even increased by some desirable simplification of cross references.

The Council has made the usual careful revision of the book. The general article Lactic Acid-Producing Organisms and Preparations has been practically rewritten. The chapter on Arsenic preparations has undergone some revision, especially in the statement concerning Neoarsphenamine. The descriptions of Chiniofon and Vioform have been revised in the light of recent developments in the treatment of amebiasis. The article on Ethylhydrocupreine has been revised to delete references to Optochin Base, which has been omitted; Optochin Hydrochloride has been retained, being recommended only for external use. The description of Typhoid Vaccine has been revised to give the dosage of the combination of typhoid and paratyphoid organisms and to mention the use of typhoid vaccine in nonspecific protein therapy. A number of revisions of the Council's Rules have been made, particularly with reference to the names of products, which is one of the most frequent and troublesome of the problems with which the Council has to deal. Comparison with last year's volume will show that revisions of more or less importance occur in many other chapters.

Among the preparations newly included in this volume are: Aminophylline, a double salt or mixture of theophylline and ethylenediamine, with the advantage of greater solubility over other theophylline preparations; the new alum precipitated diphtheria toxoid; Neo-Iopax, a new medium for intravenous urography; Benzedrine, an ephedrine substitute; serums containing type II pneumococcus antibodies, which the Council has recently recognized as worthy of clinical trial in view of improved preparations and technic; Autolyzed Liver Concentrate and Extralin, two new liver preparations for use in the treatment of pernicious anemia; Metycaine, a new local anesthetic; and Sodium Morrhuate, a salt of

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the fatty acids of cod liver oil, proposed for use as a sclerosing agent.

Annual Reprint of the Reports of the Council on Pharmacy and Chemistry of the American Medical Association for 1933. Cloth. Price, Postpaid, $1.00. Pp. 188. Chicago: American Medical Association.

The main bulk of the volume, which is, incidentally, considerably increased over that of recent annual volumes, is taken up with reports on products which the Council has found unacceptable for inclusion in New and Nonofficial Remedies. Of special note are: The report on Alpha-Lobelin, a drug upon which the Council in 1927 issued a preliminary report but which is now found not to have established itself as a respiratory stimulant of as great usefulness as carbon dioxide and oxygen; the report on a number of preparations marketed by the Upjohn Company with unwarranted, misleading and unscientific claims; the report on Clavipurin, a preparation of the alkaloids of ergot, marketed without adequate declaration of the composition and without adequate standardization under a nondescriptive proprietary name with unwarranted therapeutic claims; the report on Diampysal, another pyridine derivative proposed for use in bacterial infections, convincing evidence for the therapeutic value of which is lacking; the report on Euphydigital, an irrational mixture of digitalis and a theophylline preparation marketed under an uninforming, proprietary name, with exaggerated and unwarranted claims for its therapeutic value; the report on Guphen, stated to be the guaiacol ester of phenylcinchoninic acid, marketed with unwarranted therapeutic claims under an uninforming, proprietary name and having no proved advantage over its constituents administered separately; the report on Niazo, a pyridine compound of unsubstantiated value as a urinary antiseptic; the report on Omnadin, a preparation recognized for use for nonspecific lipoprotein therapy practically as a cure-all; and the report on a group of endocrine preparations of the Rovin Laboratories variously unacceptable as being of indefinite composition and of undemonstrated therapeutic value.

A feature of marked current interest in this volume is the preliminary report on Alpha-Dinitrophenol, the new drug for acceleration of cellular metabolism. The Council voices a warning on the dangers attending the use of this drug; this warning has been increasingly justified in reports of fatalities since the appearance of the Council's report in July of last year. Other preliminary reports which make this volume one of the most interesting issued by the Council in recent years are those on Dilaudid, a new narcotic drug related to morphine; Fuadin, a new antimony compound for use in the treatment of bilharziasis and granuloma inguinale; and Hippuran, a new product for intravenous and oral urography. The comprehensive and definitive special report on estrogenic substances furnishes a much needed review of the present status of such products in gynecologic therapy. The Council insists upon the doctrine that basic laboratory investigation of these substances should precede clinical use. Of interest to hospital authorities, especially in connection with the book Hospital Practice for Interns recently issued by the Council in collaboration with the Council on Medical Education and Hospitals, is the special report, The Hospital Formulary, by Hatcher and Stainsby of New York. It outlines a plan characterized by the highest regard for the principles of rational drug therapy. Of more general interest is the Council's second report on the intravenous use of barbital compounds which is the result of a questionnaire sent to representative physicians. In view of the answers to the questionnaire, the Council reaffirmed its previous decision concerning the limitations of intravenous use of barbital compounds; namely, that these preparations should be administered intravenously only in a limited number of conditions in which administration by other routes is not feasible. The report carefully details these conditions. The lengthy report on the omission of Pyridium is an outstanding example of the meticulous fairness characteristic of the Council's treatment of the manufacturers of commercial preparations. In connection with the omission of Pyridium should be noted the report which declares Azophene (Mallophene) not acceptable. This product has been shown to be identical with Pyridium and the Council considers the claims for its usefulness as a local, general, or urinary antiseptic as unwarranted, as are those for Pyridium.

Operating Room Procedure for Nurses and Internes. By Henry C. Falk, M. D., F. A. C. S., Clinical Professor of Gynecology, New York University and Bellevue Hospital Medical College. Price $3.00. G. P. Putnam's Sons, New York, 1934.

From a teaching standpoint, Doctor Falk's book, *Operating Room Procedure for Nurses and Internes*, is a practical one, since it presents the material in a simple and concise form. It outlines each procedure step by step with very clear illustrations.

There are two main divisions of the subject. The first part deals with accessories used in and about the operating room and their preparation; the second part deals with the preparation of the operating room for the individual operation.

Dr. Falk, recognizing that varying circumstances often require modifications, gives a variety of ways of preparing supplies. In this way he presents to the students several correct ways of carrying out the same procedure.

The book is recommended to student and teacher as being both thorough and practical. C. W.

Special Postgraduate Course in Physiology. Sponsored by the Educational Committee of the Medical Society of Milwaukee County.

This mimeographed volume consists of a series of eight lectures which were delivered before the Medical Society of Milwaukee County by an equal number of well known physiologists. The subjects and lecturers were as follows:

PHYSICIANS' EXCHANGE

Advertisements for this column must be received by the 25th of the month preceding month of issue. A charge is made of $2.00 for the first appearance of copy occupying 1 inch or less of space and $1.00 for each succeeding insertion of the same copy. Kindly accompany copy with remittance to cover number of insertions desired. Advertisements from members of the State Medical Society will be accepted without charge. Such copy will be taken out after its second publication unless otherwise requested. Where numbers follow advertisements replies should be addressed care Wisconsin Medical Journal.

WANTED—Locum tenens work by capable physician; available for short or long period; Wisconsin license; references; will not compete. Address number 851 in care of the Journal.

FOR SALE—the following at a low price: Betz office furniture; steel operating chair; irrigating outfit; instrument stand and stool; wall cabinet; electric sterilizer; baby and platform scales; microscope and numerous small articles and instruments; life-size manikin. Address Dr. J. V. Stevens, 305 North Jackson St., Janesville, Wisconsin.

WANTED—Assistantship or locum tenens by graduate, Class A Medical School who has had a one year rotating internship and two years of postgraduate work in gynecology and obstetrics at the University of Pennsylvania Graduate School of Medicine. Available July. Address No. 934 in care of the Journal. AMJ

FOR SALE—Desirable practice with small hospital in prosperous diversified farming section of southern Wisconsin. Do not write unless capable and financially responsible. Address No. 935 in care of the Journal. AMJ

FOR SALE—Eye, ear, nose and throat instruments and equipment. Write No. 941 in care of the Journal. JJA

WANTED—Eye, ear, nose and throat specialist—locum tenens for one year starting next September 1st. In prosperous Wisconsin town. Must be exceptionally well trained, of good character and personality. Possible permanent connection for the right person. State all personal particulars and qualifications in the first letter. Address No. 942 in care of the Journal. JJA

FOR SALE—Practice in a good dairy section near Milwaukee. Office and home combined. Good opening for young practitioner. Address No. 943 in care of the Journal. JJA

FOR SALE—Practice located twenty miles north of Milwaukee on highway 57. Will also sell instruments, x-ray and light ray machines and medicines. Reason for selling, retiring. Terms very reasonable. Address No. 944 in care of the Journal. JJ

FOR SALE—1934 self-shifter Reo coupe with rumble seat. Practically new. Reasonable price. Write Mrs. Magdalen De Cock, 870 Howard St., Green Bay, Wis. JJA

ASSOCIATION WANTED—by eye, ear, nose, and throat specialist with busy surgeon and physician in town of 3500 or better. Willing to assist in general practice. Address No. 936 in care of the Journal. AMJ

LOCATIONS AVAILABLE—Good country location for young or middle aged M. D. $300 will take it, including office furniture. Also have good location for EENT specialist. Act quickly. Address No. 938 in care of The Journal. MJJ

FOR SALE—Complete office equipment including Fischer X-ray. Good location, small town southeastern part of state. Terms. Price reasonable. Leaving for partnership in city. Address No. 940 in care of The Journal. MJJ

WANTED—Used eye, ear, nose and throat instruments and equipment. Must be in good condition. Address No. 939 in care of The Journal. MJJ

WANTED—Locum tenens work. Available in July, August, September and October. Wisconsin license. Had 9 years active experience in general practice. Doing postgraduate work now. Will not compete. Address No. 945 in care of the Journal. JJA

FOR SALE ON EASY TERMS—Hospital and offices for one or two physicians completely furnished 12 bed hospital. All furnishing, instruments, x-ray, furniture, beds, sterilizers, etc., together with one of the best practices in southwestern Wisconsin. Building at low rental. Owner died May 20, 1934. Property immediately available. Address Mrs. J. C. Doolittle, Lancaster, Wisconsin.

FOR SALE—One set Tice Practice of Medicine, perfect condition $50.00. Address No. 946 in care of the Journal. JJA

Practice and accounts of the late Dr. H. C. McCarthy or office furniture, drugs and instruments, including Bausch and Lomb Compound microscope. Address Mrs. H. C. McCarthy, Richland Center, Wis. JJA

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Physiology of Respiration. R. C. Herrin.
Anatomy and Physiology of the Gastro-Intestinal Tract and Liver. W. C. Alvarez.
The Sympathetic Nervous System. A. C. Ivy.
Endocrinology. A. B. Luckhardt.
Water Balance. Harry Beckman.

These addresses are really lecture reviews. They present the accepted physiology of each subject together with the more recent advances and clinical applications. They are intended to aid the busy practitioner in keeping abreast one of the fundamental fields of medicine. This purpose they accomplish very satisfactorily indeed. The Milwaukee Society is to be congratulated on carrying through such a worth while undertaking. W. J. M.

Treatment in General Practice. (Second Edition). By Harry Beckman, M. D., Professor of Pharmacology at Marquette University, School of Medicine, Milwaukee, Wisconsin. Second Edition, Revised and Entirely Reset. 889 pages. Philadelphia and London: W. B. Saunders Company, 1934. Cloth $10.00 net.

This second edition may be considered, like the first edition, as a comprehensive presentation of therapeutics. Although written by a pharmacologist it takes up in considerable detail not only drug therapy but medical management of disease as well. The author has very painstakingly reviewed and presented the views now held by various writers on therapy. His consideration does not attempt to be clinically critical. Attention in this regard should be drawn especially to paragraph number two on page one hundred and thirty-three, where the value of the nasal catheter for the administration of oxygen is not only greatly underestimated but quite erroneous. It is obvious that revisions will need to be made rapidly for there is included such widely divergent methods of treatment that some will soon be discarded.

The book includes an extensive bibliography and is well indexed. K. L. P.

TUBERCULOSIS

(Continued from page 433)

McPhedran and Opie describe these early cases, with x-ray findings but without symptoms or physical signs, as latent. Not infrequently they are forerunners of clinically manifest tuberculosis. Tracheo-bronchial gland or childhood type of tuberculosis can rarely be diagnosed on physical examination alone.

Too often in the past the entire concern has been with the positive sputum, far advanced case, whose prognosis was usually poor. Little was done to determine the status of the other members of the family until symptoms, indicating active tuberculosis, developed months or years later.

The study—giving a brief history, the reaction to tuberculin, and the x-ray findings represented diagrammatically, is shown in the drawings. Physical findings in the contacts were essentially negative in all instances.

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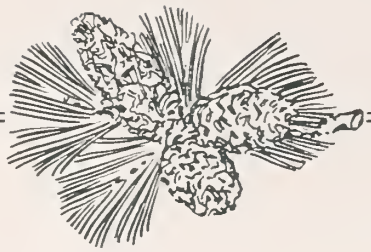

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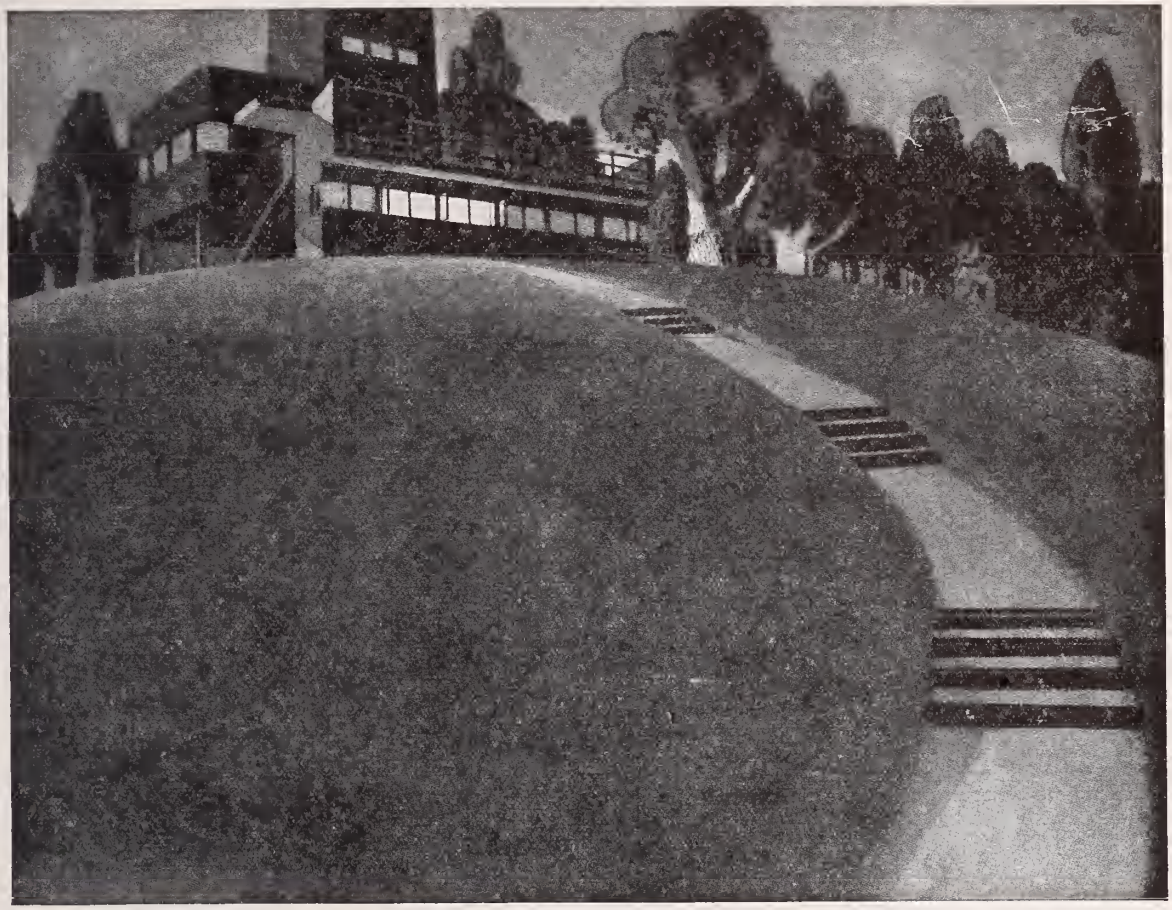

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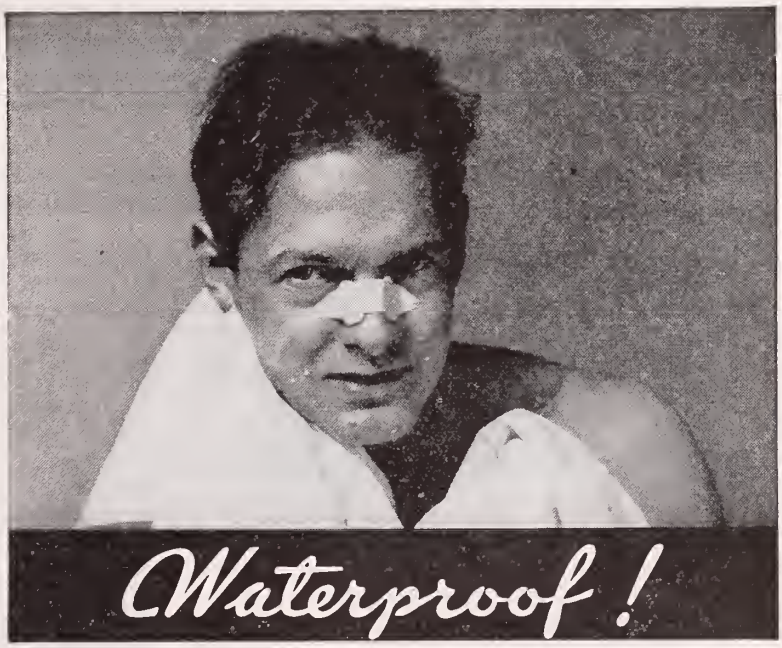

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The Significance of the Increasing Diabetic Death Rate

By ARTHUR T. HOLBROOK, M. D.
Milwaukee

FOLLOWING the discovery of insulin in 1921 and its acceptance as a therapeutic agent, the medical profession generally felt that one more disease had been placed under control and that the fatal issue in diabetes would be markedly decreased. Such results, however, were not predicted by the discoverers of the remedy; and such results have been far from realization.

Through the courteous co-operation of the health departments of a number of cities and of different government bureaus, two tables have been prepared and are here presented to show a comparison of the diabetic fatalities throughout this country for the year before insulin was placed on the market and for our latest statistical years of 1931 and 1932. The conditions disclosed are consistent with the records of most physicians of experience; but the apparent increase of death rate cannot be accepted as an actual increase of rate or as a significant increase without the evaluation of certain factors affecting these statistics, and it is to the discussion of these elements that this paper is directed.

The chief factors for consideration are:

1. Varying systems used in reporting causes of death.
2. Ratio of population increase to death increase.
3. More general recognition of diabetes.
4. Changes in mode of living.
5. Possible increase in virulence of the disease.
6. Effect of insulin therapy.

1. Systems of reporting death. It is evident that statistics will vary importantly if systems of reporting vary. At certain periods of time and in certain communities diabetes has not been recorded as the cause of death when other jointly suffered diseases of importance have been present. One finds in the vital statistic records of 1920, from various cities, reports of diabetes as a secondary or contributing cause, where in 1932 it would be given as the primary cause.

For some years, however, through the advances in public health administration, most communities conform to definite regulation of reports; and, through the United States Classification of Joint Causes of Death or through the International Classification of Causes of Death, diabetes is now reported as the primary cause wherever it occurs either as the sole cause or conjointly with any other disease with a few exceptions. Thus, if a diabetic dies during an attack of pneumonia and diabetes is mentioned in the attendant's certificate as a contributing cause, the case is recorded as a diabetic death. Inasmuch as the general acceptance of this classification has been but recently established, it may readily be seen that many deaths ascribed to diabetes in 1932 would have been omitted from the list in 1920.

Just what proportion this variation represents cannot be accurately determined but from collected data it is fair to assume that at least for the last five years of the period from 1920 to 1931 diabetes has been given precedence over most other diseases as a reported cause of death where it appears jointly with another ailment. This is probably true of practically all of the communities listed in the accompanying charts. Therefore, where figures are tabulated to show the rate per 100,000 for the last few years of this period, say from 1929 to 1931, a true knowledge is gained of the actual increase in death rate. The Division of Vital Statistics of the United States Bureau of the Census has very considerately supplied such figures and they are tabulated on Chart II to show the diabetic

CHART I

DIABETIC DEATH REPORTS

Source	Year	Total Deaths	Pop.	% Pop. Inc.	% Death Inc.
Baltimore	1920	155	733,826		
	1932	276	804,874	10	44
Chicago	1920	514	2,701,705		
	1932	979	3,376,438	18	48
Cleveland	1920	142	801,385		
	1932	193	923,200	14	27
Madison	1920	7	38,378		
	1932	26	57,899	33	73
Milwaukee	1920	70	457,147		
	1932	157	601,800	25	56
Minneapolis	1920	90	380,582		
	1932	110	464,356	18	19
Montreal	1920	77	607,470		
	1932	173	833,000	28	55
Philadelphia	1920	295	1,823,779		
	1932	576	1,950,961	8	49
New York	1920	1,075	5,620,048		
	1931	1,921	6,930,446	19	45
San Francisco	1920	98	500,000†		
	1932	173	660,000†	29	44
Toronto	1920	54	521,893		
	1932	128	639,340	19	58
Average for 11 Representative Cities				22.1	47.1

† Approximately.

CHART II

DIABETIC DEATH RATE—PER 100,000 POPULATION

Source	1920	1924	1929	1931
Atlanta	12.8	19.9	17.3	22.3
Baltimore	20.6	23.7	27.7	29.5
Boston	24.3	24.1	30.9	30.2
Chicago	20.4	18.4	25.0	27.1
Cleveland	17.3	18.4	22.7	22.8
Detroit	13.5	11.6	17.1	28.4
Indianapolis	19.6	17.5	21.6	25.1
Kansas City	17.7	17.3	21.3	22.8
Los Angeles	16.3	20.1	20.4	20.1
Memphis	12.8	17.9	21.4	20.1
Milwaukee	19.7	16.3	21.9	24.
Minneapolis	23.2	21.0	21.4	25.1
New Orleans	15.6	18.2	22.	25.5
New York	23.4	24.2	26.2	29.7
Philadelphia	18.2	22.1	26.1	29.9
Portland, Oregon	19.6	15.0	20.4	26.7
Richmond	16.3	11.9	29.7	29.3
St. Louis	16.1	23.5	32.3	33.6
San Francisco	21.8	20.4	22.9	22.3
Washington, D. C.	15.2	19.8	28.1	26.3
Metropolitan Life Ins. Co.	15.6	17.8	18.9	20.7

death rate per 100,000 inhabitants in twenty representative, widely scattered cities. The condition shown may be summarized:

From 1920 to 1931, average increase about 30%.

From 1924 to 1931, average increase about 27%.

From 1929 to 1931, average increase about 19%.

It is a justified conclusion from these figures that there has been an increase of about 19% in deaths from diabetes from January 1920 to January 1932.

2. Ratio of population and death increase. This factor emphasizes the actuality of the death increase for the total statistics collected show an average population increase from 1920 to 1932 of 19.9%, while the deaths from diabetes show for the same period an average increase of 46%.

3. More general recognition of diabetes. Improvements of technique or methods of examination have not particularly influenced the increase in diagnosis of the disease but the general trend in the past few years toward more frequent and more comprehensive examinations has brought about a more general recognition of diabetes. This has been accomplished through the popularizing of periodic health examinations; the more generally required physical examinations in schools, industrial plants, fraternal organizations and the like; by the increased number of insurance examinations; the follow-up systems of insurance companies; and the widely patronized organizations whose subscribers submit samples of urine periodically for analysis.

Undoubtedly the generally aroused interest in diabetes among the laity, as well as in the profession, through the world-wide publication of the discovery of insulin, had its effect in stimulating the search for the disease. Probably no item of medical news has been given greater publicity, ranging from scientific to sensational, than was accorded this discovery.

Owing to these reasons, diabetes without doubt was recognized in many 1932 patients, where in 1920 it would have escaped notice; and consequently there has been a proportionate increase in reports of death where diabetes has been the sole cause or a contributing factor. It is impossible to estimate definitely but it is probable that an increase of between 5 and 10 per cent may thus be accounted for.

4. Changes in mode of living. Dr. Joslin has published a very significant compilation of statistics of diabetic deaths in Berlin, Munich and Breslau for the years just preceding the World War, when these German cities were under full, normal dietary conditions; and for the years following the onset of the war, when these communities were

under very drastic food restrictions. Berlin diabetic deaths fell from 467 in 1914 to 178 in 1920. Munich from 104 in 1914 to 77 in 1918. Breslau from 115 in 1914 to 51 in 1918.

Although account must be taken of population changes these figures are definitely indicative of conditions invariably found when over-eating tendencies on one hand and rigid food restrictions on the other are compared. These figures emphasize the well established fact that over indulgence is an important factor in the development of diabetes and that obesity is one of its forerunners.

This factor undoubtedly affected the death rate in America between 1920 and 1930 because in this period there was a wide variation in our country, from restrictions due to the war situation, to unusual conditions of plenty and of indulgence.

The increased use of sugar in our country also had its effect. The statistics show a progressive increase in the consumption of sugar in the United States which was practically uninterrupted until the unsettled business conditions forced the reduction. The consumption was:

32⅓	pounds	per	capita	in 1870,
64	"	"	"	in 1900,
86	"	"	"	in 1920,
107½	"	"	"	in 1925,
114.7	"	"	"	in 1927,
111.1	"	"	"	in 1928,
110.4	"	"	"	in 1929,

and then the depression slump to:

104.0	pounds	per	capita	in 1930,
103.4	"	"	"	in 1931.

Dr. Henry W. Cook has compiled a valuable graphic chart embracing the conditions in several important countries, which shows conclusively that the incidence of diabetes varies directly and proportionately as does the per capita consumption of sugar. It is interesting to speculate as to the effect on the diabetic death rate in the United States of the advent of prohibition, which is authoritatively said to have been followed by a marked increase in the consumption of candy and other sugar products.

Consistent with these conclusions is the fact that diabetes is almost twice as prevalent among females as among males because of more sedentary habits, a greater consumption of carbohydrate foods, and the resultant obesity.

The well known tendency of the Jewish race to develop diabetes is explained on the same grounds.

5. The possibility of increased virulence. There is no acceptable evidence that diabetes was more virulent in 1932 than it was in 1920 or in any other period of time. That the disease has been robbed of considerable of its virulence by the use of insulin is beyond question and hence instead of playing a role in the increase of the death rate of diabetes this factor would operate in its decrease.

6. The effect of insulin therapy. While it is true that insulin has failed to halt the increase of diabetic deaths, it has definitely accomplished the control of several malign aspects of the disease. Of these, the two outstanding successes of insulin therapy have been the control of diabetes in the young and the prevention and treatment of diabetic coma.

The physicians of coming generations will never have the faintest idea of the hopelessness with which the practitioners of even twelve years ago faced the problems of diabetes in children and of diabetic coma.

Differing methods of tabulating records rob statistics of conclusive definiteness, but the following figures collected from different parts of the United States show significantly the improvement in the control of diabetes in the young.

In New York City in 1920 there were 3 diabetic deaths below 25 years of age per 100,000 inhabitants, and 125 deaths over 65 years of age per 100,000. In 1932 there was 1 death below 25 years and 277 deaths over 65 years per 100,000. In Madison, Wisconsin, the average age of diabetic death in 1920 was 34 years. In 1932 it was 64 years. Cleveland, Ohio, shows the least change of any report received and yet the average age of 49 years in 1920 rose to 58 years in 1932.

Before the advent of insulin, coma was the most common cause of death from diabetes. Every table available for examination which covers the figures of the deaths from coma, shows a definite and striking decrease of this termination. Dr. Joslin has published statis-

tics of coma for the period just before and after the discovery of insulin. From 1914 to 1922 he found coma in 42% of deaths, and from 1922 to 1926 in only 20%. Figures after 1926 will run still lower.

Without parading further statistics it is fair to state that the score of years, which the last half century has added to our average life expectancy, is in an appreciable measure due partly to insulin for increasing the average age of diabetic death at least 10 to 15 years.

These two elements of control in the young and control of coma with the increasing age factor lead to an increasing number of deaths from two important terminal conditions of diabetes: from cardiovascular-renal affections and from infections. These conditions are particularly of interest to the surgeon for they bring to the operating room a larger percentage of gangrene and infections than maintained before the age of death was increased. The cardiovascular-renal conditions also concern the surgeon in the risk determination even more than in pre-insulin days, because more patients will be seen who have reached this later stage of the disease. It is also important for surgeons to keep in mind that insulin if given injudiciously may greatly increase the surgical risk and incidence of death. The presence of ample glycogen in the liver and in the muscles is essential in withstanding the effects of anesthesia, the shock of operation and in securing satisfactory postoperative progress. Too much insulin before or following an operation may cause a hypoglycemia that would be far more dangerous than too little insulin with the temporary loss of sugar regulation.

Granting that the control of the disease in children and that the control of coma have been very satisfactory and that diabetic life expectancy has been remarkably prolonged, we are still forced to the realization that we cannot prevent the terminal virility of this affection. We are led to inquire if our use of insulin is as effective as it could be made or if we are to remain powerless to control indefinitely the toxemia which finally exacts its toll.

Experience teaches us that it is a comparatively simple matter to control the treatment of diabetic children. Whether at home, in an institution, or in the modern diabetic camp their diets are rigidly enforced, their insulin is given regularly, exercise and hygiene are properly regulated, weights are checked, and urine and blood examinations are taken exactly on time. Experience also teaches us that it is extremely rare to find an adult patient whose treatment can be carried out with regularity and satisfaction, excepting possibly for the few days or weeks that such a patient can occasionally be induced to spend in a hospital. The matter of diet control in the adult is today much more difficult than it was in the days before insulin was introduced. This is because physicians have been led into lax dietetic regulation under the new treatment and also because the patients are possessed of a sense of security which is unjustified and false. The same laxity is true in the regulation of exercise, hygiene and weight. In this sense of security, and particularly during the recent period of enforced economies, patients have been remiss in regular urine and blood analyses and physical examinations, in a slack manner that never would have been allowed under pre-insulin treatment.

CONCLUSIONS

A. The apparent increase in the number of reported deaths from diabetes is reduced by consideration of varying methods of reporting, by the more general recognition of the disease and by the greater incidence of the disease. The actual increase of diabetic deaths from 1920 to 1932 was probably between 10 and 15 per cent.

B. The average age at death from diabetes has increased 10 to 15 years.

C. Insulin has failed to prevent the final influence of diabetes in causing death.

D. The terminal condition under insulin treatment has shifted in frequency from coma to cardiovascular-renal affections and to infections.

E. Insulin therapy could be made more effective by avoiding a false sense of security in both physician and patient, and by instituting more rigid supervision and regulation.

F. The death rate in diabetes could be decreased by a less indulgent mode of life and a more efficient management of cases.

Chronic Rheumatic Diseases; A Study of Twenty-Two Cases, with Especial Reference to Vaccine Therapy

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SUBCUTANEOUS injections of a streptococcus vaccine have been used extensively for many years in the treatment of chronic rheumatic diseases. In recent years autogenous and stock vaccines have been tried. Important advances have been made by Crowe,[1] Cecil,[2] Pemberton,[3] Clawson,[4] Billings, Coleman and Hibbs[5] and Burbank.[6]

H. Warren Crowe[1] is of the opinion that focal infection bears an etiological relationship to chronic rheumatic diseases. This evidence is most clear cut in the case of teeth, though probably the bowel is quite as important. If the relationship of focal infection is admitted, then it follows that the actual exciting cause is the streptococcus. Many varieties of streptococci are involved in rheumatic diseases. All are non-hemolytic. He says that all persons are carriers of streptococci in their alimentary tracts and upper air passages, and of the staphylococci in the skin, scurf, urine, feces and other places. In a number of cases a certain white staphylococci called by him the micrococcus deformans is also pathogenic. Osteoarthritis and non-articular rheumatism are essentially caused by streptococci, rheumatoid arthritis by staphylococci.

The difference in his treatment and that used by others is the polyvalency of the streptococcus vaccine, the dosage, the recognition of the equally important staphylococcus infection and the use in every case of both streptococci and of staphylococci. Cecil[2] has tried autogenous vaccines made from the blood-stream streptococci. He says, some patients are extremely sensitive to them and the dosage has to be small in the beginning. Pemberton[3] feels that vaccines should be used with a balanced appreciation of the nature of the disturbance and what they may be expected to accomplish. The limits and dangers of vaccine therapy are also to be kept in the foreground. Clawson[4] and his associates have successfully used intravenous streptococci vaccine in 365 cases of chronic arthritis. Eighty per cent of these cases were clinically improved. Billings, Coleman and Hibbs[5] compared results of a series of vaccinated patients with a series of unvaccinated patients. They found no difference in improvement in the vaccinated and unvaccinated groups. Burbank[6] says the complementary titer of the patients' blood is an index to the value of vaccine. Autogenous and complement-fixing strains in dosage small enough to avoid reactions have been found more satisfactory than any shock or protein therapy.

MATERIAL

The cases from this group have been treated during the past two years. The cases are grouped into the following classes: Osteoarthritis[1], which in its usual form attacks only the joints, leaving the general health unaltered. Fibrositis or non-articular rheumatism[2], which does not involve the joints, neuritis, muscular rheumatism, neuralgia, lumbago and nodular rheumatism. Rheumatoid arthritis or atrophic arthritis[3], shows the following signs, weakness of intrinsic muscles of hands and feet, pain and tingling sensations in the fingers and arms, muscular cramps, disturbed circulation with bluish and cold extremities, sweating of palms and the presence of spindle joints. Mixed forms[4], are combinations of the other three types and may occur in the same patient.

METHOD OF TREATMENT

Since chronic arthritis can be considered as a systemic disease with streptococci and staphylococci fed into the circulation from areas of infection, the first necessary step in treatment is to locate and remove, if possible, all primary foci. This is important especially in early cases of arthritis. It has been found that in cases of acute onset with active symptoms, removal of foci offers a

complete cure. In cases of long standing removal of foci may do no particular good for in these cases secondary foci have already been established.

Burbank[7] says that the main active primary foci of infection are above the vocal cords, while the main secondary foci are below. The primary foci are found in the teeth, nasopharynx, sinuses and probably the tonsils. The main secondary foci are found in the prostate, joints, gall-bladder, urinary tract, vaginal tract, and, most important, the intestinal tract.

The removal of primary foci and the elimination as much as possible of secondary implant must be followed in conjunction with vaccine therapy.

Burbank also suggested the use of a bacterial emulsion as a spray to the nose and throat in chronic postnasal infections. Such a spray used weekly or bi-weekly, not only increases local tissue resistance but also increases general systemic resistance. The instillation in the nose of 20 to 30 minims of a warmed metaphen (1-5000) solution four times daily in both the acute and chronic cases of postnasal infections have given excellent results.

Elimination of absorption from the intestinal tract must be controlled as much as possible without injury to the mucous membrane. Such measures as a smooth diet, the use of saline colonic irrigations twice weekly is of value. The use of acidophilous milk or cubes to change the intestinal flora should be tried.

Carefully regulated massage, exercise and physical therapy, as well as certain medicinal preparations are advocated as an aid in improving peripheral circulation.

The use of salicylates and certain coal tar derivatives are of value in the acute cases.

Most patients having rheumatism are not infected by one streptococcus alone, or even by two, but sometimes by three or more. It is therefore important that, in order to treat rheumatism successfully, all the rheumatic streptococci, as far as possible, should be combined in the vaccine used. This is important in using the stock vaccine. Equally important is the recognition of staphylococci infection and the use in every case of both streptococci and of staphylococci. The stock vaccines consist of polyvalent streptococcus vaccine and of m. deformans vaccine.[8]

The vaccines used are put up in strength from 10,000 per c.c. to 500 million per c.c. In addition to the above dilutions a vial each of one half million streptococci and one half million m. deformans per c.c. is needed.

The first dose in every case is 3 minims of 100,000 streptococci injected subcutaneously and if there is no change of any sort in three to four days one can give 3 minims of 100,000 m. deformans. If again there is no change the two can be combined in four or five days. Then every four or five days a dose can be given increasing each time by some 25 to 50 per cent until response or reaction occurs. If reaction occurs, make the interval a week or more; if response, the next dose should be given when relapse appears; if nothing happens, give the doses twice a week up to two million and then once a week. It is advisable in every case to combine the autogenous vaccine with stock streptococcus and with m. deformans vaccine.

The length of treatment in each case will vary. One will continue the treatment so long as the injections are found necessary to prevent relapse. If a tendency toward recurrence of symptoms, a very small dose will usually suffice to keep down all signs of rheumatism.

Reactions of some sort were experienced following about 75 per cent of the injections. In most instances when a reaction was present the onset was from two to twelve hours following injection.

There may be nausea, headache or a feeling of being drowsy. There may be increased or lessened pain, stiffness or swelling of the joints, or muscles. The patient, on the other hand, may have felt better the next day with amelioration of symptoms.

It is important that the effect which should be obtained is an immediate improvement lasting at least two or three days, or longer. In the majority of cases the reaction was slight and no great difficulty was encountered from the beginning.

TABLE I. RESULTS OF TREATMENT

	Patient	Length of Treatment	RESULTS				
			Symptom Free	Improved	No Change	Worse	Still Under Treatment
Rheumatoid Arthritis							
Severe	1	5 months	No	Yes			No
	2	3 months	No	Yes			Yes
	3	1 month	No	Yes			Yes
Mild							
Osteoarthritis							
Severe	4	5 months	No	Yes			
	5	9 months	Yes				No
	6	8 months	Yes				No
	7	2 months	No	No	Yes		No
	8	5 months	Yes				No
	9	2 months	Yes				No
	10	4 months	No	No	Yes		No
	11	3 months	Yes				
Mild	12	3 months		Yes			No
	13	4 months	Yes				No
	14	2 months	Yes				No
Mixed Forms							
Severe	15	3 months	Yes				No
	16	2 months	No	Yes			No
	17	3 months	No	Yes			Yes
	18	3 months	No	Yes			No
Mild	19	9 months	No	Yes			No
	20	3 months	Yes				No
Fibrositis or Non-articular Rheumatism							
Severe	21	4 months	No	Yes			No
Mild	22	2 months	No	Yes			No

RESULTS

Twenty-two patients have received sufficient treatment to determine the result of vaccine therapy. Results of improvement are seen in Table I. All cases but two experienced clinical improvement. One case had an osteoarthritis of the lumbar spine of many years' duration. The second case was of the mixed form in an elderly male with diabetes.

Small dosage was found to be more satisfactory even though results were slower.

Injections of small dosage were given weekly in two instances for a period of nine months.

Results were better in the early cases when the symptoms first appeared. These cases were well again after a short course of treatment. In some cases the clinical improvement was apparent after one or two injections while in others it was more gradual.

Improvement followed with decrease in pain upon movement of the joints. Patient 4, (Table I) had an osteoarthritis for about sixteen years. After weekly injections of mixed vaccines for five months, was able to walk without the use of crutches.

In a few cases a general improvement with gain in weight was noted. In two instances a slight recurrence of symptoms occurred after a period of a year which were relieved by one or two small injections of vaccine.

COMMENT

The results of treatment of 22 cases of chronic arthritis with the use of stock vaccines consisting of various streptococci and staphylococci and other measures are discussed in this paper.

Previous experience with patients with chronic arthritis receiving shock or protein

therapy rarely improved as did these patients receiving this form of vaccine therapy.

The stock vaccine used consist of both streptococci and staphylococci. It has been shown by Crowe that staphylococci are just as frequently involved in rheumatic disease as are the streptococci.

Small dosage was found to be more satisfactory although results were slower. Small doses tend to decrease formation of antibodies against infective streptococci and staphylococci wherever large doses increase such formation and agglutination titer.[9]

Because of the systemic nature of the disease, attempt should be made to prevent absorption from the primary areas of infection to the secondary areas.

Careful consideration of the teeth, tonsils, nasopharynx and sinuses in the early cases is important.

In those cases where secondary foci are established, treatment which tends to reduce absorption is necessary.

Of great importance also in the restoration toward normal is physical and heat therapy, massage and exercise. Orthopedic devices for correction of deformities are valuable to improve peripheral circulation.

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Inflammatory Processes Involving the Optic Nerve

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ONE of the most difficult problems that the ophthalmologist encounters is one of the many inflammatory processes which involve the optic nerve. Not only is it important for him to diagnose the disease because of the danger it entails to the patient's vision, but he must also regard such inflammation as a symptom of serious affection elsewhere in the body.

The neurologist wishes to know if the eye changes are caused by inflammatory processes, toxins, or intracranial tumors. It is of vital importance and often the answer decides whether the cranium should be opened or not.

Most inflammatory processes and toxic substances which attack the optic nerve involve primarily the papillo-macular bundle causing a central or cecocentral scotoma. At times these affections are so virulent as to extend further, breaking through into the periphery. If perimetric fields are taken frequently during recovery, it is found that the periphery recovers first indicating that the defect is really a severe extensive central scotoma.

Two notable exceptions to the above are caused by syphilis and quinine where the nerve is attacked primarily at its periphery causing a concentric contraction of the fields and only in rare cases involving the central fixation. It is involvement of the papillo-macular bundle by inflammatory and toxic substances with which this paper is fundamentally concerned. If this bundle is involved close to the optic disk, the disk becomes swollen and congested; this condition is called optic neuritis.

If the lesion is further back in the nerve no change will be observed at the nerve head and because of its location it is called retrobulbar neuritis. At times these deeply seated lesions cause slight changes at the disk when atrophy ensues, often this is only observed as a temporal pallor.

The significance of the term retrobulbar neuritis seems to be well understood, but there is much misunderstanding when one speaks of optic neuritis. It is used interchangeably with papillitis, choked disk and papilledema.

Papilledema and choked disk are synonymous terms and indicate a condition where edema of the optic disk is the dominant factor.

In optic neuritis, also called papillitis, the dominant factor is one of inflammation.

Many normal disks are called pathological because of the frequent anomalies the fundus presents, and it is only after observing all types of normal cases that one can hope to gain a true sense of values. Two of the most frequent and confusing anomalies are the so-called structurally blurred and structurally full disks. A structurally blurred disk shows the disk margin blurred by normal nerve fibres usually nasally because that is the area where the greatest number of fibres pass. In structurally full disks the nerve head is elevated often to one or two diopters, the margins blurred and the physiological cup small. These cases at best are confusing and often necessitate further observation before an accurate diagnosis can be made.

Excessive glial tissue, medullated nerve fibres, colloid concretions and many other anomalies help make the picture more confusing and forces the diagnostician to depend on other clinical findings.

Objectively in the majority of cases it is impossible to differentiate choked disk from optic neuritis.

Many feel the amount of elevation, the differences in color, the severity of the retinitis, the presence or loss of the excavation give them a lead but if one depends on such points alone, many cases of optic neuritis will be attributed to increased intra-cranial pressure.

In choked disk the patient's vision and central fields remain good until late in the course of the disease. In optic neuritis there is an early loss of vision due to involvement of the papillo-macular bundle. That is, cases of optic neuritis show a central or cecocentral scotoma while choked disks do not. One exception to this is the central scotoma found with choked disk in some cases of basofrontal tumors.

Ronne defines "retrobulbar neuritis" as a disease in the optic nerve characterized by a selective affinity for the papillo-macular bundle. It is a clinical entity irrespective of the ophthalmoscopic appearance of the optic disk, which may vary from normal to an extreme degree of swelling. This definition excludes some diseases of the nerve such as interstitial neuritis affecting the connective tissue septa. It is apparent that a true neuritis of the optic nerve affects the most sensitive and most highly developed part of the nerve —the papillo-macular bundle.

In practice then, neuritis, either of the ocular or retrobulbar type, presents itself to the ophthalmologist as a central or cecocentral scotoma not explained by visible changes in the macular area. Clinically the patient usually complains of a loss of vision most marked for near objects. Depending on how sudden this loss of vision has come on really designates if it is an acute or chronic affair. In the acute form one eye as a rule is affected; in other varieties both eyes are involved either together or one after the other.

Traquair[1] says that when the scotoma is not truly pericentral then it is most commonly centrocecal and usually on the temporal side because of the tendency to invoke the crossed fibres.

When a lesion is situated at the junction of the nerve with the chiasm a unilateral scotoma with a straight vertical boundary corresponding to the vertical axis of the visual field is produced. This defect usually occupies the apex of the upper outer field quadrant. If bilateral and hemianoptic or quadrantic defects are found it eliminates lesions of the optic nerve, and optic tract lesions should be thought of such as vascular lesions or pressure from tumors. The vascular les-

ions being rapid while the pressure ones are progressive.

These inflammatory processes of the optic nerve have a tendency to recover,—this is more likely in retrobulbar neuritis than optic neuritis cases. Many patients regain their vision to the extent that they feel it is normal but if accurate fields are done relative central scotomas are often found.

ETIOLOGY

As to the etiology of these cases it is some morbid condition elsewhere in the body, usually two-fold, the underlying true cause and the exciting cause. The nerve lesion may not be produced until there is some depression in health—a cold, some infectious disease which might lower the bodily resistance. In this way the contributing cause is often blamed while later it may emerge that multiple sclerosis, tobacco or other toxic conditions actually produced it.

One of the most common causes found in literature for retrobulbar neuritis is sinusitis. The older writers persist in giving it first place while the more recent workers find disseminated sclerosis by far the greater cause. That rhinogenic infection is a factor is no doubt true but extremely rare. In a recent article by Benedict[2] of the Mayo Clinic in which he reported 225 cases of retrobulbar neuritis, only one was reported where sinus was the cause while in 155 cases multiple sclerosis was the underlying factor.

Gifford[3] in a recent report states that purulent sinusitis comprises about 3.5% as the cause of retrobulbar neuritis and that 50% of the cases were due to multiple sclerosis. There is a great tendency for spontaneous remissions in these cases. Any improvement in vision occurring while in a period of remission is often erroneously attributed to the therapy used during that time. This accounts for the relief credited to rhinologic treatment in the majority of cases. It is also possible that the local nasal treatment relieves some contributing cause and facilitates recovery. Even if it were so, it leaves a false sense of security in that both the doctor and patient feel that the real trouble has been found and taken care of. When the relationship between multiple sclerosis and retrobulbar neuritis are appreciated fewer operations on sinuses will be performed. If anything should be tried nasally it should be limited to local treatment, this might be of some temporary benefit.

Not until all cases of retrobulbar neuritis have a general and neurological examination will the relationship between such a lesion and multiple sclerosis be appreciated. Often the systemic symptoms of multiple sclerosis are delayed for years, even as long as 24 years after the initial complaint.

Multiple sclerosis can involve the optic nerve acutely or chronically, as an optic neuritis or as a true retrobulbar neuritis. In the large proportion of the cases it attacks the nerve retrobulbarly. As far as the acute form is concerned, Ronne[4] feels that it is beyond all doubt that the anatomical basis is an irregular plaque formation in the optic nerve. Ronne feels even in the chronic forms that this plaque formation exists. Multiple sclerosis has a special peculiarity in that the myelin sheath is destroyed before the axis cylinder, a peculiarity characteristic of the disease.

The central scotoma, according to Ronne's idea, can be explained on this basis that the macular fibres are more liable to the loss of their myelin sheaths than the peripheral ones, while the spontaneous recovery may be regarded as an adoption of the axis cylinder to the loss of its sheath.

Cases of stationary atrophy or the Leber's group are relatively uncommon. The onset of the disease is rapid and insidious; often the loss of vision is not noticed until it has failed considerably. It affects the two eyes simultaneously and to the same degree, although in some cases one eye may escape or be involved later. Fortunately after a rapid loss of vision the disease never goes on to total blindness, so that the patient usually retains enough vision with which to get about. The field of vision is not contracted as a rule but there is an absolute central scotoma. Ophthalmoscopic examination may show in the early stages a slight congestion of the optic disk with blurred margins and this appearance may continue for many weeks. Later the disk becomes pale and atrophic looking, although the pallor is not

so marked as in primary optic atrophy. The usual age of onset is about twenty years although it may be earlier or later. The disease is much more prevalent in males although it is met with rarely in females.

Nettleship's[5] statistics included three hundred males and sixty females, but he was of the opinion that the number of male patients was in excess of this, the reason being that more cases of females are recorded because of their rarity. Leber's proportion was one female to nine males. It is the male of a family who is usually affected, the females escape but the descent takes place through the female line, a male suffering from Leber's disease seldom transmitting it. The emerging conception of Leber's disease is a familial abiotrophy of the optic nerve, which in rare instances may be attended by degeneration in other parts of the nervous system.

Infection from the teeth and tonsils is frequently reported as the cause of retrobulbar neuritis. Such foci, it is true, may be a contributing factor and their removal be of benefit, still it is highly improbable that such toxins are neurotropic enough to involve the optic nerve.

As mentioned briefly before in this paper, syphilis primarily attacks the periphery of the nerve, nevertheless there are a few cases where the papillo-macular bundle is involved. The virus of syphilis has no specific affinity for the axis cylinder, its involvement is usually accidental. A meningeal affection with a resulting perineuritis is the most frequent optic nerve lesion in lues.

The term "toxic amblyopia" means literally partial blindness due to toxins, such toxins always affecting both eyes. Traquair feels that the subchiasmal portion of the visual pathways, the nerve fibres or ganglion cells, appear most vulnerable if not the only vulnerable part.

The most common type of poison encountered in these cases is nicotine. In a study of 108,141 eye patients, Traquair[6] found 1,088 cases of tobacco amblyopia of which the highest number occurred in the spring. Cases are fairly typical in that it is usually a man about 50 years of age, who has been active but now leads a sedentary life, sweats very little and smokes a great deal. The tobacco is usually in the form of cigars, smoking from five to six a day; pipe smokers and chewers are also affected but very rarely cigarette smokers. The patient complains of failing sight which has come on for weeks or months so now he is unable to read the newspaper or recognize people across the street.

Ophthalmoscopic examination reveals a normal nerve head but more often there is a temporal pallor. On mapping out the perimetric fields a coecal central scotoma both for colors and form is found, which extends from the nasal side of the blind spot to the fixation point later to over-lap it. As to the pathology, there are numerous ideas. The one most widely accepted is that the papillo-macular bundle is primarily affected with secondary involvement of the macular elements.

Traquair found in reviewing his cases that alcohol had very little to do with tobacco amblyopia. Blindness from wood alcohol often begins with a central scotoma, but this scotoma as a rule rapidly breaks through to the periphery giving the field an irregular crescentric or pseudo-hemianopic appearance. Later the fields become concentrically contracted and often blindness ensues. These cases, although common soon after the advent of prohibition, are now relatively rare due to the easy access of pure grain alcohol.

Since certain cases of lead intoxication have retrobulbar neuritis one would expect that thalluin, which is next to lead in the periodic table and has many chemical and pharmological properties of lead, would also produce similar optic nerve lesions. This is true in that Lillie and Parker[7] reported amblyopia with central scotomas caused by depilatory cream which contained thalluin.

Certain nutritional disturbances such as diabetes, primary anemia and the so-called lactating neuritis of pregnancy will at times exercise a selective action on the papillo-macular bundle. What the direct cause may be is unknown. Francis and Koenig[8] in reporting a case occurring in diabetes suggested that the ketone bodies may be the toxic substance. Ronne feels that it is a degeneration process in the papillo-macular

bundle rather than a neuritis as in tobacco. By far the most frequent endogenous toxins causing retrobulbar neuritis are found in cases of diabetes, there being over thirty cases reported by Leber, Foster, Moore and others.

In the differential diagnosis cases of congenital amblyopia, chiasmal and basal frontal tumors must be thought of. In congenital amblyopia the patient gives a history of poor vision in one eye for many years. If it is discovered accidentally, examination usually reveals a high error of refraction in the affected eye. Such loss of vision is usually stationary.

Chiasmal tumors can produce scotomatous defects similar to those found in toxic and inflammatory lesions of the optic nerve but bi-temporal defects for form and color are associated with the scotomatous change and are as a rule progressive in nature.

The central fibres may be affected in cases of tumor of the base of the overlying frontal lobe. These tumors may cause choked disk on each side with cecocentral scotoma on one side or choked disk on one side and pallor of the disk on the other. In these cases the tumor is on the same side as the scotoma and the pale optic disk. Midline basal frontal tumors may cause bilateral central scotomas.

Lillie[9] found a scotoma on the side of the tumor in 11 out of 14 cases.

CONCLUSIONS

1. The term optic neuritis should be used only when one wishes to designate an inflammatory lesion of the nerve head.

2. The early loss of vision and the presence of a central scotoma found in optic neuritis are what differentiate it from choked disk.

3. Multiple sclerosis is by far the most common single cause of retrobulbar neuritis, while infection of the sinuses, teeth, and tonsils are extremely rare as a primary cause.

4. In the toxic group tobacco is the most common cause.

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The Treatment of Chronic Osteomyelitis*

By WALTER J. JONES, M. D.
La Crosse

THE various infections found in the chronic type of osteomyelitis with the various factors which are responsible for the disease and the locations of the lesions, make it an amenable disease to treat.

On the other hand, often the patient has suffered from a long, chronic infection; oftentimes it is associated with many exacerbations and consequently the patient is anemic, septic, and invariably neurotic, and as a result of his infection is subject to many complicating diseases.

What happens in the bone structure during a chronic infection? In the marrow cavity we find normally the osteoclast cells which are bone destroyers and on the exterior we have the osteoblasts, which have to do with the construction of new bone.

1. When an infection occurs in a bone, inflammation results which is associated with hyperemia, oedema, and increased leukocytic infiltration; tension results and if sufficient the capillaries become obliterated. This ten-

* Presented before 91st Anniversary Meeting, State Medical Society of Wisconsin, Milwaukee. Revised to date of publication.

sion causes an ischemia which then causes necrosis of the bone. As a result of this process, the osteoclasts eat into the margins of the dead areas and a zone of granulation tissue is found, which gradually will separate the dead bone. At the same time the osteoblasts become active and new bone is formed, thus leaving the sequestrum surrounded by an involucrum which is frequently perforated by sinuses. If the sinuses become obstructed or heal over temporarily, tension develops in an unyielding cavity, which accounts for the temperature and the pain, and, if prolonged sufficiently, accounts for the toxemia and occasionally septicemia and its complications.

The question as to when surgical procedure should be followed depends largely on the predisposing causes, referring only to the operable cases. If the disease follows the acute form, sufficient time should be given until by repeated x-rays one is able to determine where there is dead bone and bone sinuses, as well as to determine what is healthy bone. If it follows a compound fracture, sufficient caleous should be formed so as to prevent re-fracturing in performing your surgical operation.

Where sinuses are present, I find it very helpful to inject these sinuses by placing a small catheter or blunt flexible needle into the sinus and injecting iodipin; under the fluoroscope one can determine the course of the sinus and also determine where there are cavities in the bone, but we are not able to carry this through in all cases. This procedure can be done at any stage of the disease and if done with care and precaution, has a very decided therapeutic value. This procedure is without distress and also gives the patient relief of pain and invariably, for a while lessens the discharge.

Operation is the paramount part of the treatment. It is the only way to eliminate the cause of the disease and it should be radical.

2. "It is absolutely essential that all bone sinuses be eliminated, regardless of the amount of good bone that has to be sacrificed, because an infected penetrating bone sinus will not remain healed. Deep cavities must be made shallow and everywhere the bone should be made smooth."

3. All sequestra and dead bone have to be removed, as well as the cortex over any cavity in the bone, so that when finished the periosteum will cover over the remaining healthy bone and thus eliminate any cavities and sinuses.

It is important to preserve the periosteum and to traumatize it as little as possible and not leave any bone deprived of the periosteum as this bone will die and become another sequestrum.

During the World War, while in charge of a ward for only infected cases, the majority of which had osteomyelitis, the Carrel–Dakin solution was used extensively in the postoperative treatment. Many of these cases were followed by infections and abscesses in apparently previously healthy regions in close proximity to the field of operation, following the operation. After sharp penetrating retractors were discontinued and flat retractors used in operating, we had no more of the infections outside of the field of operation. This is important, as you frequently see the sharp retractors pictured in books and articles. It is possible that the sharp penetrating retractors penetrate the periosteum and carry the infection to adjacent tissues.

The next procedure which I have used is to pack the wound with plain gauze soaked with a 40% iodine in a vegetable oil (in this series the iodipin was used). The wound is then closed, leaving only enough open to remove the packing. The limb is then placed in a padded, moulded plaster cast.

The packing is removed on the third or fourth day by opening up only the dressing, —the limb is not disturbed. The wound is dressed at two to four day intervals; the wound is cleaned with ether and if there is any irritation of the skin a small amount of a mixture of balsam of Peru and castor oil or zinc oxide ointment is applied to the irritated parts.

In a series of fifteen consecutive cases treated in this way which have had the disease from six months to thirty-nine years' duration, while the number is small, yet the results have been very encouraging. Four

were healed in three weeks; four in six weeks; four in three months; two in seven months; and one of the lower head of the femur showed a decided improvement but still has a small sinus persisting after two years.

There were three cases that had no discharge after the packing was removed, while the rest discharged freely for a few days and then showed only a serous discharge until healed.

There has not been a single recurrence following this treatment.

ILLUSTRATED CASES

CASE I. A. F., man aged 64 years, discharging sinus from his left leg, lower one-third, 20 years' duration, operated four times for osteomyelitis but never had healed. X-ray showed osteomyelitis of lower one-third of tibia.

Operated January 22, 1930, and left hospital February 11, 1930, and was healed by the 18th of February. X-ray four months after operation shows good regeneration of bone.

CASE II. M. O., girl aged 11 years, was admitted July 24, 1930, with history that on November 9, 1929, fractured her left femur by falling from a ladder. On December 29, 1929, was operated for a bone plating and developed a postoperative infection. On admission there was stiffness of the knee and three discharging sinuses in the region of the old scar. X-ray after injection of iodipin showed extensive osteomyelitis of the femur; also sinus tracts with a large cavity in upper one-third of femur. There was marked dermatitis of the leg.

On August 11, 1930, the dermatitis had subsided and was operated. Patient left hospital August 24, 1930; the wound was healed. X-ray on October 29, 1930, showed marked regeneration of bone and at that time had developed good function of the knee.

CASE III. E. E. L., man aged 46, gave history of osteomyelitis for 39 years of the right tibia, upper one-third following an injury. He had had four previous operations with only temporary relief. Last operation six years ago. About four months ago the wound healed and since then his leg has been swollen and he has suffered severe pain. X-ray shows extensive osteomyelitis of upper one-third of the tibia.

Operated on him on December 29, 1931; left the hospital on January 31, 1932; wound was healing nicely with only small amount of discharge. On February 23, 1932, the leg was healed and x-ray showed the extent of bone resection—while x-ray six months later showed good regeneration of bone.

CASE IV. E. S., boy aged 12 years, admitted June 18, 1932. Last February developed an acute osteomyelitis of tibia following an injury. Was operated on February 16th, when a bone guttering operation was performed. Since then numerous small pieces of bone have been removed. X-ray showed extensive osteomyelitis of tibia with large cavity formation as shown by the pooling of the iodipin in the tibia. Operated on June 18, 1932,—radical sequestrectomy. Left hospital June 28, 1932, wound healing nicely. Wound was healed on August 20, 1932.

CASE V. Mrs. W. H. N., woman aged 58 years, admitted on June 1, 1932, with a history that twenty-eight years ago was operated for a supposed tuberculosis of the bone. Continued to discharge for two years and then healed. About six months ago developed severe pain in the leg and a month later opened in the old scar. Has discharged profusely since. X-ray showed extensive destruction of the tibia, lower one-third.

On June 6, 1932, was operated and left the hospital on July 3, 1932; was re-dressed at two to three day intervals and on July 28th was healed. X-ray August 1st showed marked regeneration of bone.

SUMMARY

1. The 40% iodipin is non-toxic, non-irritating in infected cavities.

2. Promotes early healing of the wound with good and early regeneration of the bone.

3. The patient has practically no pain after the pack is removed.

4. Eliminates extensive adherent and tender scars; thereby lessens recurrence by subsequent injury to the old scar tissue.

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OLD REPORTS WANTED

The library of the Wisconsin Anti-Tuberculosis Association has the report of the Sixth International Congress on Tuberculosis held in Washington in 1908. It lacks reports of the five congresses preceding it and is hopeful that some reader may be able to furnish the library with copies of these reports. They may be mailed to the Wisconsin Anti-Tuberculosis Association, 1018 N. Jefferson St., Milwaukee, Wis.

Lower Genital Tract Infections in the Female and Their Treatment*

By H. CLOSE HESSELTINE, M. D.
Chicago, Illinois

A MEMBER of the Outagamie County Medical Society suggested that lower genital tract infections and their treatment would be an appropriate as well as a practical subject to present, presumably because the general practitioner and the obstetrician and gynecologist commonly encounter these diseases in their practices.

One includes under this title gonorrhea, trichomoniasis, mycoses, streptococcic infection, syphilis, tuberculosis, chancroid, granuloma inguinale, gas bacillus infection, diphtheria, staphylococcic infection, and many others. Gonorrhea, trichomoniasis, mycoses, and streptococcic infections occur much more frequently than the others, yet no specific therapy has been developed comparable to that for syphilis, granuloma inguinale, gas bacillus infection, and diphtheria. Although inflammatory reactions resulting from chemical, mechanical, thermal and irradiational agents are indeed infrequent, such injuries may serve as a portal of entry for infections.

Unfortunately, the diagnostic and therapeutic procedures vary for each etiolgic agent, and the clinical entity may be quite atypical. For these reasons, in addition to the physical examination and information elicited from the history, many tests are necessary in certain patients before an accurate diagnosis can be made.

Such organisms as the trichomonads, fungi or yeasts, and diphtheria bacilli ordinarily do not invade the tissues or the glands. However, gonococci and streptococci may survive for a long time in the urethral glands (Skene's), vulvovaginal glands (Bartholin's), and the cervical glands, while B. tuberculosis, spirochaete pallida, B. Ducrey, and B. Donovan are invasive and destructive.

Although vaginal discharge is usually the major complaint, other symptoms such as pruritus, pain, soreness, tenderness and heat are common, and any one or a combination of these may comprise the symptom complex. Even though abnormal vulval moisture may result from over-active vulvovaginal and cervical glands, it is infrequent, as practically all leucorrhea results from inflammatory exudates. The normal moisture is composed of vaginal bacilli (very few other bacteria) and epithelial cells (very few pus cells), while the abnormal discharge will contain other bacteria and numerous leucocytes. The fluids present may be transudates, exudates, and/or increased glandular discharges.

The character of the discharge may vary from a thin watery to a thick purulent substance. In pregnancy the flora varies somewhat, especially due to the appearance of the large bacillary forms, but otherwise the degree of variation is not extreme. In this discussion the cervix is included among the lower genital organs because of its relationship to the various diseases which will be discussed.

GONORRHEA

In the mature female this disease is generally conveyed by sexual congress, while in the female infants and children epidemics by other contacts are likely. Discharge, soreness about the vulva, and burning and smarting on urination are the essential complaints for lower genital tract infections. It seems likely that many women have had gonorrhea without having symptoms severe enough to consult a physician. In the acute stage there is redness and inflammation of the vulva and vagina, usually with skenitis and an active endocervicitis. Quite often the Bartholin duct opening appears like a "flea bite." Generally, within a few days the acuteness subsides but the glands tend to remain

* From the Department of Obstetrics and Gynecology, The University of Chicago, and the Chicago Lying-in Hospital. Read before the Outagamie County Medical Society, March, 1933.

infected. Consequently, in smear culture examinations the material should not be taken from the vagina but from the urethral and cervical glands. Material from the urethral glands may be expressed by pressure in the vagina from above downward along the course of the urethra. Ample discharge will be found in the lumen of the cervix. If the Bartholin glands show evidence of infection, this secretion should be examined likewise.

Ordinarily, the use of one slide is preferred for all smears from a given patient, with each specimen diluted in an individual drop of physiological saline solution. The urethral smear is placed at the end farthest from the label, the Bartholin or vaginal smear next to it, if taken, and then the cervical smear next to the label. Gram's stain will reveal the gram negative bean-shaped intracellular diplococci, with their flat sides in juxtaposition; this is the only reliable diagnostic method, with the exception of cultures. Cultures may be helpful but they are not as simple or as practical. The smear should not be too thick and can be made best with a platinum loop, since cotton swabs and most other paraphernalia do not allow an even smooth distribution of the discharge free from foreign bodies.

As soon as a positive diagnosis is made the patient should be instructed to lead an inactive life, to have a well balanced diet, to force fluids, to have adequate bowel eliminations, to practice complete sexual abstinence, to keep the hands from the eyes, and to protect others—especially little girls, by proper disposition of clothing and personal effects. The patient must be quiet during the menstrual period because of the danger of higher genital tract infection. After the acuteness has subsided, local antiseptic applications to the urethra and cervical canal are prescribed twice weekly or oftener, along with daily hot douches. At the Chicago Lying-in Hospital the routine treatment is gentian violet 1 per cent and acriflavine ½ per cent in glycerin. Moreover, a douche of 3 per cent sodium chloride solution (2 quarts) is prescribed daily, at a temperature as warm as can be tolerated (104 to 110° F.). The douche should be taken in the reclining position, followed by one-half hour of rest. However, treament should be discontinued during menstruation.

Since the antiseptic does not reach the depth of the glands, the hydroscopic and hypertonic solutions may favor the glands emptying their contents. T. J. Williams has reported that diathermy did not shorten the course of treatment. If the urethral and cervical glands do not clear rapidly one may cauterize them with the nasal tip cautery, as recommended for the cervix by Dickinson, in 1921. The cautery tip may be placed as high as the internal os, with sufficient heat to coagulate and desiccate but not to cause bleeding. The streak is to extend down to the external os and out into any erosion present. This is repeated at two, three, or four positions on each lip, at one time, but not oftener than once every 10 to 14 days. Furthermore, the patient must be at least five to seven days from the menstrual period, not pregnant, and free from adnexal infection. The discharge will be made worse for a few days, but the healing process is quickened, especially if astringent douches are used (one teaspoonful of alum to each quart of warm water).

The urethral glands may be cauterized or excised only when local or other anesthesia is used. The former method is recommended if done properly. The glands may be exposed by using bent hairpins and passing a curved needle, eye-end first, through or into the gland. If a Bartholin's abscess is found, drainage is indicated, with the incision at the muco-cutaneous junction or well within the introitus.

Dr. Adair, Chairman of the Department of Obstetrics and Gynecology of the University of Chicago, requests that the following criteria be fulfilled before discharging such cases from the clinic:

1. All clinical evidence of gonorrhea must be absent.

2. At least three consecutive negative smears from the urethra and cervix at intervals of 48 hours or longer (preferably one smear immediately after a menstrual period) must be obtained.

3. Pregnant patients must have the above fulfilled after delivery.

In pregnant patients with gonorrhea actual cauterization of the cervix is omitted. Even though the smears become negative and remain so for weeks during pregnancy an acute exacerbation may occur after delivery.

TRICHOMONIASIS AND STREPTOCOCCIC INFECTION

The trichomonads found in the vagina are usually the tetratrichomonads, and are associated with an abnormal bacterial flora, which seems to be a prerequisite for their invasion. Their source is unsettled, and there is some question regarding their pathogenicity. Since the clinical entity is so well established they must be considered pathogenic until contradictory proof is available. Discharge is the most frequent complaint and is often associated with extreme tenderness about the genitalia. The whole vulva and vagina are inflamed, tender and granular. The discharge is usually foamy and yellowish, but may vary considerably.

The diagnosis is made by diluting a drop of vaginal discharge in a drop of isotonic saline solution, and examining it in the hanging-drop preparation. These bodies are a little larger than pus cells and have characteristic movements, produced by the flagella and the undulating membrane. Numerous therapeutic methods are in vogue, with each author recommending his procedure. Practically all methods are directed toward destruction or removal of the protozoa. The therapeutic preparations contain frequently one or more of the following: Iodine, mercury, arsenic, picric acid, hexylresorcinol, tap water, lactic acid, pyroligneous acid, salicylates, and many others.

Independently and unaware of the other's work, Hibbert and the writer have been treating these patients by directing the therapy toward the abnormal bacteria. In our series there have been infections of the urethral, Bartholin, or cervical glands, or of the vagina and vaginal sinuses. Among the bacteria are gram positive and gram negative cocci, which are not present normally in large numbers. Maryan has shown that a streptococcus similar to some of these is responsible for chronic cervicitis. A chronic endocervicitis may be overlooked, especially if the discharge is thin, clear and watery, much like nasal discharge in a non-suppurative rhinitis and sinusitis.

In our work it has been shown that vaginal trichomonads require bacteria for their growth, which was accomplished by separating these organisms. Moreover, three patients out of 22 volunteer subjects developed the clinical entity after inoculation with the associated bacteria. Consequently, certain bacteria are necessary for trichomonad growth, and these are abnormal and pathogenic. Possibly the protozoa are non-pathogenic.

Hibbert uses a streptococcic filtrate in his treatment. Our treatment is directed at focal infections, as outlined above for gonorrhea. If the cervicitis responds slowly, coagulation and desiccation are accomplished by the electric cautery. So far, our results encourage us to continue forgetting the trichomonads as such. Therefore, it appears that with an unfavorable environment (certain bacteria absent) trichomonads will disappear.

MYCOSES

Until recently, vulvovaginal mycoses were thought to be rare. Indeed, actinomycoses, blastomycoses, and aspergillus infection are rare, but certain other fungi are quite common. About one-third of the pregnant women harbor endomyces, monilia, or saccharomyces. Of these patients, a relatively small number have symptoms of pruritus and local heat sufficiently severe to seek relief. The disease is limited generally to the last half or two-thirds of the period of gestation. Of the non-pregnant women complaining of discharge, about 10 per cent have fungi present. In diabetes with pruritus, practically all patients have these organisms. Clinically, the vulva and vagina are reddened and frequently spotted with thrush patches or caseous material. The discharge may vary from a thin watery to a thick purulent character. Occasionally, petechial areas are seen and in the more severe type desquamation is noted where the patient has scratched. In the more extensive types sleep may be so seriously disturbed that sedatives are necessary. The longer the disease has existed the more

resistant it is to treatment. Moreover, Plass and his co-workers have indicated that babies born of such infected mothers may develop oral thrush by contamination, which is the best explanation for the sporadic outbreak in nurseries. Heretofore, the nurses have frequently received the blame, but rightly it should be charged against the doctor and the patient. Nevertheless, the nurses should be charged with responsibility for epidemics.

As these fungi can stand drying and rather wide ranges of temperatures, they may be disseminated by the hands, clothing, instruments, etc. An individual may carry the organism for months without symptoms, to begin having complaints for no obvious reason yet known. As infected individuals may spread the organism by coitus, husbands and wives may repeatedly reinfect each other. Some may suggest commercial yeast preparations as a source of such infection, but this is unlikely for those preparations containing pure uncontaminated cultures of saccharomyces cerivesiae, which strain is not pathogenic. The proof of this non-pathogenicity was established by many inoculations in volunteers without producing any symptoms or tissue changes. Of course, any perishable, fresh, or even canned foods may become contaminated if not handled properly by the producers, middlemen, or consumers. No doubt, most of us ingest pathogenic fungi but develop no disease because of our resistance. Furthermore, the incidence of the vaginal mycoses appears to be restricted to those with a relatively high glucose or carbohydrate concentration locally before symptoms are produced. According to experimental studies normal individuals carry pathogenic fungi for only a short time.

The diagnosis is made easily by smear study or culture on Sabouraud's medium. The typical yeast elements (conidia and mycelia) stain distinctly by Gram's method. The treatment consists of local applications of gentian violet and acriflavine, as mentioned above, but ½ per cent lysol douche daily is substituted for the salt solution. In the past, sodium bicarbonate douches were recommended, but these have been of little value. At the present time we are experimenting to find better fungicidal preparations and procedures.

LESS FREQUENT DISEASES

Tuberculosis of the lower genital tract is rare, unless associated with tuberculosis elsewhere in the pelvis. The tubercle bacilli may be carried on the hands or may be deposited by the male, should he have genital or urinary tuberculosis. The lesion is irregular, indurated, tender, destructive and continues to grow. The best treatment is by removal with cauterization or surgical excision. Tuberculosis elsewhere in the body should be treated. Regardless of the focus, dietary regulation, rest, etc., must be insisted upon.

Since syphilis is a subject of its own, only very brief comments are made here. It appears usually on the vulva and vagina in the primary or secondary stage. The cervix and urethra are uncommonly involved. The primary lesion is indurated but not particularly painful. The lesion is ulcerated and slightly reddened, but may be slightly necrotic. Its appearance occurs in a few to several days and disappears after a few days to a week or so. The secondary lesions are more reddened and moist, sometimes tender, especially if situated so that the urine passes over them. Dark field examination of the serous exudate of these sores reveals the Spirochaete pallida. Tertiary lesions of the lower genital tract are most rare. The diagnosis, after the late secondary stage, is made by the Wassermann and Kahn tests. The treatment consists of special arsenical, mercurial and bismuth compounds, which should be carried out over several months or longer.

Chancroid ulcer simulates primary syphilitic lesions but is softer. It appears as a local vulvo-perineal and vulvovaginal disease and as an adenitis in the groin. The base of the ulceration may be necrotic. Pain and tenderness may be distressing but not marked. The diagnosis is confirmed by finding the bacillus Ducrey in the smear or biopsy. The treatment of the vulval lesion is chemical cauterization, especially with phenol, while adenitis is treated with mercurial inunction and injection. If the node

breaks down, a draining sinus may persist for a long time. Occasionally this disease responds slowly to treatment, especially in debilitated individuals.

Granuloma inguinale is a disease quite rare in Wisconsin. It is probably caused by the B. Donovan. The lesion is limited to the vulva, perineum and groin, with the appearance of an overgrowth of granulation tissue. The disease responds to tartar emetic therapy.

Diphtheritic infections are extremely rare, but occur occasionally. The patient may be acutely ill; clinically, the vagina is covered with a membrane. However, the thrush patches in mycoses may simulate this very closely. The diagnosis is confirmed by cultural methods. Diphtheritic antitoxin is the treatment of choice.

Gas bacillus infection occurs infrequently. Falls and Lash have contributed to our knowledge of this subject. The odor may or may not be characteristic, although there is an abundance of gas formation in the genital tract. Cultures are necessary to diagnose it. Anti-gas bacillus toxin may be efficacious.

SUMMARY AND CONCLUSIONS

To shorten the smear studies, we take smears from the urethra, vagina, and cervix, as mentioned above, but examine the vaginal droplet under high-dry power for flagellates, without a coverslip. After the slide dries it is then stained for gonococci, fungi and other bacteria.

The characteristic appearance of lesions of syphilis, tuberculosis, granuloma inguinale, chancroid, etc., suggests usually what type of disease is encountered. One may be guided by the clinical impression until a positive diagnosis is made by the indicated tests. To avoid masking the diagnosis, to prescribe proper therapy, and to treat intelligently—institute no treatment until the diagnosis is established.

Recent findings in some of the lower genital tract infections and the trends of present investigations are reviewed. Until we know more about trichomonads little can be recommended, even though we believe that they are secondary in importance to other invaders. The best treatment for gonorrhea is yet to be found. Fungicidal therapy can be and is being improved. Mercurochrome—30 per cent, and mallophene—1 per cent, have little or no fungicidal value. The methods of treatment outlined above are valuable ones and will suffice until better procedures or specific preparations are discovered.

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PROPOSED AMENDMENT

The following proposed amendment to the Constitution of the State Medical Society of Wisconsin was offered by Delegate H. P. Bowen of Jefferson County at the 1933 meeting of the Society. The amendment will be before the House of Delegates for action at the September, 1934, meeting. The amendment follows:

> "The terms of Councilors shall be for three years and all officers shall serve until their successors are elected and installed. The terms shall expire in the following order: seventh, eighth, ninth, tenth and thirteenth in 1935; first, second, eleventh and twelfth districts in 1936, and third, fourth, fifth and sixth districts in 1937, and thereafter shall be elected in this order.
>
> "This amendment, offered in 1933, to be acted upon in 1934, shall upon adoption be effective on January 1, 1935."

Fibroma of Ovary

By VICTOR F. MARSHALL, M. D., and MILO E. SWANTON, M. D.
Appleton

IT IS seldom that the surgeon has the opportunity of removing a pure or unmixed fibroma of the ovary and more especially so when such tumor is of unusually large size. The following case is therefore worthy of report:

M. P., a white female, age twenty-nine, single, occupation housework, was referred by Doctor Ritchie March 27, 1933. Doctor Ritchie stated the patient presented herself for examination at his office in January, 1932, with the complaint of an enlargement of the abdomen, and anxiety about possible pregnancy. At this time an x-ray was taken of the abdomen which was negative concerning the presence of a foetus. An Aschheim–Zondek test was also taken which proved negative for pregnancy. Surgical interference was advised which was refused. The patient was not seen again until her present visit.

In addition to her anxiety as to whether she was pregnant and the primary complaint of an enlargement of the abdomen, she stated there was inability to breathe normally, and, owing to a feeling of fulness in her stomach, it was necessary to reduce materially the amount of food consumed at each meal. To overcome this feeling it was necessary to eat smaller amounts of food and to eat more frequently. Frequency of urination by day and night was now prevalent and which was becoming more frequent. A moderate degree of pain in her lower obdomen previously present was now becoming progressively worse. There had been a loss of eight pounds in weight during the past year. The appetite was good and the bowels regular. To summarize, the chief complaints as given by the patient were: enlarged abdomen with inability to wear her usual clothing; difficult breathing; pain in lower abdomen during menses; frequent urination day and night; and inability to eat a full meal.

The family history revealed that her father died at the age of 64 years from a tumor of the stomach from which he had been ailing three years. He had none other than medical care during this illness. The mother is living and well, age 62 years. Two brothers are living and well, ages 35 and 38 years, respectively. Two brothers died in early infancy, cause unknown. There are three sisters, living and well, age 42 years, and twins age 26 years. There are no sisters dead.

The patient stated she had parotitis and smallpox as an infant. She had an attack of "inflammatory rheumatism" at the age of 8 years, but does not recall the length of this illness. Three years ago she had a second attack of multiple arthritis at which time she was confined in bed one month. Recovery from this attack was uneventful.

Her menses began at the age of 11 years, regular, of the 28 day type and of moderate amount. Dysmenorrhoea has not been present since the advent of this function. For the past three months the menses have been regular but somewhat scant in amount. The pain in the lower abdomen has become progressively worse. The last menstrual period occurred March 20, 1933.

The patient stated she had no operations and she gave no history of having suffered an accident.

General physical examination revealed a female height 5 feet and 10 inches, weight 125 pounds. The pulse was 78, regular and compressible. The temperature was 98.6 degrees Fahrenheit. Respirations 26, shallow breathing. The blood pressure was systolic 120, diastolic 80, pulse pressure 40.

The skin was dry and some evidence of loss of weight was present. The head was symmetrical and the scalp was clean. The face revealed no asymmetry. The pupils were equal and active and reacted to light and accommodation. The hearing was normal and there was no discharge from the ear canals. The nares were patent with no nasal discharge. The teeth were good. The pharynx was injected and the tonsils appeared normal. The contour of the neck was normal with no evidence of cervical lymph adenopathy. There was no enlargement of the thyroid gland. Motion of the neck was normal.

The upper extremities revealed no abnormality. The chest was well formed and symmetrical. Expansion of the chest upon deep breathing was limited. Percussion of the chest upon deep inspiration revealed posterior expansion to the 6th rib interspace on the right and to the 7th interspace on the left. Neither rales, friction rubs nor abnormal breath sounds were detected. The heart upon percussion was found somewhat enlarged to the left. There was present a marked systolic murmur over the mitral valve area which was transmitted to the axilla. Accentuation of the second aortic sound was present.

The abdomen was protuberant and simulated a full term pregnancy. It was impossible to palpate any of the abdominal organs due to the large tumor mass which extended from beneath the symphysis pubes to and beneath the xyphoid process of the sternum. The tumor mass extended laterally and the edges could not be palpated due to the tension of the abdominal wall.

A combined vaginal abdominal examination revealed a conical cervix, uterus of moderate size outlined to the left and movable. The tumor was ovoid in shape, irregular surface, firm consistency and only slightly movable extending from beneath sym-

physis pubes to encroachment upon the xyphoid process. There was no vaginal discharge.

The lower extremities were negative.

A cursory neurological examination revealed active reflexes of the various muscle groups of the forearm and abdominal muscles. Patellar reflexes were equal and active. No ankle clonus and good coordination. The Romberg test was negative.

A voided specimen of urine was examined. The appearance was clear straw. The specific gravity was 1.007. Neither albumin nor sugar was found upon chemical examination. Microscopically leucocytes were 1 plus, epithelioid cells 1 plus and bacteria 1 plus. The blood revealed a hemoglobin of 80%, color index 9 plus, 4,160,000 red cells, 8,500 white cells, differential white count revealed 60% polymorphonuclears, 34% small lymphocytes and 6% large lymphocytes. The blood Wassermann was negative.

The patient was operated upon the morning of March 28, 1933. Anaesthetic, spinal novocain 120 mg. Inasmuch as the incision extended higher than anticipated the dosage of novocain was found inadequate and was supplemented with ether inhalation.

Incision was midline which extended downward to symphysis pubes and upward to the xyphoid process. The tumor was large and was delivered with difficulty. The tumor occupied the entire abdomen. The intestines, small and large, were collapsed and lay posteriorly. The origin of the tumor involved the right ovary and had attachments to the fundus of the uterus and to the omentum. The vessels (veins) of the attached omentum were enlarged to the size of one centimeter in diameter and were multiple in number. Several small cysts containing a light amber colored fluid were present in the remaining omentum.

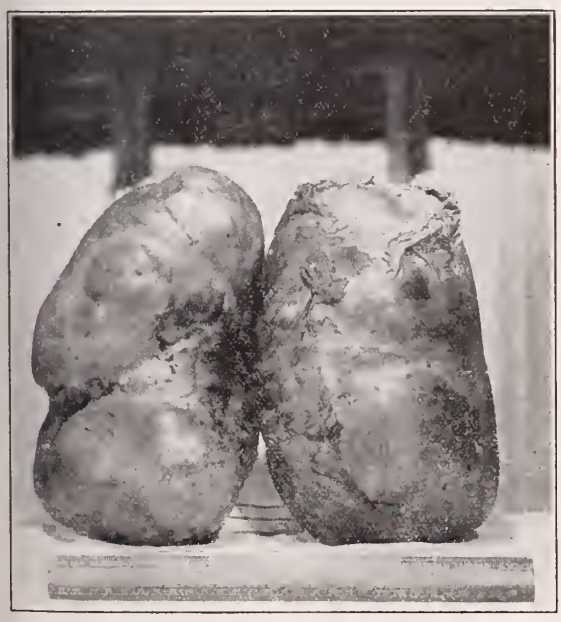
A preoperative diagnosis of an abdominal tumor, variety unknown, was made. The postoperative diagnosis was fibroma of the ovary.

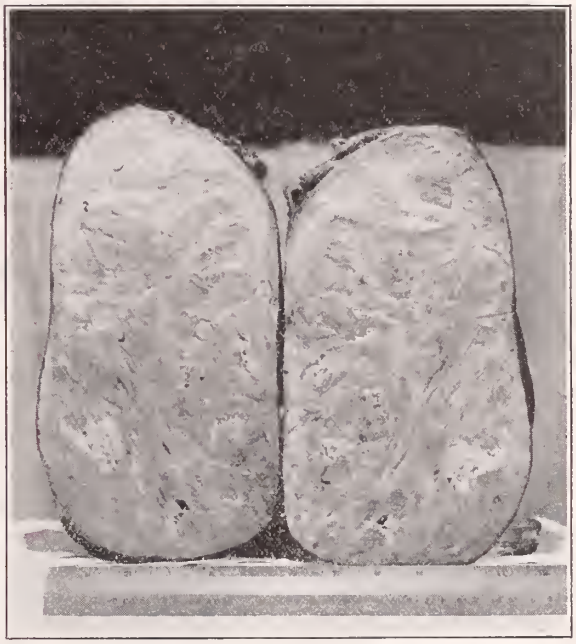
Pathologic report by Doctor Lorin E. Dickelmann, pathologist of St. Elizabeth Hospital, is as follows:

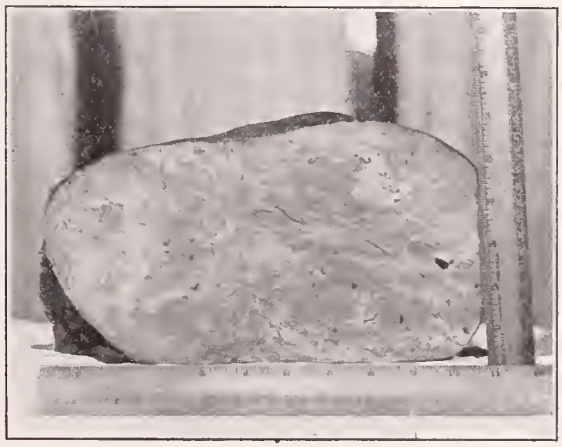
Gross Findings: Ovary measuring 27½x23x14 cm. The surface is smooth and it is well encapsulated. At one end is a dense plexus of veins some of them reaching the size of a lead pencil. The veins are separated by fibrous tissue. The cut surface shows interlacing bands of yellowish white tissue with areas of necrosis. One area is 4 cm. in length and 5 cm. in width. The tissue here is of a lighter color and soft. There are blood vessels extending through the tissue and several cystic areas. The weight of the tumor is 7936 gm.

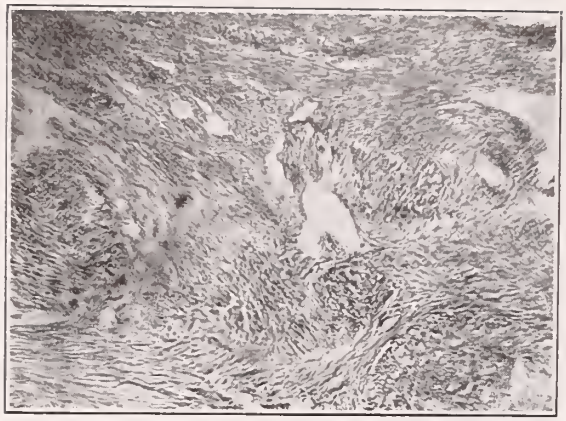
Microscopical Findings: The section shows interlacing fibers of spindle cells which are separated into bundles. It shows a slight vascularity but no evidence of malignant changes.

Pathological Diagnosis: Fibroma of the ovary.









Microscopic Section—Low Power.

The patient's hospitalization was brief. She entered St. Elizabeth Hospital, Appleton, on March 27, 1933, the operation occurred on the following day. She was discharged (walked out) on April 7, 1933, a period of but eleven days. The patient experienced an unusually small degree of shock following the operation and her convalescence was uneventful.

CLASSIFICATION

According to J. Infantozzi, the solid tumors of the ovary may be classified under three divisions as follows:

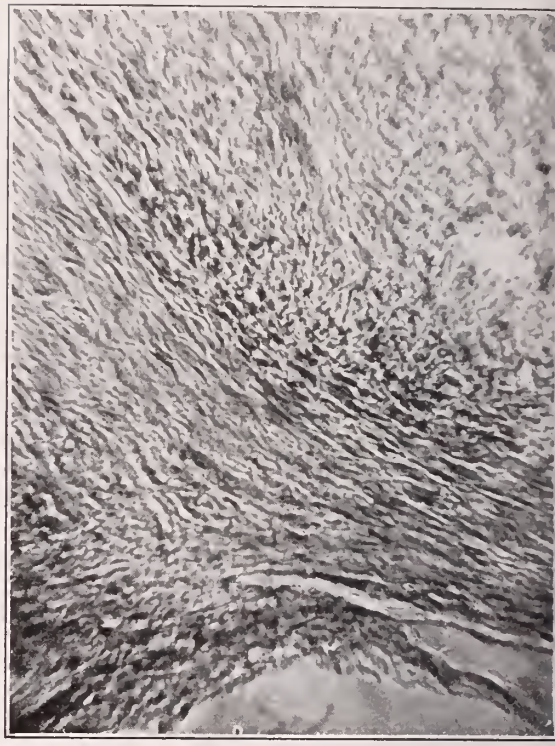
A. Connective tissue: fibroma, sarcoma and endothelioma.

B. Epithelia: epithelioma.

C. Heterotopic: embryoma, teratoma and hypernephroma.

The pure ovarian fibroma will only concern us in this presentation.

Research reveals that all of these solid tumors of the ovary are rare with the exception of fibroma which occurs more frequently than any of the others. According to some authors fibroma of the ovary may be found in 2 to 3 per cent of ovarian tumors. Hoon, Fellow in Surgery of The Mayo Foundation reported 55 cases of pure fibroma of ovary from a total of 4,175 tumors of the ovary removed surgically in the Mayo Clinic during the period January 1, 1910, to August 1, 1921. The origin of these tumors has not been definitely determined. It is stated that they may originate from the stroma of the ovary, the corpus luteum, the corpus fibrosis, organized blood clots, the capsule of this organ, and even from the walls of the blood vessels. Some other vague causes have been assigned to their origin such as hemorrhage



Microscopic Section—High Power.

and hyperaemia from mechanical causes, in fection, scirrhotic and retrogressive change in the ovary as the patient approaches th climacteric period.

Fibroma of the ovary may occur at an age after puberty but more develop imme diately preceding or following the menc pause. They occur in both married and un married individuals in about equal propo tion.

The size of these tumors vary from thos 0.5 centimeter to those more than 30 centi meters in diameter. The shape of the tumo corresponds for the most part to the shape o the normal organ. The surface is usuall irregular and often nodular. The consis tency as regards firmness is dependent upo the amount of fibrous composition or calcare ous degeneration. Malignant or cystic de generative changes occur frequently in thes ovarian tumors, whenever these changes ar present the consistency is softer. The colo is given as being usually gray or grayis white. In our case the color was quite re which was due to the profuse blood suppl of the tumor.

The cut surface is usually glistening whit

or yellowish-white owing to hyaline and necrotic degenerative changes present. The symptomatology of these cases is especially interesting. It may vary from the occurrence of none whatsoever to those of the most extreme discomforts and pain. Undoubtedly many women go through life harboring these tumors unaware of their presence with no symptoms, however slight, ensuing. As the tumor grows to the degree where the patient becomes conscious of its presence the symptoms are no doubt intensified. Our patient presented all the symptoms arising from increased abdominal pressure arising from foreign growth as evidenced by her anxiety as to whether she was pregnant due to abdominal enlargement, difficult breathing, inability to eat a full meal, frequency of urination, pain in the lower abdomen and moderate loss in weight. Other symptoms which may be present are sudden acute abdominal pain with collapse due to the presence of a tumor with a twisted pedicle. Constipation or pain upon defecation may also be present.

Ovarian fibromata are usually movable. The uterus may move separately from the tumor mass or be adherent due to intra-abdominal adhesions when it would be difficult to outline the same. Ascites is stated to be present in about 4 to 5 per cent of the cases. Ascites may occur as a result of peritoneal irritation or to the presence of an increased intra-abdominal pressure arising from the size of the tumor and consequent interference with normal blood supply to the abdominal organs. There was no evidence of the presence of ascites in our case.

There is but one treatment and that is surgical for the relief of ovarian fibromas. Medical treatment is without avail. One is not justified in temporizing with either radium or roentgen ray. There are indeed but very few cases arising in which surgery could not be employed for their removal.

There is very small probability of the recurrence of the tumor where complete removal has been performed.

Treatment of Tuberculosis in General Practice V

By ANDREW L. BANYAI
Clinical Director, Muridale Sanatorium, Wauwatosa

THE technic of artificial pneumothorax should be mastered by every general practitioner, 1. Because it is indispensable in the treatment of pulmonary tuberculosis, 2. Because it may be a necessary emergency measure, as in the case of severe hemorrhage, or when replacing aspirated fluid by air in large pleural effusions. By introducing measured amounts of air into the pleural space with a pneumothorax apparatus one is able to establish any desired degree of collapse or relaxation of the lung, provided that there are no adhesions between the visceral and parietal pleura that would prevent the recession of the lung from the chest wall, and provided that the degree of consolidation is not so marked that collapse is impossible. Indications for unilateral treatment are: 1. Severe hemorrhage that can not be controlled by any other means. 2. When cavity is present, the diameter of which is one inch or more. 3. Every case of acute pneumonic infiltration. 4. Progressive tuberculosis which does not show satisfactory response to general measures.

The sooner after the onset of the disease pneumothorax is started, the better are the chances for a useful pneumothorax. Tuberculous laryngitis or enteritis are not only no contraindications against this treatment, but, on the contrary, favorable changes are often seen, when it is used in such cases. Pregnancy or well compensated heart disease do not contraindicate it. 5. When there is improvement on general treatment but the sputum is persistently positive for tubercle bacilli. 6. The presence of bronchiectasis with persistent cough and expectoration caused by fibrosis produced by the healing process. 7. Acute, plastic pleurisy associated with excruciating pain. 8. Simple exudative pleurisy which can not be successfully treated by other methods. 9. Long standing tuberculous empyemata. 10. Mas-

sive atelectasis occurring during the course of tuberculosis. 11. When the results attained by general treatment are favorable but the patient is forced to undertake some gainful occupation, and therefore, it is necessary to hasten recovery by artificial pneumothorax.

The Floyd–Robinson apparatus is simple and easy to handle. It consists of two large, graduated bottles (2000 cc.) and of a water manometer. Bottle No. 1, the bottle next to the manometer, is filled with mercurochrome solution; then air is pumped into bottle No. 1 by means of a rubber bulb, thus forcing the water from the first into the second bottle. The air available in the first bottle can be injected into the pleural cavity by opening the cock leading to a long rubber tubing which connects with the pneumothorax needle. We use a common, long (2½") needle (Gauge 19). The patient is lying on the healthy side on a hard pillow or sand bag placed under the chest to cause a widening of the interspaces on the uppermost side. The patient is instructed not to cough while the needle is in the chest. The selected site of injection must be swabbed with tincture of iodine and alcohol. No local anesthesia is necessary. Strict asepsis must be carefully observed. The skin is elevated between the thumb and index finger over the site of the planned injection and nicked by a sharp small scalpel, then the needle connected with the manometer is introduced between two ribs. The first inflation should be attempted in the 6th or 7th interspace between the axillary lines. As the needle is sliding through the chest wall, the operator watches the manometer (containing water, stained by a few drops of methylene blue thus rendering the reading more easily visible). When the water in the manometer starts to run toward the patient, it is an indication that the needle arrived at the pleural cavity. Then the inflation may be slowly started after the manometer has been shut off and the cock connecting with the first bottle opened. Air should never be injected if the manometer does not show oscillations corresponding to respirations, or when the manometer shows positive pressure, that is, when the water rises in the limb of the manometer which is not connected with the needle. In other words, when the water in the manometer "runs toward the patient" one is safe to start inflation, but when the water "runs away from the patient" air should not be injected but the needle withdrawn. The needle may be occluded occasionally by a blood clot or by a small particle of tissue from the chest wall. In such a case the manometric oscillations will be absent in spite of the fact that the point of the needle reached the pleural cavity. The needle must be withdrawn and be cleaned with its sterilized wire and reinserted. On the completion of inflation the site of injection is covered by gauze and adhesive. The amount of air injected at the first inflation is 3–400 cc. It is increased at subsequent inflations up to from 500 to 700 cc., according to the intrapleural pressure and the required degree of collapse. The manometer should be connected with the pleural cavity and read after each 100 cc. at the first treatment and after each 200 cc. at subsequent inflations. The amount of air must be small enough to preserve a part of the negative pressure, except in hemorrhage cases, when a compression of the lung by positive pressure may be necessary to check the bleeding, and in cases of thick walled cavities which cannot be obliterated by other means, or in instances in which injections of moderate amounts of air continued for a reasonable length of time have not induced improvement. For such purposes 800–1000 cc. of air or more are necessary. Patients taking artificial pneumothorax treatment are able, as a rule, to return to their homes after a brief (15 minutes) rest, unless for some other reason they are so debilitated that ambulatory treatment is inadvisable. In such cases treatment can be safely carried out in the patient's home or in a hospital. During the first two weeks of pneumothorax, inflations are given twice a week, three days apart. One inflation is given every week from this time on during the first six months, followed by a period of treatments every two weeks. The interval between treatments is extended to every three weeks after one year of treatment.

Bilateral pneumothorax can be applied only when using small or moderate amounts

(300–500 cc.) of air and establishing low tension or selective pneumothorax. Bilateral pneumothorax is indicated in all bilaterally active cases in which there is a homogeneous healthy area in both lungs representing at least one-third of the normal vital capacity.

The duration of the treatment depends upon the time necessary for complete healing. It seems advisable, in general, to continue the treatment for from 1½ to 2 years or even longer.

Complications. Air embolism, in connection with the injection of air, is extremely rare when due precautions are observed, namely, avoidance of sites with heavy pleural adhesions and abstaining from injecting air in the absence of oscillating negative pressure. Subcutaneous, subpleural or deep interstitial emphysema follows sometimes inflation and is caused by the escape of a part of the injected air, or air from the alveoli, if the visceral pleura was injured, into the soft tissues. This condition, usually, heals without special treatment. Injury to the visceral pleura may lead, immediately or following the treatment, to the sudden development of a so-called spontaneous pneumothorax which is characterized by sharp thoracic pain, marked dyspnea and cyanosis. The air should be immediately withdrawn in a quantity which is sufficient to restore the patient's comfort and to establish a slight negative, or approximately neutral pressure, which will hasten the healing of the tear. The complication most often seen is pleural effusion. Small clear effusions are usually absorbed, and do not necessitate treatment. Large effusions must be aspirated in every instance and simultaneously replaced by air. The occurrence of empyema, following artificial pneumothorax, is exceedingly rare. (See treatment in chapter on Pleurisy.)

The containdications of artificial pneumothorax are few: generalized involvement of both lungs, extremely debilitated condition of the patient, the presence of some severe non-tuberculous complication, such as marked arteriosclerosis, nephritis, or cardiac decompensation, advanced emphysema or allergic asthma.

PHRENIC NERVE BLOCK

Induced paralysis of the phrenic nerve is conducive to a rise and abolition of the normal respiratory function of the diaphragm. This is followed by a marked decrease in the excursions of the lung on the operated side. Paralysis of the phrenic nerve can be established in a temporary or permanent form. The temporary block induced by crushing (Yates' operation) will cause a rise and abolition of the active motion of the diaphragm which will last from 3 to 6 months. Lesions of moderate extent, without cavities or cavities less than an inch in diameter, and acute plastic pleurisy are suitable for this operation. It is also indicated for the treatment of pulmonary hemorrhage, if its source is not in the bronchial arteries (the patient is not expectorating bright red blood); furthermore, as a combination treatment in connection with artificial pneumothorax. It is good practice to perform the nerve block before the artificial pneumothorax in such cases. Permanent paralysis of the diaphragm is induced by resection of a portion of the phrenic nerve (phrenicectomy) or by extracting as much of the distal portion as possible (phrenico-exeresis). Extensive unilateral lesions derive gratifying results from it. As a preliminary operation it is often used before thoracoplasty. Operation on the phrenic nerve requires a well trained surgeon with experience in this particular field.

THORACOPLASTY

All practitioners treating pulmonary tuberculosis must be thoroughly familiar with the indications for thoracoplasty, and should not fail to suggest it to the patient and call in an experienced surgeon when such occasion arises. Indications for thoracoplasty in tuberculosis are: 1. Unilateral fibrosing lesion with tendency to contraction, a) when pneumothorax or phrenic nerve block were not sufficient, b) when pneumothorax cannot be performed, c) when a successfully induced pneumothorax cannot be maintained because of adhesions and obliteration of the pleural cavity, d) when after re-expansion at the end of pneumothorax treatment the process becomes reactivated and pneumothorax cannot be induced, e) in case of large

rigid walled cavities which cannot be obliterated by other means. 2. Empyema which cannot be controlled by conservative measures. 3. Cardiac embarrassment originating from displacement of the heart by extensive fibrosis which cannot be corrected by phrenic nerve block. 4. Massive or repeated pulmonary hemorrhages uncontrollable by other means.

Contraindications: 1. Febrile, caseous disease. 2. Generalized tuberculosis or serious tuberculous complication, such as intestinal or renal lesion. 3. Non-tuberculous complications (cardiac, renal, etc.), the debilitating effect of which may jeopardize the patient's life. 4. If the vital capacity is less than one-third of normal. 5. If there is active disease in the "good" lung.

(This is the fifth of a series of short discussions on the practical treatment of pulmonary tuberculosis)

Tuberculosis of the Knee Joint; Demonstration of Tubercle Bacilli by Direct Smear at Operation

By J. R. REGAN, M. D., and J. O. DIETERLE, M. D.
Milwaukee

THIS, in the form of a case report, seems to the authors to be of sufficient importance from the standpoint of diagnosis to add another case to those in which a pure smear of tubercle bacilli was obtained in a knee joint, to merit publication.

No attempt was made at operation to obtain a portion of, or scrape the synovial membrane. The joint, when opened, was found to contain a great amount of caseous, purulent material, and a small amount of this was scooped out and a smear made of the material.

CASE REPORT

G. W., a white male, aged 45 years, entered the Veteran's Administration Hospital, Milwaukee, Feb. 15, 1933. At the time of entrance he complained of pain, swelling and limited motion in the right knee for the past eight years. He stated that the knee underwent periods when the swelling became more intense and the pain more extreme. The attacks began with sharp lancinating pains in the knee and extended to involve the muscles on the back of the leg (spasms). He stated that for the past three years the position of relief has been a bent position of the knee. At entrance, he was unable to straighten the knee.

The patient stated at entrance that he had been treated at a number of clinics and hospitals for the past eight years without relief. At no time was he able to return to his occupation as a chemist. He stated that he had received a number of courses of vaccine therapy; on all occasions he had been told that he was suffering with chronic arthritis. One year before entrance the entire right leg had been immobilized in a cast for eight weeks without result.

The past history was negative except for an attack of gonorrhea some twelve years before admission. The family history was irrelevant.

The patient was an adult male, white, weight 145 pounds, height 63½ inches. He entered the examining room with the aid of crutches and with the right knee flexed, not bearing weight on this member. At entrance the patient was not acutely ill nor in great pain. The head, neck, and special senses were negative for any abnormal findings. The cardiovascular and respiratory systems were normal. Blood pressure 118 mms. of mercury systolic and 80 mms. of mercury diastolic. The abdomen was normal. Muscles, tendons, and joints, excepting the right knee, exhibited no abnormal findings. The right knee was tremendously enlarged. The enlargement was para-articular as well as osseous. There was extreme pain on motion of the knee. Severe muscle spasm accompanied any motion at the knee. The knee was in a flexion deformity of thirty degrees. Any attempt at extension of the knee was accompanied by extreme muscle spasm and pain.

Temperature on admission was 98.6 degrees Fahrenheit.

Urinalysis—essentially negative.

Blood analysis:

Red corpuscle count	4,450,000
White cell count	9,400
Differential blood count—P. M. N.'s	75%
Small lymphocytes	15%
Large lymphocytes	5%
Endothelial leucocytes	4%
Eosinophiles	1%

The Wassermann test on Feb. 16, 1933, was negative.

On Feb. 20, 1933, the patient was seen in consultation by the orthopedic department for the first time. There had been no change in the patient's

condition since admission on Feb. 15, 1933. The case was referred as one of hypertrophic arthritis.

The patient stated that the knee was painful only on weight bearing and on motion. The time of day had little effect on the degree of pain in the joint. At the onset some eight years before the pain was more intense at night than during the day. He stated that when he endeavored to relax, uncontrollable spasms occurred. Close questioning did not reveal the presence of pain in other joints nor did it elicit the history of any luetic infection.

The right knee was enormously enlarged. The knee measured 11 inches (24.2 cms.) in circumference. The enlargement extended upwards to involve about four inches of the supra-patellar area. The enlargement also involved the dorsum of the knee as greatly as the anterior portion and, for the most part, was confined to the soft parts. There was a flexion deformity of thirty degrees at the knee. Flexion was possible to about forty-five degrees. Further motion in a flexed attitude caused extreme muscle spasm and pain. Extension was not possible beyond ten degrees from the thirty degree angle of deformity. Atrophy of the muscles of the thigh and calf was extreme. There was no tenderness about the knee when the knee was in a thirty degree flexion attitude.

Roentgenograms taken on Feb. 20, 1933, showed a severe destruction of the joint surfaces with a lessened degree of joint space. The articular surface of the patella was involved in the destructive process. A severe osseous atrophy was present.

At this time the possibility of a specific infection was advanced and to lessen any existing doubt, a genito-urinary survey was advised as well as a provocative Wassermann. This survey as well as the serum analysis was negative.

The patient was transferred to the orthopedic service on Feb. 23, 1933, and a diagnosis of tuberculous involvement of the right knee advanced. Operation was advised. The patient, however, wished to defer the operation and it was not until March 10th that the patient consented to an operation.

Under subarachnoid anaesthesia the right knee was operated upon by Dr. J. O. Dieterle, a curved infra-patellar incision being used. The para-articular tissues were extremely thickened. The synovia was studded with tubercles. The entire joint was filled with a cheesy, purulent exudate. The posterior compartment of the joint as well as the various ramifications and connections of the bursae and synovia were filled with this material. Some of the material was taken from the inter-articular space and sent to the laboratory for microscopic study and guinea pig inoculation. An arthrodesis was performed by resecting the joint surfaces and placing two small pins upwards through the tibial crests into the lower part of the femur and a cast applied.

The postoperative course was without incident.

On May 10, 1933, a walking metal stirrup was incorporated in the cast and the patient encouraged to bear weight.

The cast was removed on June 1, 1933, and a solid union at the operative area was present on clinical and roentgenographic examination.

The smear from the knee joint was examined microscopically by Dr. J. Grill of the Department of Pathology, Marquette University School of Medicine, who reported the presence of tubercle bacilli.

On April 22, 1933, an autopsy performed on the guinea pig which was subjected to inoculation and the report as submitted by Dr. E. Miloslavich stated the presence of tuberculosis.

The patient left the hospital on June 15, 1933, bearing weight without the use of any artificial support. The latest report from the patient brings the information that he is again employed as a chemist for an iron ore corporation and is without pain.

DISCUSSION

The case as presented opens the door to several questions which are pertinent in cases such as these are. We are all aware of the difficulty of demonstrating tubercle bacilli in the exudate in cases of joint tuberculosis. We probably are open to criticism in neglecting to puncture the joint prior to operation. Had we done so, we are of the opinion that a positive microscopic picture would have been obtained. However, the length of time of disability, the mono-articular involvement, the roentgenographic study and the depressed state of the patient following a long period of disability treated by various and diverse measures without relief justified arthrotomy. Puncture of every doubtful joint should be performed. There is no doubt but that many cases can be correctly and quickly diagnosed by mere puncture of the involved joint. The finding of a purulent exudate by puncture with a sterile picture is always strongly in favor of tuberculous involvement.

It is a common observation that the demonstration of tubercle bacilli in aspirated material from a joint is extremely unusual. Were it possible to so easily diagnose joint disease the surgeon would be spared considerable perplexity in the management of these cases. The late Russell Hibbs of New York was a strong advocate of arthrotomy with removal of tissue for diagnosis in any doubtful case. There can be little question that his dictum is quite the logical one to follow in questionable cases. Had this been

done in the case mentioned above some years before, the diagnostic problem would not have been so formidable and the patient would have been spared the pain and disability which he suffered for eight years.

It seems important, therefore, to follow certain definite procedures when confronted with a joint involvement where the diagnosis is not clear cut and is rather difficult to arrive at with the ordinary methods at hand. When the causative factor of a destructive lesion is doubtful, one must always consider the possibility of tuberculous involvement. We, therefore, believe that aspiration should be attempted first with microscopic study and biologic (guinea pig inoculation) test. If the smear is negative, arthrotomy should be performed with microscopic study of the specimen and biologic test.

Syphilis of the Infant and Child

By F. J. BROGHAMMER, M. D.*
Superior

WE ALL know syphilis is caused by the Spirochaeta pallida, so I shall not discuss the how, or when, or by whom this fact was established. The origin of the germ is uncertain. Some hold that it first came from the New World, others say that the antiquity of syphilis dates back to 1,000 B. C. Dr. Cheney found references to syphilis in the ancient Hindu Scriptures. Bone deformities undoubtedly caused by a syphilis have been dug up in the ancient cities of the Orient.

Excepting the Japanese, who are probably carriers, syphilis has no respect for race, age, social position, and I might add creed. It attacks any and all structures of the human body and often runs a course which masks or simulates the symptoms of other diseases.

It is not right or just that these poor unfortunates should be ostracized by our society on account of being afflicted by this disease, lues to me, is no different than any other disease that might befall a human being. Some authorities say that 10%, yes, even 20% of the human race are afflicted with this scourge. It is rather fortunate that the life of this organism is not of long duration outside the body and that common soap has a detrimental effect on its vitality.

A child born of syphilitic parents has a very great handicap in life when he comes in competition, on his own resources, with the world at large because of inferior physical and mental health. He is handicapped all through life in earning a livelihood.

I am dwelling more on the congenital or inherited type of syphilis than on the acquired, although cases of acquired syphilis in the very young child have come under my personal observation. A mother who has syphilitic changes in the cerebro-spinal fluid almost always gives birth to a syphilitic child, according to Dr. Sandas, writing in the "Lancet", London. Some authorities make a distinction between heredosyphilis and congenital syphilis. It will not be essential to our purpose to discuss that point in this paper.

I do not sanction an abortion of a syphilitic woman. In the first place pregnancy is treatment for syphilis in the woman and adequate treatment of the mother during pregnancy protects the child in a great many instances. The cure of syphilis is never a very rapid process. The German School, I think, affirms that syphilis never dies, but sleeps only, or in other words is arrested. I wonder how accurate this statement really is? Some call congenital, and a portion of acquired cases, syphilis of the innocent.

If one does not hold to the view that all offspring of syphilitic parents, or particularly of syphilitic mothers, should be treated, then the basis for treatment must be stigmata or symptoms of the disease. It is obvious that a syphilitic infant should receive treatment from the earliest possible moment. This should always be made before the appearance of symptoms such as inter-

* Deceased May 26, 1934.

stitial keratitis, deafness, or other manifestations. This is quite possible in those cases in which symptoms appear late. Whenever symptoms appear in the first week or weeks of life all attention must be directed toward treating the symptoms. Where treatment is instituted early some very successful results may be obtained. The children who have severe early symptoms such as pemphigus, marasmus, etc., often improve very rapidly under anti-syphilitic treatment. I will give one case as an illustration. Mr. H. was treated vigorously by a competent man for neurosyphilis, tabes. He then married and the first offspring had pemphigus about three days after birth which cleared up with anti-syphilitic treatment. I know that the mother and children by a former marriage were free from syphilis. A pregnant woman should be treated, up to tolerance, for the protection of the offspring.

The incidence of the Wassermann reaction is about 20% in mate and children of known syphilitic mothers. This is one reason for treating the offspring even though there be a negative Wassermann. An early diagnosis of syphilis in these children is, therefore, of very great importance. As mentioned previously, the diagnosis of congenital syphilis is based chiefly upon stigmata, symptoms, and history of the child, supplemented by family history. The examination should be very thorough. The conclusion is inevitable that every child who shows either definite stigmata of congenital syphilis or symptoms of the disease or a combination of both should have treatment. I would hold that every child with definite stigmata which make a diagnosis of congenital syphilis certain should have treatment whether or not symptoms are present.

NECESSITY FOR TREATMENT

Thus, Hutchinson's teeth in a child of syphilitic parentage is rather definite evidence that syphilis has caused some change in the organism and indicates that the child should receive treatment, though he has shown no other signs of the disease. The Wassermann is one of the most important signs of congenital syphilis, yet a negative Wassermann is of no more significance than the absence of the signs or symptoms of syphilis. Where there is evidence that congenital syphilis is present a negative Wassermann has no real bearing on the question of treatment. It must be thoroughly recognized that in congenital syphilis, as in the acquired form, there may be long periods of apparent latency in which no symptoms with the possible exception of the Wassermann appear. When the Wassermann is consistently positive, the evidence that syphilis is present in an active form is weighty enough to demand radical treatment. Both logic and experience seem to show that later manifestations may be prevented by the treatment of children who have a positive Wassermann but no other symptoms of the disease. It is, of course, difficult to say this with great definiteness. If no symptoms develop, one is never able to say that they would have developed if treatment had not been given.

Preventive therapy is never startling, as it offers no brilliant picture. A vast amount of experience will be necessary to show just how much can be accomplished. The experience at hand, however, seems to justify the value of thorough treatment.

Often when congenital syphilitics are treated and relieved of present symptoms one cannot give an entirely accurate prognosis or the assurance that no later symptoms will develop. Cases of interstitial keratitis or other late manifestations may appear in children who have been well treated. In other words, we have no definite cure for all cases of congenital syphilis. Without much question the number of symptoms may be very markedly decreased by treatment. The great difficulty in the amassing of facts concerning the value of treatment in congenital syphilis is due to the difficulty in following cases over a long period of years. The value of a well run follow-up service is nowhere greater than in this field. All the evidence we have at the present time goes to show the great good than can be accomplished by the treatment of congenital syphilis. This is certainly obvious in the results that are obtained in the treatment of the earlier manifestations. As one can remove symptoms it

is most probable that one can be successful in preventing them. The most satisfactory effect of treatment of a congenital syphilitic is seen in the general constitutional improvement of the patient.

Children who are feeble, weak, and poorly developed, will often begin to show immediate improvement upon the administration of adequate early treatment. After many years have elapsed and the organism has secured a definite footing in the deeper structures of the body and has succeeded in thriving despite the resistance of the patient, results are often much more difficult to obtain and are discouraging to the patient, his people, and the Doctor. Thus, in interstitial keratitis, a condition in which relatively non-vascular regions of the eye are involved, the effects of treatment are not so brilliant. Certainly one does not obtain the magical results that are shown in the treatment of many other types of lesions.

There are some oculists who are not very enthusiastic about the systemic treatment and its results in eye conditions. Such treatment even in interstitial keratitis seems gradually to be winning more esteem. Thus, Pusey says that the outcome of a case of interstitial keratitis in which the individual is given thorough anti-syphilitic treatment should be better than in those which are not thus treated. Scarring, which interferes with vision, apparently is considerably reduced when treatment is thorough and adequate, and the tendency to recurrence of the difficulty is greatly reduced. In certain of the severe late nervous system manifestations, such as juvenile paresis and nerve deafness, the results are not good. In these conditions, however, we are dealing with a situation which is identical with that found in acquired syphilis, and treatment should not be considered any more discouraging than that of cases of acquired syphilis in adult life where treatment has been too long delayed. The type of treatment that a congenital syphilitic should receive is something that cannot be laid down in dogmatic fashion. This is also true in regard to treatment of syphilis in general.

TYPES OF TREATMENT

Individual conditions make different methods of treatment advisable and necessary. The ideas of different syphilologists demand variations in the regimen of treatment. In days before arsphenamine, fairly good results were obtained by the use of mercury over a period of a great many years. Mercury by mouth has produced many excellent results clinically in congenital syphilis. However, I prefer the inunction of mercury ointments, although other forms of medication may be used or added as, for instance, iodides or the arsenicals. Arsphenamine produces some excellent results and may be used from the very early days of life.

Clinical experience seems to indicate that lives of seriously ill syphilitic infants may be saved by the early administration of arsphenamine. Some say the treatment of the nursing mother may also have some valuable therapeutic effects upon the child. Personally I doubt this. I may add that a negative Wassermann obtained during treatment is not proof that the child is cured of syphilis. Treatment over a long period of years is necessary to obtain a cure or to effect a cure.

Hospitalization of these cases would lighten the burden of their parents and also the physician treating them for the disease, hence, one could feel reasonably sure that the treatment would be carried out intelligently and faithfully as directed. In some European countries they have established hospital schools for these patients and this method of handling them has proven successful.

It must be remembered that the aim of treatment of early and late congenital syphilitics, those with little damage done and those in a serious condition, is to minimize the social handicap of the congenital syphilitic and to allow him to take his place in the everyday world. Time, only, can tell how far we have progressed toward accomplishing this end. But even now, we can say that we have gone a considerable distance.

From what I have said or called your attention to, you will readily see and understand that a very great responsibility rests on the physician who takes a case of syphilis,

congenital or acquired, and treats or attempts to treat it. The future happiness and welfare of the patient is in his hands and depends on his skill in combating the disease successfully. The patient's future is in his hands.

The minimum cost of treatment is about $300.00, the maximum about $1,500.00. Yet in neuro-syphilis it would be much higher, a reason for many cases receiving inadequate treatment. Another reason for discontinuing treatment is the many years required for perfect success. Other reasons for discontinuance are the optimistic feeling of well being as the treatment progresses and the inconvenience of the treatment.

DIAGNOSIS

In trying to make a diagnosis of syphilis get the complete history of the case; clinical evidence present, physical findings; laboratory tests or examination of specimens of blood, tissues, smears, and serums from suspicious lesions, spinal fluid obtained by spinal puncture or cistern puncture which must be correctly interpreted. Also, darkfield examinations of all venereal or other suspicious sores should be done. A word of caution right here: In using the darkfield, one must have considerable experience and have developed a fine technique, otherwise he may confuse the Spirochaeta pallida or Treponema pallidum, the causative factor of the initial sore and the beginning of the disease of syphilis, with the many other types of spirochaetes. I feel sure that a conscientious medical man or woman would not want to brand unnecessarily a patient for life as a syphilitic, to say nothing of the discomfort and inconvenience of a prolonged treatment with its necessary large outlay of time and money.

Is there cardio-vascular involvement in cases where the blood Wassermann continues to stay positive in spite of energetic treatment? I would answer an emphatic yes.

Some authorities say that there are more cases of neuro-syphilis since the advent of arsphenamines but the scientific literature does not bear out this contention, provided the treatment has been adequate. I have read some glowing reports of stovarsol used orally in the treatment of congenital syphilis but I cannot agree. A Herxheimer reaction can be avoided by starting treatment first on iodides or mercury. The dangers of a nitritoid crisis can be lessened by being scrupulously clean with glass ware, tubing, or such paraphernalia as is customarily used. Of course, it goes without saying that the whole procedure must be carried out aseptically and with proper sterilization. Intraspinal treatment has not been as effective as at first thought and is not without danger.

It was noted in the Balkan area of Europe that patients having malaria, which is very prevalent there, did not develop the severe types of neurosyphilis. Taking this as a cue, they began to investigate and experiment with malaria as a treatment of neurosyphilis. The malaria (tertian) treatment of neurosyphilis has not been as spectacular in the youth as in adults. But if you wish to try it, I suggest that it is safer to take the malaria blood from a patient who has never had syphilis, since crossing different strains of Treponema pallida may increase its virulency, also, group your bloods and have agglutination tests made to avoid possible trouble.

A negative Wassermann may become positive even if rigid treatment is started early in acquired or congenital syphilis. In acquired syphilis treatment should be very energetic even if gotten early or before blood becomes Wassermann positive. The chances for cure are much better as this is the golden opportunity. Some syphilographers call this the abortive treatment when carried out intensively. After this early intensive treatment a patient should be under observation after he is considered cured. Patients treated properly do not have recurrence of visible lesions and laboratory tests remain negative.

The proof of cure is a re-infection, another hard chancre followed by a positive reaction, or the birth of healthy offspring. But could it be possible that the virulence is so low that another infection of higher virulence could be superimposed and a second chancre follow? This is a debatable question and may be solved in the future to our satisfaction.

Precaution could be exercised in giving intermuscular treatments. Be sure to avoid blood vessels and nerve trunks, especially with insoluble preparations. And, when giving intravenous medication, be sure you are in the lumen of the vessel and that you are not allowing leakage into the tissues or you will have trouble in more ways than one. Care should be taken in the selection and preparation of the site to be used. The chemical manufacturers give directions as to how to prepare and administer their remedies and the selection of proper site or area.

CHOICE OF REMEDIES

Every case is a law unto itself as regards choice of remedies. The selection of a therapeutic agent for a given case will test your judgment in getting results. Products of any reputable house are good as they all have to come up to standards or tests as passed by the U. S. P. H. service. Among the antisyphilitic remedies there are arsenicals and their combination, bismarsen, tryparsamide, 606, 914, sulpharsphenamine, stovarsol and others; iodides; bismuth and combinations; mercury and combinations. At times you may need atropine, adrenalin or its ally, sodium thiosulphate, saline cholagogue. These agents are marketed under different trade names or chemical formulae.

Mercury is an old reliable remedy. Bismuth may in time prove to be as reliable. The arsenicals, particularly 606 and 914, clear up the contagious element or dangers but are not a permanent cure alone. Many liken them to morphine in renal or gall stone colic.

For infants the dose of sulpharsphenamine is up to 0.02 milligram per kilogram of body weight. I have used it in congenital cases. It is necessary to watch the skin for dermatitis. In general, I prefer the mixed intermittent treatment. Two to six doses of 606 or 914 and 30 to 50 mercury rubs used in about four courses a year. At the age of three weeks to six months one may give a treatment of 0.1 gm. of arsphenamine 914 a week with 1/10 gr. mercury bichloride every 4 or 5 days in about four courses per year. One must check closely the physical condition, age, and body weight. Under some particular form of treatment you will see lesions heal like magic, weight increase, color and nutrition improve, also the activity of the child. With well regulated treatment these patients will develop into useful members of society, be self-supporting in spite of the handicap of the affliction placed on them by their parents or by acquirement from others. If not given a well regulated treatment they will be a costly and bothersome burden to society. These are the two fates of the patient to be considered by the attending physician.

A microscopic examination of the placenta may prove of greater value in determining a latent infection than the result of a Wassermann on blood from the umbilical cord or from the veins during early life. The prognosis of congenital syphilis depends on the amount of prenatal treatment, the physical condition at birth, the severity of the disease at birth or virulence of the infection, the time treatment is begun, the type of treatment and toleration of treatment. In all cases the eyes of the patient should be examined by an oculist. In some cases the eyes of the patient should be examined repeatedly by an oculist, giving attention to the visual fields and the disk, etc. Be on guard as to the ears, heart, blood vessels, kidneys, spleen, liver, skin, meninges, nerves, gastrointestinal tract, gums, and endocrine glands for any reaction from treatment. Watch the patient's foods and use tonics, especially iron, when indicated.

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INVITED TO DULUTH MEETING

Members of the State Medical Society of Wisconsin are cordially invited to be guests at the eighty-first annual meeting of the Minnesota State Medical Association which will be held at Hotel Duluth on Monday, Tuesday, and Wednesday, July 16, 17 and 18. The scientific program opens on Monday morning July 16th, with meetings of the Surgical Section, Trudeau Society, Heart, Obstetrics, and Gynecology with scientific demonstrations scheduled for 11:00 Monday morning. The Monday afternoon sessions feature Pediatrics, Radiology, Orthopedics, Neurology, and Psychiatry.

General assemblies will open Tuesday morning and the program will continue throughout Tuesday and Wednesday. The annual dinner of the Society will be held at Hotel Duluth Tuesday night.

Recent Experience with Resection of the Prostate Gland*

By GERSHOM J. THOMPSON, M. D.
Section on Urology, The Mayo Clinic, Rochester, Minnesota

DURING the past few years surgical methods for the relief of urinary obstruction have been widely discussed. Men such as Caulk, T. M. Davis, Bumpus, Kretschmer, Alcock, and others have been frank in stating that transurethral resection of the prostate gland is applicable in the vast majority of cases in which there is urinary retention caused by hypertrophy of the gland. Others such as Edwin Davis, Young, and Lowsley have been just as frank in their opinion that results from this operation have been overrated and that prostatectomy is still the procedure of choice in all but selected cases. Lewis called attention to the inordinate risk of transurethral operations in the hands of the occasional operator, and Caulk has pointed out the dangers of perforation of the bladder, either at the time of operation or as a result of sloughing due to unusual heat developed by the so-called cutting currents, even in the hands of experts.

It would be impossible in the time allotted to this paper and certainly impractical to consider all the evidence that has been repeatedly advanced to support or condemn transurethral resection of the prostate gland. I shall report and review, therefore, in emphasizing the advantages of the operation, the work done in this field at The Mayo Clinic during 1933 when 451 patients with obstructive lesions at the vesical neck were cared for by transurethral resection.

SELECTION OF CASES

During 1933, only seven patients were subjected to prostatectomy. In these cases it was either impossible to pass a resectoscope, or it was the opinion of the surgeon that the prostate gland was of such size that several procedures would be necessary to effect relief. It can be seen, therefore, that in only 1.5 per cent of the 458 cases was prostatectomy deemed necessary. Transurethral resection of the prostate gland proved effective in the other 98.5 per cent, thus justifying one in assuring almost any inquiring patient that he could be cared for in this manner. I have previously called attention to the wisdom of selecting cases carefully when one is developing the technic, for it is probably true that only by such selection will a low mortality rate result during a surgeon's early experience. As stated in a previous article, in practically all cases in which benign hypertrophy of the prostate gland is well advanced there is compensatory thickening of the vesical wall. A similar margin of safety exists in cases of carcinoma of the prostate gland. Hence it follows that in these cases perforation of the vesical neck by incision will be difficult, although perforation secondary to sloughing following the use of excessive heat must be borne in mind. It is to such cases that a surgeon should confine his first efforts, for he can cut even deeper than intended and still be safe. In contrast to this it is, with few exceptions, wide excision in which the vesical wall is normal and the prostate gland small that has brought discredit to the operation, regret to the surgeon, and suffering to the patient.

PREOPERATIVE PREPARATION

Careful general examination is a necessary preliminary to any elective operation. Transurethral resection of the prostate gland should not be considered an exception. The usual routine procedures, such as roentgenograms of the abdomen and thorax, determinations of the chemical constituents of the blood and other tests to estimate the extent of renal and cardiac injury are invaluable. When such study is going on, it is often wise and sometimes absolutely necessary to drain urine from the bladder with an inlying catheter. Cabot, however, in a recent study comparing 600 prostatectomies with 600 prostatic resections, found that in 54.16 per cent of the latter procedures no

* Read before the Eau Claire and Associated Counties Medical Society, Eau Claire, Wisconsin.

preliminary drainage by catheter was necessary other than that made to check the residual urine. An inlying catheter for periods up to two weeks was used in 23.66 per cent of the cases, and in 19.16 per cent preliminary suprapubic cystostomy was deemed the best method of preparation.

No specific rules can be laid down, but I am confident that in many cases in which retention of urea is marked, death was avoided by performing preliminary cystostomy. In 1933, of the 458 patients who received relief by transurethral resection of the prostate gland, thirty-six (7.98 per cent) had been subjected previously to suprapubic cystostomy, either performed at the clinic or elsewhere. During the year only one patient died following cystostomy. Forcing fluids orally and intravenously to increase renal output and to reduce retention of urea is of primary importance. I endeavor to increase the output of urine to 1,500 c.c. or more daily, but carefully avoid forcing fluids beyond the tolerance of the patient's stomach or his cardiovascular mechanism. Preliminary bacteriologic study, and, if necessary, investigation of differential renal function by cystoscopy or intravenous urography, should be made.

TECHNIC OF OPERATION

Spinal anesthesia was used in the majority of cases in 1933. In no case was more than 100 mg. of procaine solution employed, and in many cases as little as 50 to 60 mg. sufficed. For men more than seventy-five years of age, it is rarely necessary to use more than the 60 mg. since patients in this age group apparently metabolize the drug slowly, thus prolonging anesthesia.

The knife punch was used in all but a small number of cases, in which the McCarthy resectoscope was found advantageous.

In previous articles I have called attention to the technic employed, particularly with regard to the necessity when using a knife punch of resecting the tissue on the edge of the bladder before that portion of the prostate gland which is in the urethra can be engaged. All obstructing tissue lying between the ureteral ridge and the verumontanum should be resected, and particular attention should be paid to any nodules projecting into the region of the internal sphincter. It is possible, if a resectoscope can be passed, to remove a median lobe of any size; only the larger lateral lobes will tax the ingenuity of the skilled surgeon. The multiple needle electrode should be used cautiously when the operation is nearing completion; thus, a minimal amount of coagulated tissue will be left in situ. Caulk and Lewis have pointed out the danger of excessive heat, and have enumerated many cases of vesicorectal fistula caused by massive sloughing of the prostatic bed. All resection and coagulation near the external sphincter must be done cautiously, for, if a piece is cut or sloughs from it, incontinence will result. The amount of tissue resected will vary from a few grams to an ounce (28 gm.) or more. From one patient in 1933, 116 gm. of tissue were removed and from numerous patients, more than 50 gm. have been removed. All bleeding points can be seen and readily stopped by electrocoagulation. I have never found it necessary to use a bag in even one of more than 400 cases in which I have performed the operation personally, nor have such contrivances been used by any of my associates. Surgeons elsewhere have used bags, however, with apparently good results, and certainly there seems no objection if only a reasonable amount of tension on the bag is employed.

POSTOPERATIVE CARE

The bladder should be irrigated frequently through an inlying catheter, and the suprapubic tube as well, if one is present. This should be done often enough to prevent plugging of the catheter by a clot. In some cases, for a few hours one must be quite vigilant, whereas in others, bleeding ceases almost immediately. I have never had a case in which it was necessary to perform suprapubic cystostomy to control hemorrhage. During 1933, it was necessary to return only two patients to the operating room to evacuate clots through the cystoscope the same day resection was performed. In a number of cases, however, I am confident that assiduous care in regard to the catheter and frequent lavage obviated such

treatment. Transfusion because of hemorrhage was necessary in only one case. The patient had a severe hemorrhage the day of operation; the bleeding vessel had to be coagulated again six hours after operation, and transfusion was carried out as a precautionary measure. In one other case transfusion was performed because of shock following resection of 59.5 gm. of tissue. Two other patients received transfusions late in the course of their convalescence merely for its tonic effect, for in neither case was the bleeding at the time of operation greater than average.

Forty-eight hours of drainage by catheter is the routine. Six hours after removal of the inlying catheter it is wise to pass a catheter again to determine the presence or absence of residual urine. If more than 150 c.c. of urine is present, it is sometimes best to fasten the tube in again and leave it for another forty-eight hours. In my experience, if the patient does not void at the end of this time, the operation will probably have to be repeated. This was necesary in 12 per cent of the cases; in three of these, three operations were required, and in three others, a total of four operations was necessary before the patients could void completely. Thus, in 451 cases, 513 resections were performed.

Careful attention to the general condition of the patient as well as to the drainage by catheter is essential. He must be encouraged to move his legs, to get out of bed after the first day, to eat all the nourishing food possible, and to keep his bowels open.

The period of hospitalization will usually be less than a week; in 1933, 88.7 per cent of the patients were out of the hospital in fourteen days or less after resection of the prostate gland.

COMPLICATIONS

Habein, in a careful study of cases during the first eight months of 1933, found that delayed bleeding occurred in only 5.42 per cent. Severe pulmonary congestion occurred in only three cases, and bronchopneumonia in two. In no case was gross perforation of the bladder made, although in one an ischiorectal abscess developed during the postoperative interval and necessitated drainage. Cystoureteropyelonephritis with subsequent septicemia occurred in one case. Epididymitis occurred in less than 4 per cent of cases; in four cases it was quite severe, and greatly lengthened the postoperative course. At present, therefore, at the clinic, bilateral partial vasectomy is advised for men more than seventy years of age, or for those younger who are in extremely poor condition. Because the chance of the occurrence of epididymitis is so small, vasectomy is not advised for men less than seventy years of age who are in good condition.

MORTALITY

Of the 451 patients, in which group 513 resections of the prostate gland were performed, five died. In one patient, aged sixty-six years, bilateral pulmonary embolism proved fatal; another patient, aged sixty-seven years, died of bronchopneumonia twenty-three days after operation; a third patient, aged seventy-six years, who had a severe cardiac complication, died on the twenty-sixth day after operation; the fourth patient, aged eighty-one years, died from renal insufficiency the twenty-third day after operation, and the fifth patient died the twenty-first day after operation from terminal bronchopneumonia. This last patient had extensive carcinoma of the prostate gland. It was felt that transurethral resection of sufficient tissue to enable him to void was indicated. His immediate convalescence was uneventful, but he lost strength rapidly during the third week and died. Had the extent of metastasis, as found at necropsy, been known, the operation would not have been advised. The percentage of mortality for the year was thus 1.1, and I am confident that many patients who otherwise would have been denied any other form of operation, and certainly any form of prostatectomy, are included in those who survived operation.

RECURRENCE

To my knowledge no one has stated any definite interval of time that should elapse

(Continued on page 538)

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« « « EDITORIALS » » »

Cretinism In Wisconsin

FOR a number of years it has been predicted that since the states in the Great Lakes Basin are deficient in those elements protective against goiter, when a number of generations had been reared in this comparatively newly settled region cretinism would also be found in sufficient numbers to constitute a true endemic. Several writers have stated that our American goiter regions—contrary to the experience in Switzerland and elsewhere—do not contain the elements productive of cretinism. However, observations made within the past two years have shown that we are now having an increasing number of cretins in our institutions in Wisconsin. Lists so far compiled contain no record of patients in the seventy or more county insane asylums of the state. This should be investigated.

The work begun by Dr. C. H. Stoddard of Milwaukee, published in June, 1933, in the Wisconsin Medical Journal, detailing 68 cases of cretinism; the work which was interrupted by the untimely death of Dr. E. Forrest Bickel of Oshkosh, who was most interested in the subject, and the work of Dr. Arnold Jackson of Madison, have all tended to confirm the dictum of Morel that "Goiter is the first step on the road to cretinism". And still further research promises to yield many more cases. Public health officials, social workers and the heads of institutions are awakening to the public health aspect of the situation, and unquestionably recommendations for proper treatment of pregnant women of goitrous families will be soon undertaken. Many physicians are already carrying out such treatment. All should do it.

The Committee on Scientific Work of the State Society might well interest itself in this subject by encouraging post-graduate students to investigate the incidence of the disease in its various aspects. In the same connection, perhaps, a very fruitful source of study might be a survey of the so-called "Driftless Area" in western Wisconsin including the western parts of Dane, Sauk and Portage counties and the whole of Crawford, Grant, Green, Iowa, Richland and Lafayette counties. For years it has been recognized in the older countries that glaciated region have been the seat of goiter.

Proof of this contention might be readily found in the area of western and southern Wisconsin, from which the polar glacier was diverted and where conditions of soil and water in that territory are similar to those of non-goitrous regions. In Pennsylvania and West Virginia certain valleys for example are found to contain large numbers of goiters and of cretins as compared to the remaining parts of those states. Therefore, should a decided con-

trast be found between the number of cases of goiter and cretinism here and in the remainder of the state, another interesting fact would have been established. Medical studies of this kind having a decided local interest seem to be a logical field of research effort both for our own medical schools and for the Committee on Scientific Work. C. H. S.

Sound Practice

THERE is nothing new in the observation that many things inherently valuable both social and political are so abused that one sometimes wonders whether they are really good or bad. The same thought may apply to medicine, particularly when one surveys the many new technique and apparatuses which flood the medical field. In this connection certain principles may be laid down which are more or less axiomatic. 1. Nothing must stand in the way of scientific advancement in medicine. 2. The physician must not allow anything to interfere with his powers of observation and his skill in doing a first class physical examination. 3. The cost of medical care must in some way be decreased rather than increased. These principles in themselves arouse very little argument, but when each is followed to its logical conclusions, contradictions and marked differences of opinion arise.

May we illustrate the thought we have in mind by referring to the electrocardiograph. When Einthoven made it practical to secure a photographic record of the changing electric potentials in the heart, several of the most important chapters of cardiac physiology were quickly written. Applications to clinical medicine followed at once. It was found that certain specific cardiac conditions were accompanied by characteristic changes of the electrocardiogram, and that these records might therefore be used as a means of diagnosis. At once every office, clinic and hospital that could possibly afford it ordered an electrocardiograph.

Any wholesale condemnation of the electrocardiograph is very far from the writer's mind. Scientifically the instrument has more than justified itself.

At present we are interested most in the relations of its use to our principles two and three. That the use of the electrocardiograph has often been abused by replacing a second physical examination is the belief of many. The instrument impresses the patient. A record is turned out which is quite free from any error inherent in the human senses. It is natural to rely more and more on the electrocardiogram. The crutch becomes the chief support. Two things are forgotten. Since we still do not know the fundamental laws governing the variations in spread of electric potentials in the heart, the electrocardiogram has really only been checked against physical findings. Its use is still largely empirical. It takes a very competent and expert cardiologist to interpret the records. In the second place electrocardiographic records for the most part lag behind the clinical signs and symptoms. Hypertrophy for example does not usually write an unequivocal record in the electrocardiogram before it can be told with equal ease by a physical examination. Myocardial degeneration results in some degree of breathlessness quite as soon as R waves are split or Ts inverted. It is this situation that has prompted Sir Henry Lewis to remark that the cardiac capacity to do work and the condition of the heart's reserve can be correctly answered in almost all cases by simple interrogations and bed side signs. The electrocardiograph then is an instrument that should be known and understood as far as possible. When needed it should be available. It should however never become the chief form of examination and it should never in any degree be allowed to dull the sense perceptions of the physician.

The fear of more expense must of course not be allowed to hamper the practice of scientific medicine. This must not be taken to mean however that every patient must be submitted to expensive routines which are frankly not concerned with the disease in question. One views with some alarm the introduction of such instruments as the electrocardiograph into offices and small hospitals because it may mean merely the indiscriminate assessment of another heavy laboratory fee.

After all we are not quarreling with the use of modern instruments and methods of precision. Their number however has become so large that not all can ever be used in a given case. For this reason nothing then can ever replace the physical senses of the physician. By them he becomes acquainted with the general clinical picture. It then takes the soundest of judgment to order and interpret the proper tests. W. J. M.

. . . . THE PRESIDENT'S PAGE . . . .

The American College of Surgeons and Health Insurance

ON SUNDAY, June 10, 1934, the day preceding the meeting of the House of Delegates of the American Medical Association, newspapers of the country stated that the American College of Surgeons had announced in favor of health insurance. This circumstance and the subsequent action of the House of Delegates condemning public declarations of opinion on social and economic problems relating to medicine by special societies other than the American Medical Association is of sufficient interest to us as a state society to warrant rather serious consideration.

The attitude of Wisconsin medicine in this matter is well expressed in a resolution drafted by Dr. Rock Sleyster, and adopted by the Council in January, 1933. It reads as follows: "WHEREAS, There have been formed important national organizations of physicians, specialists other than the American Medical Association, and

"WHEREAS, Such organizations fundamentally formed for scientific purposes have from time to time publicly expressed opinions concerning the entire practice of medicine, especially in its social and economic relationships, and

"WHEREAS, An unusual emphasis on the social and economic position of medical practice has recently been precipitated by the published report of the national Committee on the Costs of Medical Care,

"*Be It Resolved,* In the interest of the welfare of the public and the maintenance of the most serviceable form of medical practice, the proper representatives of the American Medical Association request other national medical organizations whose qualifications for membership include membership in the American Medical Association, to publicly declare their opinions on general social, legislative, and economic relationships of medical practice only through approved channels of the American Medical Association. To this end the Council of the State Medical Society of Wisconsin pledges its own efforts and influences to bring about this most desirable point of view in the minds of members of the State Medical Society of Wisconsin, who are also members or Fellows of the other organizations to which reference has been made. The Council also respectfully requests the Board of Trustees of the American Medical Association to bend every effort to accomplish this purpose throughout the Association at the earliest possible moment in order that the sane evolutionary progress of medical practice may not be disturbed by social experiments which endanger the health and the welfare of our citizenship, and which have proved a pernicious health influence in other nations."

This resolution and one similar, adopted by the Board of Trustees of the Medical Society of the State of Pennsylvania, were presented to the American Medical Association at the Milwaukee meeting. Repeated overtures have been made by the American Medical Association to various societies requesting that in the interest of the public and of the medical profession, the principles outlined in the resolutions be adhered to.

The Board of Regents of the American College of Surgeons adopted, on June 10, 1934, the report of the Medical Service Board of that organization. This report is a statement of principles which should be observed in the development and conduct of a pre-payment plan for medical and hospital service to persons of moderate means. It does not purpose any specific plan. It does state that the American College of Surgeons recognizes that the periodic pre-payment plan providing for the cost of medical care of illness and injury of individuals and of families of moderate means offers a reasonable expectation of providing

them with more effective methods of securing adequate medical service. It suggests that plans for the payment of hospitalization alone without provision for payment for medical service may be considered the first project to be undertaken in the average community.

It is not my intention to enter into a discussion of health insurance. I have made brief reference to this subject in a previous President's Page, and bulletins of the American Medical Association have recently given authoritative reviews of the subject. Sufficient attention has been given this controversial matter to enable our membership to arrive at definite conclusions. The problem presented by the action of the American College of Surgeons is primarily one of allegiance. Are we as a profession to divide into a number of groups each proclaiming a panacea for the economic and social ills which beset the country, or are we, as a united profession and through orderly processes, willing to proceed to a carefully studied decision? At the present time several important foundations and the American Hospital Association are actively favoring health and hospital insurance. An active campaign to bring about health insurance, timed to be most effective when many legislatures meet in the fall, is planned by some groups. The general trend of thought in government is toward social insurance which we must recognize includes health insurance. There has never been a time when concerted action on the part of the medical profession is so imperative. By concerted action I do not mean a stubborn adherence to outworn practices, but a steady advance of medical and social lines when that advance is based on scientific knowledge. In these times it is easy to be led to believe that change and progress are synonymous. Common sense should be sufficient to dictate an adherence to the principles which Dr. Sleyster's resolution outlines.

A word regarding the American College of Surgeons is timely. Organized in 1913, its stated objective is "To elevate the standards of surgery, to establish a method of granting Fellowships in the organization, and to educate the public and the profession to understand that the practice of surgery calls for special training." The Fellowship pledge states that the College seeks to develop, exemplify and enforce the highest traditions of the calling of surgery. The desirability of an organization actively fostering these ideals cannot be denied. Wisconsin medicine wholeheartedly endorsed the cause which the College proclaimed as its principal mission. Its splendid journal, Surgery, Gynecology and Obstetrics, has been a stimulating force in the advance of scientific surgery. A genuine interest in the ethical and practical standards of surgery, and an interest in the College as an organization, professedly created for the purpose of elevating these standards, prompts the statement that there is prevalent in Wisconsin a widespread conviction that the College, having put its hand to the plow and finding the going somewhat stony, has turned to other fields. There is reason to believe that untrained surgeons have never had greater opportunity for practice than they have today, and that secret division of fees is as widespread an evil as ever. There is prevalent also the belief that any advance in the ethical standards of surgery since 1912, if a true advance has been made, may be attributed as well to other factors and may be claimed as well by other groups as by the American College of Surgeons. The primary purposes of the College are too vital to humanity to be obscured by other activities or by controversies essentially foreign to it. The mistake should not be made that lip service and pomp and circumstance will be accepted as permanent substitutes for courageous leadership in dealing with incompetent or dishonest practices in surgery. If the College will show that it is determined to fulfill the splendid objectives which it set for itself, and which stimulated an initial interest on the part of right thinking men, it will have a much needed rejuvenation of interest in Wisconsin.

Society Proceedings

CHIPPEWA

The Chippewa County Medical Society held its regular monthly meeting at Hotel Northern, June 7, Chippewa Falls. A good attendance was present to listen to and discuss the several papers dealing with obstetrical subjects under the general caption, "A Symposium on Present-Day Obstetrical Practice."

In line with a policy announced in 1933 by the Chippewa County Society, and later endorsed editorially by the Wisconsin Medical Journal, program material has been supplied largely by the members of the society.

After a year in which this practice has been largely followed, the members of the society seem satisfied as to (a) the value to the individual members called on to supply a paper. This is inestimable. (b) The value of the discussions showing the keen interest of the Society members in the subjects treated.

It is recognized that these "home programs" do not draw many outside of the local membership. This may or may not be an advantage.

The papers presented at the June meeting were of unusual interest. All were splendidly prepared.

Dr. Richard S. Rogers, Chippewa Falls, presented a most interesting paper upon "The Newer Anaesthetics in Obstetrical Practice." Dr. C. A. Cooper, Colfax, followed with a discussion upon "The Conduct of Face and Breech Presentations." Dr. F. T. McHugh, Chippewa Falls, in "Indications for the Caesarean Section" upheld his past reputation as one who is always ready to present the latest and best on any subject dealt with by him. Dr. R. E. Graber, Stanley, discussed "The Use of Pituitrin." These papers were all ably prepared and showed an intimate knowledge of the subjects.

Following the summer vacation the meetings of the Society will be resumed in September. M. F.

DODGE

Dr. Arthur G. Sullivan of Madison addressed the members of the Dodge County Medical Society at a meeting on May 1st on the subject "Medico-Legal Problems."

GREEN

At a meeting of the Green County Medical Society held the latter part of May, all of the old officers were re-elected for another year. They are: Dr. L. A. Moore, Monroe, President; Dr. G. S. Darby, Brodhead, Vice-President, and Dr. J. F. Mauermann, Monroe, Secretary–Treasurer.

Speakers at this meeting were Dr. L. M. Warfield of Milwaukee and Dr. Stanley J. Seeger, Milwaukee, President of the State Society.

KENOSHA

Members of the Kenosha County Medical Society, together with the members of the Woman's Auxiliary, met in the Terrace Court Recreational Room on June 7th. Speakers and their subjects included the following:

Dr. F. B. Lansdowne,—"Newer Treatment Methods at Willowbrook Sanatorium"; Dr. G. F. Adams, "Organized Medicine"; Dr. Charles Ulrich, "The Newly Formed Kenosha County Medical Society Credit Bureau"; Dr. J. F. Hastings "Why Free Medical Service?" and Dr. W. C. Stewart, "A New Medical Code."

A general discussion ensued which was followed by a luncheon served to the physicians and their wives. Forty were in attendance.

OUTAGAMIE–WAUPACA

A joint meeting of the Outagamie–Waupaca County Medical Societies was held at the Elwood Hotel at New London, Wisconsin, following a 6:30 dinner.

Dr. F. D. Murphy and Dr. John Grill of Milwaukee presented a clinico-pathological demonstration of two very interesting yet obscure cases. These cases were discussed by the forty-eight members present. After the discussion and probable diagnosis was made, Dr. Grill gave the pathological findings making this a very instructive and interesting meeting.

At the close of the meeting all members agreed that a clinico-pathological demonstration of this type tends to stimulate greater interest in our programs. F. J. P.

POLK

The Polk County Medical Society and Auxiliary met on May 31st at Forrest Wood on Wood Lake, for a dinner meeting. Miss Forrest talked on astronomy and its relation to weather; Dr. J. D. Nicholson of Milltown gave a reading "Tam O'Shanter"; Mr. George B. Larson, Secretary of Polk County Medical Society, Frederic, talked on the Auxiliary, and Dr. W. C. Andrews discussed the causes of death in Wisconsin. Pictures of Florida and of the Milwaukee zoo were shown to the group.

On Thursday evening, June 7th, a meeting of the Society was called at St. Croix Falls to hear Mr. H. H. Clegg of the Bureau of Investigation. Washington, D. C.

RACINE

The regular meeting of the Racine County Medical Society was held Thursday evening, May 24th, at 8:15 at the Elks Club.

The program consisted of an address on "Medical and Surgical Lesions of the Feet Including High-

lights on Low Arches" by Philip Lewin, associate professor o orthopedics at the University of Illinois. He a oted some time during the program to answering ndividual problems of the members.

Lantern slide were shown. S. J.

ROCK

The regular meeting of the Rock County Medical Society was held on May 18th at the Colonial Club in Janesville. This meeting was a joint meeting with the Radiological Section of the State Medical Society of Wisconsin. Fifty-seven members of both societies were present for the dinner which was served at 6:00 P. M. Dr. James T. Case of Chicago was guest speaker for the evening and addressed the Society on "Diverticulae of the Gastrointestinal Tract." This joint meeting was in charge of Dr. Kuegle of Janesville.

The special meeting on tuberculosis was held at Pinehurst Sanatorium on May 29th with Dr. T. O. Nuzum in charge. A picnic dinner was served by the Sanatorium staff to the society members and to the Auxiliary. The guest speaker of the evening was Dr. Henry C. Sweany of Chicago who gave an interesting and comprehensive discussion of tuberculosis from the standpoint of pathology and pathogenesis. Thirty-six members were present. T. F.

SHEBOYGAN

At a regular meeting of the Sheboygan County Medical Society held at the Memorial Hospital at Sheboygan on May 22nd, Dr. Edmund H. Mensing of Milwaukee gave a very interesting talk on "Reducing the Hazards in the Treatment of Intestinal Obstruction." The doctor's talk was illustrated with lantern slides.

Dr. John P. Zohlen of Sheboygan read a paper on "Cardiospasm and Esophageal Diverticula" and demonstrated the technique of dilatation with the dilator which he has perfected. A.C.R.

WINNEBAGO

Dr. J. P. Malbant of Maybury Sanatorium at Detroit, Michigan, was the principal speaker at the meeting of the Winnebago County Medical Society on May 25th. His subject was "Childhood Tuberculosis."

FOURTH COUNCILOR DISTRICT

A meeting of the Fourth Councilor District of the State Medical Society was held at Lancaster, Friday, May 25th, in the Grantland Club Rooms. Dr. J. E. Donnell, President of Grant County Medical Society, presided. The following program was presented:

"Nervous Breakdowns, with the Nature, Cause and Principles of Management" by Dr. Meyer Solomon, professor of neurology at Northwestern University Medical School, which was followed by a general discussion.

"The Etiologic and Pathologic Approach to the Diagnosis of Heart Disease" by Dr. A. R. Barnes, of the Mayo Clinic. This was followed by a discussion by Dr. Laurence Cooley of Dubuque, Iowa.

"The Treatment of Burns" by Dr. Stanley J. Seeger, President of the State Society. Lantern slides illustrated the talk, which was discussed by Dr. Wilson Cunningham, Councilor of the Fourth District.

"Progress in Ocular Surgery" by Dr. Oscar B. Nugent, professor of ophthalmology, Chicago, Eye, and Ear Hospital, Chicago. Discussion by Dr. E. H. Brooks of Appleton.

The wives of the physicians were entertained during the afternoon at the home of Mrs. R. C. Godfrey by a committee composed of the wives of the Lancaster physicians. At six-thirty o'clock physicians and their wives joined the Kiwanians and their wives at a banquet served in the Grantland Club Rooms. At the close of the banquet, Mr. Otto F. Christianson, President of the Kiwanis Club, introduced in a happy manner the speakers of the day and the meeting was turned over to the physicians for the evening entertainment, with Dr. Wilson Cunningham, toastmaster.

Mr. J. G. Crownhart, Secretary, read a paper on "Medicine—A Profession"; Dr. A. R. Barnes talked on "Heart Disease" and other speakers were Dr. Meyer Solomon, Dr. Stanley J. Seeger, Dr. Laurence Cooley and Dr. E. H. Brooks. Dr. Oscar B. Nugent then gave a lay talk on "Primitive India" and exhibited three reels of motion pictures showing scenes and conditions in that country.

Resolutions of sympathy and respect were passed for the loss by death of Dr. J. C. Doolittle, a few days before the meeting. M. B. G.

FIFTH COUNCILOR DISTRICT

Members of the Fifth District of the State Medical Society met on Thursday afternoon and evening of May 31st at the Sheboygan Association of Commerce Rooms. Dr. A. H. Heidner of West Bend is Councilor for this district.

The program in the afternoon consisted of the following:

"Certain Practical Aspects of Prenatal Care"—John W. Harris, M. D., Madison.

"Fractures"—H. W. Meyerding, M. D., Mayo Clinic, Rochester.

"Amebiasis and Amebic Dysentery: Its Epidemiology, Clinical, Pathological Aspects and Its Practical Treatment—illustrated with lantern slides."—Frank Smithies, M. D., Editor-in-Chief American Journal of Digestive Diseases and Nutrition, Chicago.

"Acute Abdominal Conditions,"—E. G. Bannick, M. D., Mayo Clinic, Rochester.

The evening program commenced with a dinner for the physicians and their guests, after which the following talks were given:

"Medicine—A Profession."—J. G. Crownhart, Secretary, State Medical Society.

"The Physician and Public Health,"—S. J. Seeger, M. D., President, State Medical Society.

"A Layman Looks at Medicine,"—Dr. Edward A. Fitzpatrick, Dean of Graduate School, Marquette University, and President, Mount Mary College, Milwaukee.

Dr. Theodore Gunther of Sheboygan was elected president and Dr. A. C. Radloff of Plymouth was re-elected secretary of the Fifth District. A. C. R.

TENTH COUNCILOR DISTRICT

Upwards of one hundred physicians attended a meeting of the Tenth District of the State Medical Society, of which Dr. H. M. Stang is Councilor, at the Menomonie Country Club on Saturday, May 26th. Activities began at two o'clock in the afternoon with golf and refreshments which was followed by a dinner at six-thirty o'clock.

Dr. C. B. Wright of Minneapolis read a paper on "Medical Legislation," and Mr. George Crownhart, Secretary, gave an address an "Medical Economics."

MILWAUKEE ACADEMY OF MEDICINE

The following program was presented by the Milwaukee Academy of Medicine at its meeting held on May 22nd:

"Filaria Loa" by Claude S. Beebe, M. D.

"Snake Bite in Milwaukee" by Fernan–Nunez, M.D.

"Cardiac Pathology" by Otto Saphir, M.D., Pathologist, Michael Reese Hospital. Chicago.

MILWAUKEE HOSPITAL INTERNS' ASSOCIATION

The May meeting of the Milwaukee Hospital Interns' Association, held at the home of Dr. Ralph P. Sproule on May 16th, was in the nature of a social evening, the physicians' wives also being in attendance.

A case report "Nephritis in the Child" was read by Dr. Frank E. Drew. Drs. George Kelly and S. F. Morgan discussed Dr. Drew's presentation.

The Association held a picnic on June 30th at the summer home of Dr. M. N. Federspiel on Lake Winnebago.

MILWAUKEE NEURO-PSYCHIATRIC

Dr. J. M. Essenberg, associate professor of anatomy, Loyola University, spoke on "The Embryology of the Nervous System" before a meeting of the Milwaukee Neuro-Psychiatric Society held on June 28th.

MILWAUKEE OTO-OPHTHALMIC

The May meeting of the Milwaukee Oto-Ophthalmic Society was held at the University Club on May 22nd and was the last meeting to be held until October.

A clinical exhibition of patients took place at 6 P. M. followed by dinner, and the meeting concluded with the following program:

"Modification of the Jameson Recession and a Discussion of the Reese Resection in the Treatment of Squint" by F. A. Davis, M.D., Madison.

"New Theory of Vision" by J. Y. Malone, M.D., Milwaukee.

THE WOMAN'S AUXILIARY

Mrs. Eben J. Carey, Milwaukee, *President*
Mrs. Rock Sleyster, Wauwatosa, *President-elect*
Mrs. George H. Ewell, Madison, *Secretary*
Mrs. R. G. Arveson, Frederic, *Treasurer*
Mrs. Walter A. Ford, Sheboygan, *Press and Publicity Chairman*
Mrs. James Blake, Hopkins, Minn., *National President*

Two Wisconsin Members Elected to National Offices at Cleveland Convention

Mrs. Eben J. Carey, Milwaukee, state president, was elected National Treasurer, and Mrs. Rock Sleyster, Wauwatosa, president-elect of the state auxiliary, was re-elected Director of the national auxiliary at the annual convention of the Woman's Auxiliary to the American Medical Association, held in Cleveland June 11th to 16th.

The Auxiliary to the State Medical Society of Wisconsin was represented by twenty-nine of its members. A total of 1425 women were present at the convention, 577 of whom were registered with the auxiliary at the auditorium and Hotel Carter.

The reports read by the presidents of other state auxiliaries as well as the reports of the national chairmen of committees were of real value and inspiration.

A report of this convention will be given at our Annual Meeting in Green Bay, Wisconsin, September 11, 12, 13, and 14th.

The other National officers and directors elected are:

President—Mrs. Robert Tomlinson, Wilmington, Delaware.

President-elect—Mrs. Rogers N. Herbert, Nashville, Tenn.

First Vice-President—Mrs. Rollo K. Packard, Chicago, Ill.

Second Vice-President—Mrs. Otis Lamson, Seattle, Wash.

Third Vice-President—Mrs. J. Bonar White, Atlanta, Ga.

Fourth Vice-President—Mrs. William Lett Harris, Norfolk, Va.

Recording Secretary—Mrs. Elmer S. Whitney, Detroit, Mich.

Treasurer—Mrs. Eben J. Carey, Milwaukee, Wis.

Board of Directors:

One year—

Mrs. Henry Trigg, Westoverhills, Ft. Worth, Texas.

Mrs. Rock Sleyster, Wauwatosa, Wisconsin.

Mrs. C. C. Tomlinson, Omaha, Nebraska.

Two years—

Mrs. A. A. Herold, Shreveport, La.

Mrs. F. W. Scatena, Sacramento, Calif.

Mrs. M. L. Stevens, Asheville, N. C.

County News Items

KENOSHA COUNTY

The June meeting of the Auxiliary to the Kenosha County Medical Society was held at the Willowbrook Sanatorium on Monday afternoon, June fourth. The superintendent, Miss Alice Nelson, presented an interesting talk on the work of the sanatorium. A tour of the sanatorium followed the talk after which the guests were served a delicious lunch.

On June twelfth the Auxiliary was invited to a meeting of the Kenosha County Medical Society and also took charge of the lunch which followed the meeting.

The annual picnic of the Auxiliary and the Kenosha County Medical Society was held on June twenty-first at Dr. J. H. Cleary's cottage at Twin Lakes. An ideal June day brought out a large attendance and everyone reported an exceptionally good time. Golf, swimming, fishing and bridge provided entertainment for the group.

MARINETTE COUNTY

Dr. Arthur J. Cramp of the Bureau of Investigation of the A.M.A., gave an informative and educational lecture on "Pink Pills and Panaceas" in the Marinette High School auditorium at an open meeting of the Auxiliary to the Marinette, Menominee and Oconto county medical societies on Monday evening, May 28th.

ROCK COUNTY

Eighty-five attended the annual picnic of the Woman's Auxiliary and the Rock County Medical Society. Members and guests who are interested in the fight against tuberculosis, attended a lawn supper under the pine trees at Pinehurst sanatorium the last of May. Dr. H. J. Sweeney, Chicago, was the speaker.

The Auxiliary members played bridge, the prizes going to Mrs. R. S. Vivian, Beloit, and Mrs. Harry Lapp of Janesville.

MEMBERSHIP INCREASING

Exactly 700 doctors' wives are members of the Wisconsin Auxiliary to date. This membership comprises sixteen county auxiliaries having paid 1934 state and national dues of fifty cents per member. It is expected that additional dues will be received before the close of the fiscal (calendar) year. The first half of 1934 has brought 216 new members and the organization of a new county auxiliary. With growth in numbers the Auxiliary will seek growth in achievements.

News Items and Personals

Dr. Leif H. Lokvam of Burlington, Wisconsin, has joined the staff of the Kenosha Clinic, Kenosha.

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Dr. S. J. A. Francois of New Glarus left on June second for a two months' trip to Europe where he will take special studies in Paris and Vienna.

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An interprofessional relationship meeting of physicians, dentists and pharmacists was held at the Park Hotel, Madison, on the evening of May 22nd. This meeting was sponsored by Rho Chi Honorary Pharmaceutical Society. Speakers were Dr. H. P. Greeley, Madison, who represented the physicians; Dr. O. M. Dresen, D.D.S., Milwaukee, who spoke for the dentists and Otto H. Berndt, Manitowoc, talked from the pharmacist's point of view. Dr. F. B. Kirby of North Chicago was present to explain the interprofessional relationship movement in other states.

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Mrs. Elizabeth Head Gundersen, 37, wife of Dr. Sigurd B. Gundersen of La Crosse died on May 24th. She was the daughter of the late Dr. Louis R. Head of Madison. Survivors are her husband, two daugh-

ters, Elizabeth and Elinore, and two sons, Sigurd B. and Adolf.

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Dr. M. H. Wirig of Madison attended a two weeks postgraduate course in surgery at the U. S. Naval Medical School in Washington, D. C., in June.

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Ninety-two physicians from Wisconsin registered at the American Medical Association meeting at Cleveland, June 12–15. The list of physicians follows:

Adams, Sylba, of Hayward.
Bach, Mark J., Milwaukee.
Banister, Edwin B., Appleton.
Bannen, W. E., La Crosse.
Baldwin, R. M., Beloit.
Belknap, Elson L., Milwaukee.
Bennett, William H., Kenosha.
Brumbaugh, E. V., Milwaukee.
Brussock, Walter A., Milwaukee.
Buerki, R. C., Madison.
Carey, Eben J., Milwaukee.
Chapman, Vernon A., Milwaukee.
Christiansen, C. A., Superior.
Clark, Burton, Oshkosh.
Comstock, Elizabeth, Arcadia.
Crosley, G. E., Milton.
Cushing–Lippitt, Eleanore, Milwaukee.
Donohue, W. E., Manitowoc.
Echols, Chester M., Milwaukee.
Edwards, Wilmer C., Richland Center.
Eisenberg, Philip P., Milwaukee.
Evenson, Earl E., Wittenberg.
Ewell, George H., Madison.
Farrell, H. J., Milwaukee.
Fellman, George H., Milwaukee.
Fletcher, Wm., Salem.
Foerster, Harry R., Milwaukee.
Frenzel, W. C., Wausau.
Frost, William D., Madison.
Gallaher, David M., Appleton.
Griffith, Joseph C., Milwaukee.
Hahn, Paul R., Racine.
Heidner, Albion H., West Bend.
Heise, Herman A., Milwaukee.
Hermann, Alfred H., Milwaukee.
Herner, William L., Milwaukee.
Hipke, Lucius W., Milwaukee.
Howard, Merle Q., Wauwatosa.
Hugh, G., Milwaukee.
Jackson, Arnold S., Madison
Jamieson, R. D., Racine.
Janney, Francis Rush, Wauwatosa.
Judd, Merrill H., Milwaukee.
Kasak, Michael, Wauwatosa.
Kassowitz, K. E., Wauwatosa.
Kramoris, Fred H., Milwaukee.
Kearns, Walter M., Milwaukee.
Kristjanson, H. T., Milwaukee.
Kurten, Russell M., Racine.
Leeson, Fred W., Beloit.
Long, Chester W., Milwaukee.
Mackoy, Frank W., Milwaukee.
Madison, Frederick W., Milwaukee.
Mantell, Francis J., Veterans Administration.
Marshall, Victor F., Appleton.
McCormick, Stuart A., Madison.
McGary, Lester, Madison.
MacIntosh, R. L., Madison.
McMahon, Henry O., Milwaukee.
Middleton, William S., Madison.
Monroe, Maurice E., Hartford.
Nause, F. A., Sheboygan.
Nuzum, Thomas O., Janesville.
Oesterlin, Ernst J., Milwaukee.
O'Hora, Clarence M., Beaver Dam.
O'Malley, Wm., Milwaukee.
Pessin, S. B., Madison.
Podlasky, Harry B., Milwaukee.
Pohle, E. A., Madison.
Rees, T. H., Manitowoc.
Reifenrath, I. B., Milwaukee.
Rhea, Clarence W., Veterans Administration.
Ryan, Wm. A., Milwaukee.
Satter, O. E., Prairie du Chien.
Schaefer, A. A., Milwaukee.
Schmidt, Erwin R., Madison.
Schmit, Felix, Milwaukee.
Schneller, E. J., Racine.
Schwartz, A. B., Milwaukee.
Seeger, Stanley J., Milwaukee.
Sevringhaus, Elmer L., Madison.
Sleyster, Rock, Wauwatosa.
Smith, Joseph F., Wausau.
Smith, L. D., Milwaukee.
Squier, Theodore L., Milwaukee.
Stemper, Irene T., Oconomowoc.
Sullivan, Arthur G., Madison.
Sullivan, Eugene S., Madison.
Taylor, J. Gurney, Milwaukee.
Waters, Ralph M., Madison.
Williamson, Geo. H., Neenah.
Wood, C. A., Waukesha.

DR. LITTLE TO SPEAK

Dr. C. C. Little, former President of the University of Michigan and presently executive Secretary of the American Society for the Control of Cancer will give a public address on this subject on July 18th at Madison. The address will be given at 3:30 in the afternoon of the 18th in Bascom Hall and the physicians are particularly urged to attend.

BIRTHS

A daughter to Dr. and Mrs. Arne C. Gorder, Milwaukee, on May 5th.

A daughter to Dr. and Mrs. Carl W. Eberbach, Milwaukee, on May 8th.

A daughter to Dr. and Mrs. H. R. Ausman, Milwaukee, on May 11th.

A daughter to Dr. and Mrs. A. F. Kustermann, Milwaukee, on May 14th.

MARRIAGES

Dr. C. S. Stern, West Allis, to Dr. Ruth Schoenkerman of Milwaukee on June 17th at Temple Beth Israel.

Dr. Robert F. Purtell, Milwaukee, to Miss Florence McCormack at St. Rose of Lima church, Milwaukee.

Dr. Palmer R. Kundert, Madison, to Miss Kathryn Elizabeth Mauermann, daughter of Dr. J. F. Mauermann of Monroe on June 19th.

Dr. R. C. Thompson of Cumberland to Miss Alberta Shelby, St. Paul, at Duluth, Minnesota, on June 9th.

DEATHS

Dr. F. J. Broghammer, Superior, died suddenly of heart disease on May 26th while driving his automobile.

Dr. Broghammer was born in Decorah, Iowa, August 14, 1888. He received his medical education at Marquette University School of Medicine, graduating in the year 1913. He served internship at St. Mary's Hospital in Duluth.

He was a member of Douglas County Medical Society, the State Medical Society, and the American Medical Association.

Besides his widow, Dr. Broghammer is survived by four children, Mary Margaret, Anna Louise, Carolyn and Charles.

Dr. J. C. Doolittle, Lancaster, died of heart disease on May 17th.

We was born in Brodhead, Wis., July 6, 1883. He attended Northwestern University School of Medicine for two years and received his M.D. degree from the Wisconsin College of Physicians and Surgeons of Milwaukee in 1907. For many years Dr. Doolittle, together with his brother, Dr. S. W. Doolittle, operated the Doolittle Hospital at Lancaster.

He was a member of the Grant County Medical Society, the State Medical Society, and the American Medical Association.

Surviving are his widow, a son, John, a student at the University of Wisconsin, and one daughter, Helen.

Dr. Eugene P. Ellenson, Chippewa Falls, died suddenly of heart disease at his home on June 17th.

Born in La Crosse in 1869, he came to Eau Claire with his parents at an early age. He attended Beloit College, Valparaiso Medical College, and received his degree from Rush Medical College in the year 1892. He came to Chippewa Falls where he became associated with the late Dr. C. A. Hayes but after a few years he established his own practice.

Dr. Ellenson was a member of the Chippewa County Medical Society, the State Medical Society, and the American Medical Association.

Survivors are one son, Eugene A. Ellenson of Chippewa Falls, and a brother, Arthur, of Seattle, Washington.

Dr. E. A. Ruka, Muscoda, died of heart disease on May 26th in his office while caring for victims of an automobile accident.

Dr. Ruka was born in the year 1890 and was a graduate of Rush Medical College in the year 1915. He had practiced in Muscoda for twelve years.

He was a member of Grant County Medical Society, the State Medical Society, and the American Medical Association.

He is survived by his widow and one daughter, Mary Ann.

Dr. J. P. Zohlen, Sheboygan, died of agranulocytosis on June 2nd at St. Nicholas Hospital, Sheboygan.

Dr. Zohlen was born in Germany on September 5, 1886. He came to Sheboygan with his parents in 1897. Graduating from St. Lawrence College, Mount Calvary in 1909, he attended St. Louis University School of Medicine and Marquette University School of Medicine from which he received his degree in 1913. He came to Sheboygan in 1913 and had practiced there up to the time of his death. He was President of the staff of the Sheboygan Clinic.

He was a member of the Sheboygan County Medical Society, of which he was President, and was a member of the State Medical Society and the American Medical Association.

Dr. Zohlen is survived by his widow and one daughter, Imogene, aged two.

Dr. S. F. Rudolf, Green Bay, died on May 16th. He was born in the year 1879 and was a graduate of Northwestern University Medical School in 1905. He was a brother of Dr. A. J. Rudolf of Milwaukee.

He is survived by his widow, one son and two daughters.

Frank C. Studley, Milwaukee, was born January 23, 1869 in New York City. He was the son of a physician, William H. Studley, a graduate of Columbia University and an ordained Episcopal minister.

He was a graduate of Lawrence College at Appleton and of the Medical School at Columbia University (1893) from which his father had graduated in 1854.

He served his internship at the Sealey Hospital in New York and after the usual European post-graduate expedition came to Milwaukee where he associated himself for a time with Dr. Levings in the general practice of medicine and surgery.

About the year 1898 the Riverside Sanitarium and Woman's Hospital was opened through his efforts and enterprise. It was originally planned primarily as a surgical hospital but soon metamorphosed by a process of natural selection and popular demand into a private sanitarium and hospital for the care of neurological and psychiatric patients and allied semi-chronic and chronic invalids.

He became early interested, through this type of work in medico-legal problems, and was a leader in efforts to obtain constructive legislation and generally improve the intelligent efforts of society and the state in its attitude toward, and treatment of, the problems of criminology and insanity or mental

disease. His views on this general subject were admirably set forth in a paper read before the 62nd Annual Meeting of the State Medical Society in June 1908 entitled "The Present Status of Medical Expert Testimony On Insanity—A Plea for Corrective Legislation," which treatise resulted in the appointment of a special committee by the society for the purpose of bringing about, if possible, remedial legislation.

His keen interest in the study of the criminal and the psychopath was further exemplified in a visit of several days, which he made a number of years ago to the State Prison at Waupun for the purpose, as he expressed it, of "self illumination,"—and as a result of which visit he was enabled to make many constructive and valuable suggestions for the treatment to depend, as he said, upon his (the criminal's) mental make up, differentiating between the "born or habitual criminal" who needs segregation for the protection of society, and the other type who has, perchance, committed a crime in the heat of passion, and who should have temporary confinement to permit of "change of attitude and habits."

He contributed many papers to various medical journals, and his valuable work in connection with forensic medicine is a matter of common knowledge —witness his services in connection with the John Schrank trial following the attempted assassination of Theodore Roosevelt, his connection with the Geo. Willoughby and E. Roy Tompkins trials and a host of others.

The following extracts from the Life and Character of his father (William Studley) written by Dr. J. R. MacGregor in 1882 might well grace his own epitaph.

> "Perhaps not the least positive quality with which he was endowed was the power of expressing his views in didactic discussions. It was marked by clearness of thought, and felicity of expression, (he had a most unusual command of English and a charming versatility of expression). No proposition clouded in a misty atmosphere was thrown forward tentatively; the statement was always made showing that the subject, no matter what it was, had been tried in his crucible, and not only did he entertain definite opinions on it, but they generally gave evidence that it had been inspected from more than one standpoint of observation."

and again

> "In that attrition of intellect which occurs when those of extraordinary endowments are brought together, by which the faculties become sharpened, and are refined as it were through a personal magnetism, which in the highest order of society it is considered the greatest complement to shine, he was at ease; and was able to impart as well as to acquire.
>
> "The gloss of a surface knowledge suited neither his taste nor his habits. There was no satisfaction in a comprehension that did not sink its roots deeply in the foundations which truth and its logical deductions would warrant; and his powers of analysis were of that acute nature as to readily exclude all that was extraneous and misleading."

We may imagine him conveying somewhat the following message to us tonight:

> "Not in the sunshine, not in the rain;
> Not in the night of the stars untold
> Shall we ever all meet again
> Or be as we were in the days of old,
> But as ships pass and more cheerily go,
> Having changed tidings far out at sea.
> Though I am richer of them I know
> They are not poorer, I trust, by me."

A memorial presented before the Milwaukee Academy of Medicine by Herbert W. Powers, M.D., Chairman of the Academy.

SOCIETY RECORDS

New Members

S. Simenson, Dallas.
Kenneth G. Bulley, Statesan.
Chas. F. Fishback, Sharon.
Lawrence G. Patterson, Waupaca.

Changes in Address

W. E. Allen, Albany to Rock Island Bank Bldg., Rock Island, Ill.

L. J. Bennett, Fort Atkinson to 625—57th St., Kenosha.

CORRESPONDENCE

ASKS COOPERATION

TREASURY DEPARTMENT
Public Health Service

Washington, June 12, 1934.

J. G. Crownhart, Editor,
Wisconsin Medical Journal,
119 E. Washington Avenue,
Madison, Wisconsin.

Dear Sir:

Your attention is invited to the accompanying morbidity report of the venereal diseases for the month of April, 1934. This statement is prepared monthly by the Public Health Service, and because of the widespread prevalence of the venereal diseases is of much importance to physicians and other individuals interested in the prevention and eradication of syphilis and gonorrhea. It is possible that you may find this statement of sufficient significance to publish it in your Journal regularly. A copy will be mailed to you in the future each month.

It is hoped that by releasing this statement the Public Health Service may assist the State and local

boards of health in interesting the individual physicians of the United States in the more thorough reporting of the venereal diseases. The present trend is to neglect the submission of such morbidity reports, yet the extensiveness of venereal disease prevalence can never be ascertained without the thorough cooperation and assistance of all of the physicians of the country. It is hoped that the publication of the morbidity reports by States may stimulate a spirit of friendly rivalry among physicians and health officers responsible for this activity.

Respectfully,

H. S. Cumming,
Surgeon General.

American Medical Association Again Condemns Sickness Insurance and Outlines Position on Scientific and Economic Questions

DECLARING that all forms of voluntary health insurance inevitably lead to the institution of compulsory health insurance and announcing a ten point outline of its position on the entire subject of the delivery of medical service, the American Medical Association, through its House of Delegates, took one significant step after another in its Cleveland sessions to protect the public interest. Immediately following the adoption of their ten point "measuring stick" for basing its position on any or all proposed changes in methods of delivery of medical service, the House of Delegates went on record as condemning the American College of Surgeons for attempting to speak for the medical profession when, the day prior to opening the Cleveland meeting, the College publicly commended certain forms for the prepayment of both hospital and medical services.

Dr. James McLester of Birmingham, Alabama, was selected as President-elect while Dr. George Reinle, former president of the California Medical Association, Oakland, was elected to the vice-presidency. Dr. Olin West, Chicago, was given an ovation following his unanimous re-election to the Secretaryship. Other officers selected were:

Treasurer—Dr. Herman L. Kretschmer, Chicago, re-elected.

Speaker—Dr. F. C. Warnshuis, Grand Rapids, Mich., re-elected.

Vice-Speaker—Dr. N. B. Van Etten, New York City, re-elected.

Trustees—Dr. Roger I. Lee, Boston, Mass.; Dr. Allen H. Bunce, Atlanta, Ga., re-elected.

President Bierring announced that he had appointed Dr. E. C. North of Kansas City to be a member of the Judicial Council and both Drs. Fred C. Moore of Iowa and John H. Musser of New Orleans to be members of the Council on Hospitals and Medical Education. The Canadian Medical Association was invited to join in the 1935 scientific sessions which will be held at Atlantic City.

The abuse of medical facilities in Washington, D. C., and an announced policy at New Orleans, both drew fire from the House of Delegates. At the suggestion of delegates from the District of Columbia, the Association declared that the securing of free hospitalization and free medical services in government institutions by those legally not entitled to such service (congressmen, judges, senators and others holding political office) was regarded as "essentially unfair". At New Orleans it has been announced that 800 beds in the State Charity Hospital now will be devoted to the care of private patients and that revenue derived therefrom will be used by the state of Louisiana to repay on a proposed borrowing from the Public Works Administration at Washington of the sum of $9,800,000 for the building of public works in the state. This, the House of Delegates declared, was open "exploitation of the medical profession".

Throughout the five sessions of the House, major attention of the delegates was focused upon the many proposals from foundations, lay commercial groups, and others calling for some form of sickness insurance. While submitting that the position of the Associa-

tion had been repeatedly announced in prior sessions, the House adopted unanimously a special report prefaced by a declaration that the institution of medicine as it now exists in the United States has produced a record of health achievements that can be equalled by no other system wherever it may be found. The ten point yardstick for the measuring of the value of any form for the rendition of medical service follows:

First: All features of medical service in any method of medical practice should be under the control of the medical profession. No other body or individual is legally or educationally equipped to exercise such control.

Second: No third party must be permitted to come between the patient and his physician in any medical relation. All responsibility for the character of medical service must be borne by the profession.

Third: Patients must have absolute freedom to choose a duly qualified doctor of medicine who will serve them from among all those qualified to practice and who are willing to give service.

Fourth: The method of giving the service must retain a permanent, confidential relation between the patient and a "family physician." This relation must be the fundamental and dominating feature of any system.

Fifth: All medical phases of all institutions involved in the medical service should be under professional control being understood that hospital service and medical service should be considered separately. These institutions are but expansions of the equipment of the physician. He is the only one whom the laws of all nations recognize as competent to use them in the delivery of service. The medical profession alone can determine the adequacy and character of such institutions. Their value depends on their operation according to medical standards.

Sixth: However the cost of medical service may be distributed, the immediate cost should be borne by the patient if able to pay at the time the service is rendered.

Seventh: Medical service must have no connection with any cash benefits.

Eighth: Any form of medical service should include within its scope all qualified physicians of the locality covered by its operation who wish to give service under the conditions established.

Ninth: Systems for the relief of low income classes should be limited strictly to those below the "comfort level" standard of incomes.

Tenth: There should be no restrictions on treatment or prescribing not formulated and enforced by the organized medical profession.

If it is determined in a community that some experiment to change or improve the method of administering medical service is desirable, observance of these principles will remove many of the "disturbing influences" from such an experiment. In all such experiments, attention must be sharply focused on the quality of medical service.

Other important actions taken by the House of Delegates follow:

1. Physicians should be included in the state and county administrative staffs of the Federal Emergency Relief Administration.
2. Staffs of hospitals approved for interne training shall be composed exclusively of members of the American Medical Association.
3. Recommended attention to the field of radiology to the end of placing the use of the x-ray for both diagnostic and therapeutic purposes under the direct control and supervision of licensed physicians.
4. Adopted three amendments to the Principles of Medical Ethics:
   A. Clarifying that section referring to contract practice.
   B. Warning clinics and similar institutions that group practice must abide by the same Principles that bind the individual physician.
   C. Declaring unethical the resale of physicians' services by lay groups or institutions when the groups or institutions derive direct profit from such sale.
5. Asked that contract surgeons of the Spanish–American War be granted the same rights already extended to contract nurses.
6. Urged State Medical Societies to appoint special committees to confer with similar committees of the Bar to the end of abolishing evils arising in the field of expert testimony.
7. Referred to the Council on Medical Education and Hospitals for study a resolution calling for abolishing illegal practice connected with the administration of anesthesia by those not licensed to practice medicine.
8. Asked appointment of special committees by the A. M. A. and component state societies to contact all interested groups, particularly labor and industry, to the end of bringing about a

clear understanding of the position of medicine with reference to health insurance.

9. Condemned the exploitation of dangerous drugs and those of doubtful value direct to the lay public by means of radio advertising, urging the Federal Radio Commission to take proper steps to end all "patent medicine" advertising. The House also asked the Board of Trustees of the A. M. A. to establish a "Clearance Bureau" to serve all radio stations in advising concerning the true nature of drug advertising submitted to them.
10. Asked the Council on Medical Education and Hospitals to take proper steps to end abuses resulting from the sale to the public of the services of roentgenologists by hospitals at a profit to the institution. The House declared that this constituted a form of exploitation of the profession to the detriment of the public nature of the service sought to be rendered.
11. Refused to consider resolutions calling upon the Association officially to participate in studies of the dangers and values of contraceptives and study the entire subject of "birth control."
12. Called upon the Board of Trustees to investigate the subject matter of medical patents, their use by foundations and other institutions together with the revenue derived therefrom and the effect of the present situation upon the practice of medicine.
13. Reapportioned seats in the House of Delegates. Wisconsin retains its three delegates.
14. Extended an invitation to the Canadian Medical Association to join scientific sessions in the 1935 meeting at Atlantic City.

MEDICAL ETHICS

Three amendments to the Principles of Medical Ethics adopted at the Cleveland session follow:

1. Lay organizations. "It is unprofessional for a physician to dispose of his professional attainments or services to any lay body, organization, group or individual, by whatever name called, or however organized, under terms or conditions which permit a direct profit from the fees, salary, or compensation received to accrue to the lay body or individual employing him. Such a procedure is beneath the dignity of professional practice, is unfair competition with the profession at large, is harmful alike to the profession of medicine and the welfare of the people, and is against sound public policy."

2. Practice by Clinics. WHEREAS, The growth of groups and clinics has intensified the economic competition between them and individual practitioners, and

WHEREAS, The common custom of employment of "business managers" by the clinics and groups has had a tendency to submerge the ethical principles governing competition among doctors, and

WHEREAS, Clinics and groups were little known, were not serious competition and were not mentioned when the Principles of Ethics were formulated in 1912; therefore be it resolved that a section be added to read:

"The ethical principles actuating and governing a group or clinic are exactly the same as those applicable to individuals. As a group or clinic is composed of individual doctors each of whom whether employer, employee or partner is subject to the principles of ethics herein elaborated, the uniting into a business or professional organization does not relieve them either individually or as a group from the obligation they assume when entering the profession."

3. Contract Practice. "By the term 'contract practice' as applied to medicine is meant the carrying out of an agreement between a physician or group of physicians, as principals or agents, and a corporation, organization or individual, to furnish partial or full medical services to a group or class of individuals for a definite sum or fixed rate per capita.

"Contract practice per se is not unethical. However, certain features or conditions if present make a contract unethical, among which are. (1) When there is solicitation of patients, directly or indirectly. (2) When there is underbidding to secure the contract. (3) When the compensation is inadequate to assure good medical service. (4) When there is interference with reasonable competition in a community. (5) When free choice of physician is prevented. (6) When the conditions of employment make it impossible to render adequate service to the patients. (7) When the contract because of any of its provisions or practical results is contrary to sound public policy.

"Each contract should be considered on its own merits and in the light of surrounding conditions. Judgment should not be obscured by immediate, temporary or local results. The decision as to its ethical or unethical nature must be based on the ultimate effect for good or ill on the people as a whole."

All three amendments to the Principles of Ethics were proposed by the Judicial Council.

WISCONSIN DELEGATES

All three Wisconsin delegates were in attendance throughout all five sessions of the House of Delegates. Dr. Joseph F. Smith, Wausau, was appointed a member of the Reference Committee on Legislation and Public Relations and Dr. J. Gurney Taylor, Milwaukee, was appointed Chairman of the Reference Committee on Reports of Officers.

Dr. W. E. Bannen, La Crosse, took the floor of the House to support the resolution from Illinois declaring that all members of the staffs of hospitals approved for interne training shall, in the future, be members of the American Medical Association. The resolution had been reported for killing but following discussion from the floor, the House reversed the committee action by an overwhelming vote.

"The time has come," declared Dr. Bannen, "when the profession must be united and speak with a single voice if we are to prevail against the forces that would destroy the institution of medicine. In La Crosse all hospital staff members are required to be members of the American Medical Association. At such a time as this, when membership costs less than three cents a day, it is utterly absurd for the A. M. A. itself to certify hospitals for interne training whose staff members are not sufficiently interested in the profession to be a member of the only organization that seeks to advance the science of medicine and maintain the rights of its practitioners."

Dr. Smith, whose resolution a few years ago was responsible for the creation of the Council on Physical Therapy, piloted through the House a second resolution strengthening the work of the Council. Dr. Rock Sleyster, Wauwatosa, was present throughout the session as a member and Vice-Chairman of the Board of Trustees.

College of Surgeons Supports Foundations on Health Insurance

DECLARATIONS of the Board of Regents of the American College of Surgeons, the day prior to the opening of sessions of the American Medical Association advocating a procedure for furnishing medical and hospital care by the insurance method, drew fire from the House of Delegates at the Cleveland session. Asserting that the College did not speak for the profession as a whole and that such statements gave "aid and assistance to those bodies and individuals attempting to revolutionize medical practice", the House adopted a resolution condemning the action of the A. C. S. The report of the Judicial Council adopted by the House without a dissenting vote follows:

"A resolution introduced by Dr. Whalen of Illinois calls attention to a recent action by the Medical Service Board of the American College of Surgeons approved by its Board of Regents, advocating and publicizing a procedure for furnishing medical and hospital care for certain classes of the population. No consideration appears to have been given to policies or procedure previously adopted by the American Medical Association of which the Board of Regents are members. The American Medcal Association is the one organization representing the entire body of physicians constituting the medical profession and by virtue of that fact is the only organization qualified to speak for the varying interests and ideas of the profession as a whole.

"Recurring proposals concerning the entire practice of medicine from small sections of the profession without due regard to the policies of the entire profession as represented by the American Medical Association when presented to the public through other channels than the representative body are confusng to the public mind, harmful to the profession and give aid and assistance to those bodies and individuals attempting to revolutionize medical practice.

"The Judicial Council, therefore, recommends the adoption of the resolution as follows:

WHEREAS, The American Medical Association, including 100,000 physicians, is the only democratic body representing the organized profession of this country through delegates regularly elected through county and state medical societies, and

WHEREAS, Other medical organizations and groups, representing selected groups of specialists, have, from time to time, issued pronouncements of policies in the field of medical economics and medical practice, which do not represent the views of organized medicine, and which purport to guide the medical profession and the public in the administration of medical affairs, and

WHEREAS, The House of Delegates of the American Medical Association has repeatedly condemned the issuing of such announcements and policies, which seriously embarrass the attempts of this organization to secure adequate care for the health of the American people and to protect the ideals of the medical profession, and

WHEREAS, The Board of regents of the American College of Surgeons, assembled in Chicago on Sunday, June 10, promulgated a policy including a prepayment plan for medical care, restricted to so-called "Approved Hospitals" to members of the staffs of such hospitals, and to physicians acceptable to such staffs, and

WHEREAS, This action of the Board of Regents of the American College of Surgeons has been spread to the people of the United States through the public press on the opening day of the annual session of this House of Delegates,

Therefore, be it resolved, That the House of Delegates of the American Medical Association express its condemnation of such tactics and of this apparent attempt of the Board of Regents of the American College of Surgeons to dominate and control the nature of medical practice, and

Be it further resolved, That the House of Delegates request the Board of Trustees of the American Medical Association and the Judicial Council to ask the Board of Regents of the American College of Surgeons, who are themselves members of the American Medical Association, to explain the reasons for their action and to justify the attempt by this small group within a specialistic organization to legislate for all the medical profession of this country, truly represented only by the American Medical Association.

ACTION OF A. C. S.

The action of the American College of Surgeons which was given to the public press and commented on editorially in a number of Wisconsin papers was an action by the Medical Service Board of the American College of Surgeons. The report of the Medical Service Board follows:

1. The American College of Surgeons affirms its interest and its desire to co-operate with other agencies looking toward the provision of more adequate medical service to the whole community.
2. The College believes that it is the duty of the medical profession to assume leadership in this movement and to take control of all measures directed to this end.
3. Encouragement should be given to the trial of new methods of practice designed to meet these needs, and a careful evaluation of their success should be the duty of the medical profession before they are offered for general adoption. All such new and experimental methods of practice must be conducted strictly in accordance with the accepted code of ethics of the medical profession in order that the interests of the patient and of the community may be protected.
4. The College recognizes for immediate study four groups of the population for whom more adequate medical service should be made available, as follows:
   a. The indigent.
   b. The uneducated and credulous members of the community.
   c. Those who because of limited resources are unable, unaided, to meet the costs of serious illness and hospitalization.
   d. Those living in remote districts where adequate medical service is not obtainable.
5. The care of the indigent sick should be a direct obligation upon the community and, (unless otherwise compensated by intangible benefits such as staff and teaching appointments, opportunity and experience) physicians fulfilling this public service should receive remuneration.
6. The College should work in cooperation with other medical groups in order to dispel the ignorance and credulity of the public, and to bring the people to a proper realization of the protective and curative resources of modern medicine.
7. The American College of Surgeons recognizes that the periodic pre-payment plan providing for the costs of medical care of illness and injury of individuals and of families of moderate means offers a reasonable expectation of providing them with more effective methods of securing adequate medical service.

A number of different plans for the organization of such services have been proposed, although few have been in operation long enough to permit definite conclusions in regard to their success. It is to be desired that these experiments be continued. Conditions differ to such a degree in different parts of the country that a specific plan which is practicable in one place may require modification of details in other communities. The varying restrictions imposed by present insurance laws in different states further complicate the problem.

Periodic pre-payment plans providing for the costs of medical service may be divided into two classes:

A. Payment for medical service.
B. Payment for hospitalization.

It is suggested that plans for the payment of hospitalization alone (Class B) without provision for payment for medical service, may be considered the first project to be undertaken in the average community.

The American College of Surgeons believes that certain general principles can and should be established, the observance of which will tend to obviate known difficulties and dangers which may threaten the success of these special forms of medical service. These principles are as follows:

a. Periodic pre-payment plans for medical service should be free from the intervention of commercial intermediary organizations operating for profit. After deduction of the clerical costs of operation of the fund and such accumulation of reserve as may be advisable in the interest of the contributors or may be legally imposed, the full amount paid by the contributors should be available for medical and hospital services.

b. In the interest of the patient, the organization of plans for the periodic payment of medical and hospital costs must be under the control of the medical profession. The medical profession must act in concert with the hospitals and such other allied services as may be involved in the individual project, together with a group of citizens representative of the whole community and of industry who are interested in the successful operation of the plan.

c. The principle of free choice of the physician and hospital by the patient must be assured to the end that the responsibility of the individual physician to the individual patient shall always be maintained. When hospitalization is required, this choice must of necessity be limited to the physicians and surgeons who hold appointments on the staffs of the hospitals participating in the plan or to those physicians and surgeons who are acceptable to the hospital. It is further recommended that only approved hospitals be admitted to participation in such a plan.

d. The compensation of the physician and of the hospital should be estimated with due regard to the resources available in the periodic payment fund and should be based upon the specific services rendered.

e. The organization and operation of any plan of this type must be free from any features not in accordance with the code of ethics of the medical profession which code has been established for the protection of the patient.

f. The medical organizations participating in such a plan must assume the responsibility for the quality of service rendered.

8. Periodic pre-payment plans for medical and hospital service should eliminate many of the conditions which have brought about the development of industrial contract practice. Until such plans have been more widely established certain general principles are here formulated with a view to the elimination of the commercial features of such forms of medical service.

a. The Minimum Standard for Industrial Medicine and Traumatic Surgery of the American College of Surgeons should be accepted. This Standard is as follows:

MINIMUM STANDARD FOR INDUSTRIAL MEDICINE AND TRAUMATIC SURGERY

1. That the industry shall have an organized medical department, or service, with competent medical staff including consultants and adequate emergency dispensary and hospital facilities and personnel to assure efficient care of the ill and injured.
2. That membership on the medical staff shall be restricted to physicians and surgeons who are (a) graduates of scientific medicine holding the degree of Doctor of Medicine, in good standing and licensed to practice in their respective states or provinces; (b) competent in the field of industrial medicine and traumatic surgery; (c) worthy in character and in matters of professional ethics, that in the latter connection, the practice of the division of fees under any guise whatsoever be prohibited.
3. That there shall be a system of accurate and complete records filed in an accessible manner —a complete record being one which includes identification data; cause of illness or injury; nature and extent of illness or injury; detailed description of physical findings; special examinations such as consultations, clinical laboratory and x-ray; tentative or provisional diagnosis; treatment; prognosis with estimated period of disability; progress of illness or injury; final diagnosis; condition on discharge; end results; and such additional information as may be required by statute for Workmen's Compensation claims or for other purposes.
4. That all patients requiring hospitalization shall be sent to institutions approved by the American College of Surgeons.
5. That the medical department shall have general supervision over the sanitation of the plant and the health of all employees.

b. Physicians and surgeons, qualified as in paragraph 2 of the above Minimum Standard may properly be employed on a full-time or a part-time basis by industrial organizations to provide medical and surgical service for their employees, as follows:

i. To provide emergency service and first aid in injury or disease, and to provide adequate medical or surgical care for industrial injuries and diseases. Medical and

surgical care of the families of employees, and of employees themselves, except for emergency and industrial injuries and diseases, should be provided by the industrial physician only in remote districts where other adequate medical service is not available.

ii. To provide pre-employment and periodic physical examinations.

iii. To study the hazards of the particular industry and to cooperate with other agencies in effecting such measures as may be needed for the prevention of injury and disease.

iv. To keep accurate records such as may be required by local Workmen's Compensation laws, and so complete as to serve for scientific investigation of industrial hazards with a view to their further prevention. These records are privileged communications, subject always to due process of law.

c. The sale of a contract by an industrial organization to an individual physician or group of physicians for medical and/or hospital service for its employees encourages commercial competition and is to be condemned.

d. Unethical practices in publicity, advertising, solicitation, and competition, either of a professional or of a financial nature, must be eliminated.

e. The accepted code of ethics of the medical profession, which is designed to protect the best interests of the patient, should apply to industrial medical service as to all other forms of medical practice.

MEDICAL SERVICE BOARD,
G. HARVEY AGNEW,
CHARLES A. DUKES,
FRANKLIN H. MARTIN,
C. JEFF MILLER,
EUGENE H. POOL,
ARTHUR M. SHIPLEY,
J. BENTLEY SQUIER,
S. MARX WHITE,
BOWMAN C. CROWELL, *Secretary*,
ROBERT B. GREENOUGH, *Chairman*.

C. W. A. Medical Services

THE following statement regarding the payment of vouchers for medical services rendered to injured C. W. A. employees has just been received from the United States Employees' Compensation Commission. The complete statement follows:

A certain amount of delay in the settlement of vouchers for medical services rendered injured employees of the Civil Works Administration is unavoidable. Legislation extending compensation benefits to these employees was not approved until February 15, 1934, and the Commission has had to engage personnel and set up its organization to handle the large volume of additional work which is involved in the settlement of claims.

Before approving vouchers for medical services, it is necessary for the Commission to have received from the local Civil Works Administrators complete reports relating to the injury of the employee concerned. Since the entire work program was organized very quickly, some localities were slow in setting up the necessary local administration to take care of injury reports, and due to unfamiliarity of the personnel with the requirements and procedure, many reports of injury have been incorrectly filed, necessitating correspondence to obtain the information which was lacking.

In view of the problem presented, the Commission bespeaks the patience of physicians and others who have bills for medical services pending. Every possible effort is being made by the Commission to speed up the work of examining and certifying these claims for payment, and it is believed that within a short time considerable progress will be made in further expediting these payments.

NATIONAL BOARD EXAMINATION

Dr. J. Gurney Taylor, Milwaukee, member of the National Board of Medical Examiners, announced late in June the creation of the examining committee for Wisconsin. The examination in Part 3 (oral) was held for four candidates in Milwaukee on June 21, 22 and 23.

Members of the Wisconsin committee are: J. Gurney Taylor, Milwaukee, Chief Examiner; H. T. Kristjanson, first diplomate of the Board, Secretary, and the following as Associate Examiners: C. R. Bardeen, Joseph C. Bock, C. H. Bunting, Eben J. Carey, Paul F. Clark, F. Gregory Connell, Carl Henry Davis, Carl W. Eberbach, H. R. Foerster, W. E. Grove, W. J. Meek, W. S. Middleton, F. D. Murphy, W. D. Stovall and A. L. Tatum. Assistant Examiners are J. W. Harris, S. A. Morton and M. G. Peterman.

William Snow Miller Awarded the Trudeau Medal

THE Trudeau Medal, awarded annually by a committee on the foremost tuberculosis authorities in the United States to that individual who has made the most meritorious contribution on the "Cause, Prevention, or Treatment of Tuberculosis", has been granted for the year 1934 to Dr. William Snow Miller, Madison, Professor Emeritus of Anatomy at the University of Wisconsin. The announcement of the award was made at the Annual Meeting of the National Anti-Tuberculosis Association at Cincinnati late in May.

Dr. Miller is the ninth to receive the Trudeau Medal which was first awarded in 1926 to Dr. Theobald Smith. Subsequent awards have been made to Dr. E. R. Baldwin, Saranac Lake, 1927 Sir Robert Philip, Edinburgh, 1928; Dr. Eugene L. Opie, Philadelphia, 1929; Dr. Henry Sewall, Denver, 1930; Dr. Allen K. Krause, Tucson, 1931; Dr. Esmond R. Long, Philadelphia, 1932; Dr. Lawrason Brown, Saranac Lake, 1933.

Dr. Miller has been associated with the faculty of the University of Wisconsin since 1892 and is noted internationally for his work on the anatomy of the organs of respiration.

Dr. Wm. Snow Miller

New Frontiers

By THEODORE WIPRUD

Executive Secretary, The Medical Society of Milwaukee County

A RECENT study made by a group of nationally-known educators should give the medical profession pause for serious thought. Its announced purpose was "to map the present and chart the future of social studies" so that students might prepare themselves for the kind of society in which they would live.

Their conclusions were that "the old order of individualism is dying, a new age of collectivism coming to birth." To quote from the report, "almost certainly it will involve a larger measure of compulsory as well as voluntary cooperation of citizens in the conduct of the complex national economy, a corresponding enlargement of the functions of government, and an increasing state intervention in fundamental branches of economy."

There is no need to emphasize the implications of such views to the medical profession. Obviously, medicine too must chart its future course. It confirms the often expressed belief that individualism in medical practice will be maintained only if physicians see eye to eye on important issues. There is ample evidence that such unity does not always exist.

It is only fair to state that a similar situation exists in other groups, although seemingly not to the degree that it does among physicians. This is not due to the perversity of the medical man; he is, above all, an individualist. The very nature of his profes-

sion demands individual initiative and resourcefulness to a high degree. In most instances he alone bears the responsibility to his patients. In this personal relationship he cannot allow any interference without jeopardizing the patient's welfare. No thinking person, be he a physician or a layman, would contend that individualism in the practice of medicine should be abandoned or that a substitute should be found. In fact, there is no substitute, despite arguments to the contrary by so-called socially-minded enthusiasts who would minimize what has been learned from the time of Hippocrates down through the centuries.

Every age, however, presents its own problems, and great social upheavals are not infrequent. In recent years we have witnessed disturbances involving our social order which are unequaled in the history of civilization. Medicine has not been set apart, but has been very much in the heart of the conflict. It still remains to be determined whether individualism can be maintained in medical practice. The outcome will depend upon the strength and unity of medical organizations.

In this connection a paradoxical situation arises, for while we contend that the individualism of the physician must be maintained, he, as an individual, cannot meet the economic and social problems which face him today. It can be accomplished only by the concerted action of the medical profession. Complexities of our modern civilization have made organization necessary, because of the realization that only by organized effort can objectives be attained. The effectiveness of the organization depends, of course, upon the fusing of ideas and unity in the ranks. Often small groups attain this unanimity of purpose better than do larger organizations and are, therefore, more effective. Witness the strength displayed by minority groups in our government councils today.

It is with no thought of minimizing the splendid work done by organized medicine that we suggest that the physician does not always recognize these facts. He is apt to allow the individualistic qualities, which are all important in his practice, to carry over into the economic and social phases affecting his life, not appreciating the potent instrument at hand—his medical society. At times we find him indifferent, which is most deadly of all because nothing else can so completely destroy the effectiveness of a medical group.

If we agree thus far, what then do we mean when we speak of a unified medical group? Let us take for an example a mythical county medical society. This society stands out not because it counts among its members the majority or perhaps all of the physicians in the community, but, what is more important, there is unity of purpose. That does not mean a unanimity of opinion. Were this true nothing worthwhile might be looked for. It does mean that conflicting opinions can be so fused that objectives will be attained. The opinion is ventured here that in such organizations and in them alone lies the hope for the future of medical practice in this country.

May we suggest that to attain such perfection in organization it is necessary to suppress the individualism which is so all important in medical practice. This must be done to the extent that if the issue at stake is vital enough the physician will consider the welfare of his profession even though it affects his personal interests. It is a pleasure to record that to my knowledge a number of instances of this kind have happened and the sacrifice was made without complaint. Who would deny that it is of such stuff strong medical groups are created?

What then should be the objectives of a well-organized county medical society? These are so excellently set forth in the Constitution and By-Laws of The Medical Society of Milwaukee County that they are worthy of being quoted here:

> "The purposes of this Society shall be . . . . to extend medical knowledge and advance medical science; to elevate and make effective the opinion of the profession in all scientific, legislative, public health, material and social affairs; to promote friendly intercourse between its members; to guard and foster the material interest of its members and the medical profession generally; and to establish, maintain, and operate such agencies as shall be deemed advisable to promote and aid the material and professional advancement of its members; . . ."

The American Medical Association and state medical societies are no stronger than

their county units. That being true, the loosely-knit organizations of a decade or two ago are as outmoded as the Model T car. Just as there are still Model Ts on the road, so there are the old type county medical societies in existence which concern themselves largely with infrequent scientific meetings. Such societies, of course, do not pretend to cope with the many problems which press from all sides, nor do they assume any degree of leadership.

MODERN LEADERSHIP

The modern county medical society organizes itself efficiently to meet the situations existing in the community. Conditions, of course, vary, but there are functions common to all medical societies, some of which we may profitably consider.

Experience has shown that adequate representation of each section of the community on committees inspires confidence and strengthens the organization. This cannot always be done without sacrificing efficiency. Within reason the balance lies in favor of the former course, because confidence and interest are all important.

It is, perhaps, superfluous to mention the scientific program, yet it is generally agreed that a word of caution is needed so that societies in their zeal to cope with general problems of the profession will not neglect one of their most important functions.

Rapid strides are being made in scientific knowledge. Every county medical society owes it to its members to keep abreast of the times, and monthly and bi-monthly meetings of general nature are not usually adequate. Carefully developed postgraduate courses are now commonly sponsored by county medical groups, especially the larger organizations. It is possible for even the smallest society to offer adequate courses at little or no cost by drawing upon nearby qualified physicians to assist.

Perhaps no activity of the county medical society is more important at the present time than that in the field of public health. We all agree that the entire responsibility for public health measures should not and cannot be assumed by public health agencies. Health officials are frank to admit that without the cooperation of physicians in private practice a public health program is not fully effective. We would go further and say that any public health program is inadequate unless it is built around the private practitioner of medicine. County medical societies, if they accept the responsibilities which are theirs, are called upon for leadership in public health work.

In Milwaukee County the Medical Society sponsors clinics and courses in preventive medicine, immunization clinics, public health lectures, radio health talks (in cooperation with the State Board of Health), and a speakers' bureau. A substantial portion of this program is of an educational nature and is carried on among the laity. My personal feeling is that all of these activities have returned good dividends in knowledge, good will, and public support. The program is still in its early stages of development, but its effectiveness is becoming more apparent as time goes on. It is the type of program which a county medical society must sponsor if its members are not to lose contact with preventive medicine.

The public health program of The Medical Society of Milwaukee County cannot be dismissed without mention of the Speakers' Bureau, which has been very successful due to the untiring efforts of the Woman's Auxiliary, whose members aid in placing speakers before lay audiences. At the time of its establishment the Bureau's value was questioned. There is no longer any such question, for evidence is at hand that lay organizations and individuals who knew nothing of the Medical Society are turning to it as a source of information.

Economics is a live topic both within and without the medical profession, and it is a subject which a county society cannot ignore. Surveys, investigations, and conferences,—whatever other value they may have,—are exceedingly important from an educational standpoint. When opinions have been sufficiently crystallized there will be action.

Again we cite an experience in Milwaukee County. For several years there has been a strong demand for the elimination of the panel under the Workmen's Compensation Law. It was concluded that a desirable

method of accomplishing this would be by cooperating with insurance companies. Following conferences with representatives of major insurance companies in Milwaukee, a plan was agreed upon which would, to a degree, provide free choice of physician by patient. More recently the largest underwriter of compensation insurance in the State voluntarily agreed to post the Society's list of physicians who had expressed a desire to do industrial work. This suggestion was accepted as an experiment worthy of trial.

It is coming to be recognized that no small factor in the physician's retaining his independent status will be his active interest in civic affairs. Public welfare demands that his voice be heard. Undoubtedly, one of the surest ways of his accomplishing this is for him to hold public office.

That there are difficulties in a physician's active participation in public affairs is apparent, but under our form of government only those engaged in public service or represented in governmental councils seem to obtain proper hearing. Logically then, an active county medical society will so organize that its participation in public affairs will be effective.

There is no need to go into further detail in considering a county medical society program. The larger the organization the more extensive its activities. Many large societies operate agencies such as telephone exchanges and collection and credit bureaus. All of these, if properly conducted, are valuable aids to the physician, for they do protect his economic interests. It is important to mention, however, that the success of these agencies,—in fact, of the whole program,—depends upon the friendly and understanding spirit engendered among the membership. This is more than a mere platitude, as experience has demonstrated. Over a period of several years social activities have been emphasized in Milwaukee County. Following each scientific program there is a social hour devoted to fraternizing of the profession. On many occasions members have mentioned the friendly spirit in evidence or that they have learned "so-and-so" is a good fellow. Officers have concluded that the cost of the social hour, during which luncheon is always served, is one of the Society's best investments.

THE GREAT NEED

If we are to be honest we must admit that county medical societies, no matter how well organized, are still not completely effective. As a matter of fact, they are passing through an evolutionary stage, and many of their activities are merely stop gaps until experience has shown them worthy of permanent adoption. In most fields, except the purely scientific, county medical societies are pioneering on new frontiers. Many resources at their command still remain to be used. To what extent this will be done will depend not only on the interest but also on the financial support given by their members. Accomplishments, with some variation, are in proportion to what has been invested. Therefore, in speaking of the resources of medical societies, it is obvious that if they are drawn upon to the fullest extent there must be an adequate investment. It has been contended with what appears to be considerable justification that until the medical profession recognizes this fact societies will be only partially effective.

Some complaints have been heard that the present dilemma of the medical profession should have been foreseen: that the expansion of public health agencies, the growth of contract practice, and the development of institutions for the care of the indigent sick should have had the guiding hand of medicine. As a matter of fact, individual physicians did foresee many of the present difficulties, but the medical profession was not so organized that action was possible. We might well be wary of making such complaints, for there loom on the horizon problems which are of equal magnitude. After all, it would have required remarkable sagacity to have prophesied the conditions under which we now live. Will physicians of the present show more foresight? What constructive ideas will the profession offer in the face of trends which are distinctly disturbing to medicine? Will county medical

societies assume leadership in their particular communities, using all resources at their command?

Only the medical profession can answer these questions. If the answer is in the affirmative we shall be assured a unified medical profession, which is the great need of organized medicine today.

Plans Nearing Completion for Ninety-Fourth Anniversary Meeting at Green Bay, September 11-12-13-14.

WITH a scientific program that will embrace upwards of eighty presentations, all plans for the September annual meeting of the State Medical Society at Green Bay are rapidly nearing completion. Dr. Arnold S. Jackson, Madison, Chairman of the Committee on Scientific Work, announced late in June that out-of-state guests at the meeting will include:

Dr. Olin West, Secretary and General Manager of the American Medical Association, Chicago.
Dr. Gilbert J. Thomas, Assoc. Prof. of Urology, Univ. of Minnesota.
Dr. Herman Kretschmer, Clin. Prof. of Surgery, Rush Medical College, Chicago.
Dr. Fred J. Hodges, Prof. of Radiology, Univ. of Michigan.
Dr. Leo G. Rigler, Prof. of Radiology, Univ. of Minnesota.
Dr. Harry Mock, Assoc. Prof. of Surgery, Northwestern University.
Dr. Loyal Davis, Assoc. Prof. of Surgery, Northwestern University.
Dr. Herbert Giffin, Mayo Clinic, Rochester.
Dr. Ellis Fischel, Assoc. Prof. of Surgery, St. Louis Univ. School of Medicine, St. Louis, Mo.
Dr. Robert Dinsmore, Cleveland Clinic, Cleveland, Ohio.
Dr. George Eusterman, Mayo Clinic, Rochester.
Dr. E. W. Ryerson, Prof. of Orthopedic Surgery, Northwestern University.
Dr. Dean Lewis, Retiring President of the American Medical Association, Baltimore.
Dr. W. R. MacAusland, Boston.
Dr. E. Starr Judd, Mayo Clinic, Rochester.
Dr. James Hayes, Minneapolis.

Over sixty papers will be presented during the three-day session by members of the Society in addition to dry clinics and round table discussions.

Local arrangements for the Green Bay sessions are in charge of Dr. Emil Nadeau, General Chairman. Dr. Nadeau has appointed the following committee chairmen: Clinics—Dr. J. R. Minahan; Entertainment—Dr. R. L. Cowles; Hotels and Housing—Dr. A. J. McCarey; Golf—Dr. W. P. Tippet; Reception—Dr. E. S. McNevins, and Smoker—Dr. W. E. Mueller.

HOTEL RESERVATIONS

All requests for hotel reservations for the Green Bay meeting should be addressed to Dr. A. J. McCarey, Northern Bldg., Green Bay. No reservations will be handled by the hotels direct to avoid confusion.

While early reservations are desirable, Dr. McCarey assures members and their wives of ample accommodations for the September meeting.

Topics of general interest will be presented before the several general sessions during the three days of the meeting while choice of specialized programs will be afforded through several sectional meetings. Section topics and symposia will include the subjects of medicine, surgery, urology, obstetrics and gynecology, radiology, fractures, orthopedics, cancer, cardio-vascular conditions, nervous and mental diseases and diseases of the gastro-intestinal tract.

The scientific sessions which open on Wednesday, Sept. 12th, will be preceded on Tuesday by sessions of the Council and House of Delegates and the annual golf tournament. President-elect T. J. O'Leary of Superior will present the address of the incoming President at a smoker on Wednesday evening. Alumni luncheons will be held on Thursday noon and the Annual Dinner will be given at the Northland Hotel Thursday evening. Drs. W. J. Mayo and Olin West will present the two addresses of the evening.

All scientific sessions of the Society will be held in the large Columbus Club which

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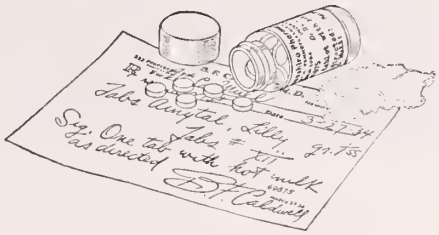

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is conveniently located in the hotel district. Sessions of the Auxiliary, House of Delegates and the Annual Dinner will be held in the Northland Hotel. The complete program for each of the scientific sessions will appear in the August issue of the Journal together with all reports of officers and committees.

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Wood	F. X. Pomainville, Wisconsin Rapids	K. H. Doege, Marshfield

RESECTION

(Continued from page 511)

before concluding in any given case or group of cases that recurrence is thereafter unlikely. Caulk, in an early paper stated: "If a man remains well for six months, he usually will remain well forever." At that time Caulk's series included 63 per cent of all types of obstructing lesions of the prostate gland. It is well known that obstruction sometimes recurs after prostatectomy, although usually many years later; but, sadly enough, it recurs in an occasional case very soon after operation and in these cases it is a result of cicatrization of the prostatic urethra. In 1933, ten patients were again able to void freely following transurethral resection who, a number of years previously, had undergone so-called total prostatectomy. On three of these, prostatectomy had been performed at the clinic, and on seven, elsewhere. Following transurethral resection of the prostate gland I have yet to see a case in which the recurrence of obstruction is due to stricture in the operative site.

To January 1, 1934, twenty-six patients had returned for resection of the prostate gland following a punch operation, or resection, done during the interval January 1, 1913, to January 1, 1933. During this interval punch operations were performed on 655 patients. Eight of these twenty-six patients who returned each had a malignant gland at the time of primary operation; recurrence, therefore, might well be expected. Four of the remaining eighteen suffered initially with a contracture of the vesical neck, while six had only a small median bar, leaving only eight in which there was definite adenofibromatous prostatic hypertrophy of the type formerly removed by prostatectomy. It is well known that patients with small median bars and contracted vesical necks often persist in having recurrent obstructive symptoms no matter what surgical procedure is employed. However, if only the malignant cases are excluded the recurrence amounts to 2.7 per cent. It is impossible to compare this figure with a similar one after prostatectomy, but since previous to 1933 ten patients of the group of 451 had had prostatectomy performed, or a percentage of 2.2, it seems that there is probably little difference in the percentage of recurrence after either operation. Since more patients will survive resection than will survive prostatectomy, there may be, over a period of years, a slightly greater incidence of recurrence.

CONCLUSIONS

1. Transurethral resection continues to be the operation of choice for all obstructing lesions of the prostate gland that will permit passage of a suitable instrument.

2. In developing a technic, a surgeon must select his cases before he is finally justified in operating on the most difficult types. Until such skill is acquired, prostatectomy is a safer procedure.

3. The low morbidity and short stay in the hospital has made relief possible for many patients whose physical and financial conditions are poor.

4. Recurrence of urinary obstruction is not any greater after transurethral resection than after prostatectomy.

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** Eusterman, George B. and Wilbur, Dwight L.: Clinical Features of Vitamin A Deficiency (further reference, same as in other copy).*

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Constitution and By-Laws of the State Medical Society of Wisconsin

CONSTITUTION

ARTICLE I

NAME OF THE ASSOCIATION

The name and title of this organization shall be the State Medical Society of Wisconsin.

ARTICLE II

PURPOSE

The purposes of this Society shall be to federate and bring into one compact organization the entire medical profession of the state of Wisconsin, and to unite with similar societies of other states and territories of the United States to form the American Medical Association; to extend medical knowledge and advance medical science; to elevate the standard of medical education, and to secure the enactment and enforcement of just medical laws; to promote friendly intercourse among physicians; to guard and foster the material interests of its members and to protect them against imposition; and to enlighten and direct public opinion in regard to the great problems of state medicine, so that the profession shall become more capable and honorable within itself, and more useful to the public, in the prevention and cure of disease, and in prolonging and adding comfort to life.

ARTICLE III

COMPONENT SOCIETIES

SECTION 1. Component Societies shall consist of those county medical societies which hold charters from this Society.

SEC. 2. The terms, county medical society and component county medical society, shall be deemed to include all county medical societies and academics of medicine now in affiliation with this Society, or which may hereafter be organized and chartered by the House of Delegates of this Society.

ARTICLE IV

COMPOSITION OF THE ASSOCIATION

SECTION 1. This Society shall consist of members who shall be the members of the component county medical societies who have been certified to the headquarters of this Society, and whose dues and assessments for the current year have been received by the Secretary.

SEC. 2. Those members who have been elected to honorary membership by the various component county societies may be enrolled as honorary members of this Society upon approval of the Council. These honorary members shall enjoy all the rights of membership, and their dues to the State Society shall be remitted.

SEC. 3. Members in good standing who shall make outright gifts to the Endowment Fund of this Society, in the amount of $1,000 or more, shall have bestowed upon them the gift of life membership in this Society. Such membership shall carry with it all the prerequisites of active membership, without the requirement of annual dues, and shall continue in force during the life of the member, providing that the member continues in good standing in his local County Medical Society.

ARTICLE V

HOUSE OF DELEGATES

The House of Delegates shall be the legislative body of the Society, and shall consist (1) of delegates elected by the component county medical societies, and (2) the officers of the Society enumerated in Section 1 of Article IX of this constitution, and Past Presidents of the Society shall be ex-officio members, but without the right to vote.

ARTICLE VI

COUNCIL

The Council shall be the Board of Trustees of this Society. The Council shall have full authority and power of the House of Delegates, between annual sessions, unless the House of Delegates shall be called into session as provided in the Constitu-

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tion and By-Laws. It shall consist of the Councilors. The President, the President-Elect, the Secretary, the Treasurer and the Speaker of the House of Delegates shall be ex-officio members of the Council, but without the right to vote. Nine of its members shall constitute a quorum.

ARTICLE VII

SECTIONS AND DISTRICT SOCIETIES

The House of Delegates may provide for a division of the scientific work of the Society into appropriate Sections, and for the organization of such Councilor District Societies as will promote the best interests of the profession, such societies to be composed exclusively of members of component county societies.

ARTICLE VIII

SESSIONS AND MEETINGS

SECTION 1. The Society shall hold an annual session during which there shall be at least two general meetings, open to all registered members, delegates and guests.

SEC. 2. The place for holding each annual session shall be fixed by the House of Delegates, or by failure to act, such authority is delegated to the Council. The time for holding each annual session shall be approved by the Council.

SEC. 3. Special meetings of either the Society or the House of Delegates may be called by a two-thirds vote of the Council or upon petition by twenty delegates.

ARTICLE IX

OFFICERS

SECTION 1. The officers of this Society shall be a President, a President-Elect, a Secretary, a Treasurer, thirteen Councilors, and a Speaker and Vice-Speaker of the House of Delegates.

SEC. 2. The officers, except the Councilors, shall be elected annually. The terms of the Councilors shall be for three years.

As nearly as possible, one-third of the members of the Council shall be elected each year. The Secretary and the Treasurer shall be elected by the Council. All these officers shall serve until their successors are elected and installed.

ARTICLE X

FUNDS AND EXPENSES

Funds shall be raised by an equal per capita assessment on each component society. The amount of the assessment shall be fixed by the House of Delegates. Funds may also be raised by voluntary contributions, from the Society's publications and in any other manner approved by the House of Delegates. The Treasurer and Secretary shall submit an annual budget to the Council. All resolutions providing for appropriations shall be referred to the Council and all appropriations approved by the Council shall be included in the annual budget.

ARTICLE XI

REFERENDUM

At any general meeting of the Society it may, by a two-thirds vote, order a general referendum upon any question pending before the House of Delegates. The House of Delegates may, by a vote of its members, submit any question to the membership of the Society for its vote. A majority vote of all the members of the Society shall determine the question.

ARTICLE XII

SEAL

The Society shall have a common seal. The power to change or renew the seal shall rest with the House of Delegates.

ARTICLE XIII

AMENDMENTS

The House of Delegates may amend any article of this Constitution by a two-thirds vote of the members of the House present at any Annual Session, provided that such amendment shall have been presented in open meeting at the previous Annual Session, and that it shall have been published twice during the year in the bulletin or journal of this Society, or sent officially to each component society at least two months before the meeting at which final action is to be taken.

BY-LAWS

CHAPTER I

MEMBERSHIP

SECTION 1. The name of a physician on the official roster of this Society, after it has been properly reported by the secretary of his county society, shall be *prima facie* evidence of membership and of his right to register at the Annual Session.

SEC. 2. No person who is under sentence of suspension or expulsion from any component society of this Society, or whose name has been dropped from its roll of members, shall be entitled to any of the rights or benefits of this Society.

SEC. 3. Each member in attendance at the Annual Session shall register, when his right to membership has been verified by reference to the records of this Society. No member shall take part in any of the proceedings of the Annual Session until he has complied with the provisions of this section of the By-Laws.

CHAPTER II

GENERAL MEETINGS

SECTION 1. The General Meetings shall be open to all registered members and guests. At such time as may have been arranged, shall be delivered the annual addresses of the President and of the President-Elect.

SEC. 2. No address or paper, except those of the President, the President-Elect, and the annual orations, shall occupy more than twenty minutes in its delivery. No member, except by unanimous consent, shall speak more than once in the discussion of any paper nor longer than five minutes at any one time.

SEC. 3. All papers read before this Society shall be its property. Each paper, when it has been read, shall be deposited with the Secretary. Authors of papers read before this Society shall not cause them to be published elsewhere until after they have been published in its Journal or returned by the Editorial Board. Authors who fail to observe this section shall be ineligible to appear on programs of the State Society for a period of five years.

CHAPTER III

HOUSE OF DELEGATES

SECTION 1. The House of Delegates shall meet annually at the time and place of the Annual Session.

SEC. 2. Each component county society shall be entitled to send each year one delegate or one corresponding alternate to the House of Delegates for each fifty full-paid members or major fraction thereof in this Society provided, however, that each county society shall be entitled to at least one delegate or one corresponding alternate.

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SEC. 3. One-fourth of the members of the House of Delegates registered shall constitute a quorum of the House of Delegates. All meetings of the House of Delegates shall be open to members of the Society.

SEC. 4. From among members of the House of Delegates the Speaker of the House of Delegates, for the purpose of expediting proceedings, shall appoint Reference Committees to which reports and resolutions shall be referred as follows:

a. On Credentials.
b. On Resolutions.
c. On Report of Officers.
d. On Reports of Standing Committees.

He shall also appoint such other committees as may be considered by him to be necessary.

SEC. 5. The House of Delegates shall elect delegates to the House of Delegates of the American Medical Association in accordance with the Constitution and By-Laws of that body.

SEC. 6. The House of Delegates shall divide the State into Councilor Districts, specifying what counties each district shall include, and, when the best interest of the Society and the profession will be promoted thereby, organize in each a district medical society, of which all members of the component county societies shall be members.

SEC. 7. The House of Delegates shall have authority to appoint committees for special purposes from among members of the Society who are not members of the House of Delegates. Such committees shall report to the House of Delegates, and may be present and participate in the debate on their reports.

SEC. 8. It shall approve all memorials and resolutions issued in the name of the Society before they shall become effective.

CHAPTER IV

ELECTION OF OFFICERS

SECTION 1. The House of Delegates at its first meeting at the Annual Session shall elect a committee on nominations consisting of one delegate from each councilor district. The committee on nominations shall report the result of its deliberations to the House of Delegates in the form of a ticket containing the names of one or more members for each of the offices to be filled at that Annual Session. No two candidates for President-Elect shall be from the same district, and each candidate for Councilor must be a resident of the district for which he is nominated.

SEC. 2. The report of the nominating committee and the election of officers shall be the first order of business of the House of Delegates at the third meeting of the House.

SEC. 3. All elections of officers, where more than one nomination is received, shall be by ballot and a majority of the votes cast shall be necessary to elect except for delegates and alternates to the American Medical Association. In case no nominee receives a majority of the votes on the first ballot, the nominee receiving the lowest number of votes shall be dropped and a new ballot taken. This procedure shall be continued until one of the nominees receives a majority of all the votes cast, when he shall be declared elected. In case no delegates or alternates for the American Medical Association receive on the first ballot a majority of the vote, the nominees shall be declared elected in the order of the highest number of votes received, until the allotted number shall have been chosen. In case of a tie vote for delegate or alternate, the tie shall be determined by lot.

SEC. 4. Nothing in this chapter shall be construed to prevent additional nominations being made from the floor by members of the House of Delegates.

SEC. 5. No person known to have solicited votes for or sought any office within the gift of this Society shall be eligible for any office for two years.

CHAPTER V

DUTIES OF OFFICERS

SECTION 1. The President shall preside at all meetings of the Society; he shall appoint a Committee on Arrangements for the Annual Session and all committees not otherwise provided for; he shall deliver an annual address at such time as may be arranged, and shall perform such other duties as custom and parliamentary usage may require. He shall be the real head of the profession of the State during his term of office, and, as far as practicable, shall visit, by appointment, the various sections of the State and assist the Councilors in building up the county societies, and in making their work more practical and useful.

SEC. 2. The President-Elect shall act for the President in his absence or disability. If the office of President should become vacant the President-Elect shall succeed to the presidency. In case of vacancy in the office of both President and President-Elect the Council shall appoint one of its members as Acting President until the next meeting of the House of Delegates.

SEC. 3. The Treasurer shall give bond in such amount as the Council may provide. He shall demand and receive all funds due the Society, together with bequests and donations. He shall pay money out of the Treasury only on a written order of the Secretary; he shall subject his accounts to such examination as the House of Delegates may order, and he shall annually render an account of his doings and of the state of the funds in his hands.

SEC. 4. The Secretary shall attend the General Meetings of the Society and the meetings of the House of Delegates, and shall keep minutes of their respective proceedings. He shall be Secretary of the Council. He shall be custodian of all record books and papers belonging to the Society, except such as properly belong to the Treasurer, and shall keep account of and promptly turn over to the Treasurer all funds of the Society which come into his hands. He shall provide for the registration of the members and delegates at the Annual Session. He shall, with the cooperation of the secretaries of the component societies, keep a card index register of all the legal practitioners of the State by counties, noting on each his status in relation to his county society, and shall transmit a copy of this list to the American Medical Association, transmitting to its secretary each month a report containing the names of new members and the names of those dropped from the membership roster during the preceding month. He shall conduct the official correspondence, notifying members of meetings, officers of their election and committees of their appointment and duties. He shall employ such assistants as may be ordered by the Council and shall make an annual report to the House of Delegates. He shall supply all component societies with the necessary blanks for making their annual reports, and shall collect from them the regular per capita assessments and turn the same over to the Treasurer. The amount of his salary shall be fixed by the Council.

SEC. 5. The Speaker shall preside at the meetings of the House of Delegates and shall perform such duties as custom and parliamentary usage requires.

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SEC. 6. The Vice-Speaker shall officiate for the Speaker in the latter's absence or at his request. In case of death, resignation, or removal of the Speaker, the Vice-Speaker shall officiate during the unexpired term.

CHAPTER VI

COUNCIL

SECTION 1. The Council shall meet on the day preceding the Annual Session, and daily during the Session and at such other times as necessity may require, subject to the call of the chairman or on petition of three Councilors. It shall hold an annual meeting during January for purposes of organization and other business. Its Chairman shall make an annual report to the House of Delegates.

SEC. 2. Each Councilor shall be organizer, peacemaker and censor for his district. He shall visit each county in his district at least once a year for the purpose of organizing component societies where none exist, for inquiring into the condition of the profession, and to keep in touch with the activities of and to aid in the betterment of the component societies of his district. He shall make an annual report of his work, and of the condition of the profession of each county in his district at the Annual Session of the Council. The necessary traveling expenses incurred by each Councilor in the line of duties herein imposed may be allowed on a proper itemized statement, but this shall not be construed to include his expense in attending the Annual Session of the Society.

SEC. 3. The Council shall be the executive body of the House of Delegates and between sessions shall exercise the power conferred on the House of Delegates by the Constitution and By-Laws.

The Council shall be the board of Censors of the Society. It shall consider all questions involving the rights and standing of members, whether in relation to other members, to the component societies, or to this Society. All questions of an ethical nature brought before the House of Delegates or the General Meeting shall be referred to the Council without discussion. It shall hear and decide all questions of discipline affecting the conduct of members or component societies, on which an appeal is taken from the decision of an individual Councilor. Its decision in all cases, including questions regarding membership in this Society, shall be final.

SEC. 4. Charters shall be issued to county societies only on approval of the Council, and shall be signed by the President and Secretary of this Society. Upon the recommendation of the Council, the House of Delegates may revoke the charter of any component society whose actions are in conflict with the letter or spirit of this Constitution and By-Laws.

SEC. 5. In sparsely settled sections the Council shall have authority to organize the physicians of two or more counties into societies, to be suitably designed so as to distinguish them from district societies, and these societies, when organized and chartered, shall be entitled to all rights and privileges provided for component societies until such counties shall be organized separately.

SEC. 6. The Council shall provide for and su perintend the issuance of all publications of th Society including proceedings, transactions an memoirs, and shall have authority to appoint a editor of the Journal and such assistants as i deems necessary. It shall prescribe the method of accounting and through a committee of three o its members, to be known as a Committee on Audit ing and Finance, shall audit all accounts of thi Society, and with the Treasurer, supervise the in vestment of funds. The Council shall adopt a annual budget providing for the necessary expense of the Society, which shall be prepared and pre sented for its consideration by the Treasurer an Secretary at the first meeting of the Council i January of each year. Its Chairman shall submi an annual report to the House of Delegates, whic shall specify the character and cost of the publica tions of the Society, the amount and character o all of its property, and shall provide full informa tion concerning the management of all affairs o the Society which the Council is charged to ad minister.

SEC. 7. The Council shall, by appointment, fil any vacancy in office not otherwise provided fo which may occur during the interval between an nual meetings of the House of Delegates; the ap pointee shall serve until his successor has bee elected and has qualified.

SEC. 8. The Council may elect as Secretary on who need not be a physician nor a member of th Society.

SEC. 9. The salaries of all employees of the So ciety shall be fixed by the Council.

SEC. 10. The Council shall provide such head quarters for the Society as may be required to con duct its business properly.

CHAPTER VII

COMMITTEES

SECTION 1. The standing committees of this So ciety shall be as follows:

A Committee on Scientific Work.
A Committee on Public Policy.
An Editorial Board.
A Committee on Medical Defense.
A Committee on Medical Education and Hos pitals.
A Committee on Medical Economics.
A Committee on Health and Public Instruction
A Committee on Necrology.

Unless otherwise provided in these By-Laws, eacl of these committees shall consist of three members each of whom shall serve for a term of three years One member of each of these committees shall b appointed annually by the incoming President, b and with the consent of the House of Delegates provided that at the 1927 Annual Session one mem ber of each of the foregoing committees shall b appointed for a term of three years, one each fo two years, and one each for one year; provide further, that at the 1926 Annual Session all com mittee members shall be elected by the House o Delegates in accordance with the custom of tha House.

(To be continued next month)

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FOR SALE—Eye, ear, nose and throat instruments and equipment. Write No. 941 in care of the Journal. JJA

WANTED—Eye, ear, nose and throat specialist—locum tenens for one year starting next September 1st. In prosperous Wisconsin town. Must be exceptionally well trained, of good character and personality. Possible permanent connection for the right person. State all personal particulars and qualifications in the first letter. Address No. 942 in care of the Journal. JJA

FOR SALE—Practice in a good dairy section near Milwaukee. Office and home combined. Good opening for young practitioner. Address No. 943 in care of the Journal. JJA

FOR SALE—Practice located twenty miles north of Milwaukee on highway 57. Will also sell instruments, x-ray and light ray machines and medicines. Reason for selling, retiring. Terms very reasonable. Address No. 944 in care of the Journal. JJ

FOR SALE—1934 self-shifter Reo coupe with rumble seat. Practically new. Reasonable price. Write Mrs. Magdalen De Cock, 870 Howard St., Green Bay, Wis. JJA

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WANTED—a physician immediately, as an associate in a rural community. Extensive practice, attractive arrangement waiting. Write to Dr. B. E. McGonigle of Ableman, Wisconsin. JAS

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*Like Mead's Cereal, Pablum represents a great advance among cereals in that it is richer in a wider variety of minerals (chiefly calcium, phosphorus, iron, and copper), contains vitamins A, B, E, and G, is base-forming and is non-irritating. Added to these special features, it is adequate in protein, fat, carbohydrates, and calories. Pablum consists of wheatmeal, oatmeal, cornmeal, wheat embryo, yeast, alfalfa leaf, and beef bone.

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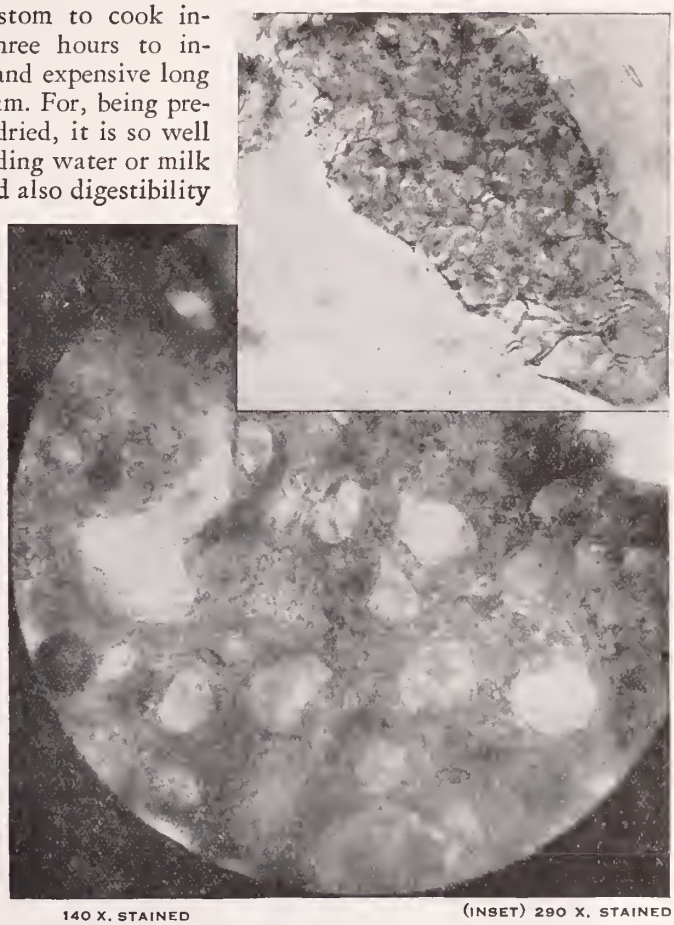
Why Starch of PABLUM *Is More Quickly Digested* than that of Long-cooked Cereals

FOR many years it has been the custom to cook infants' cereal one, two, and even three hours to increase its digestibility. This bothersome and expensive long cooking is proven unnecessary with Pablum. For, being precooked at 10 pounds steam pressure and dried, it is so well cooked that it can be served simply by adding water or milk of any temperature. Photomicrographs and also digestibility studies *in vitro* give evidence of this thorough cooking.

Fifteen cereals (both cooked and uncooked) studied microscopically were revealed as containing many starch granules, most of them massed into dense clumps. *Such unruptured clumps were never observed in hundreds of examinations of Pablum.* The latter consists, rather, of porous flakes which, like sponges, drink up liquids. Hence Pablum can be entirely saturated by the digestive secretions. This is borne out by studies of Ross and Burrill who found that the starch of Pablum is more rapidly digested than that of ordinary cereals cooked 4 hours.

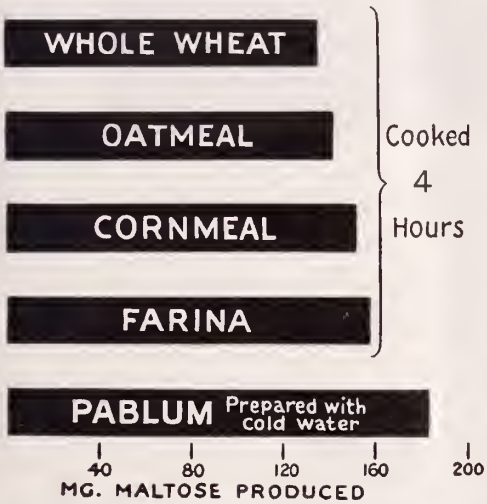


140 X. STAINED (INSET) 290 X. STAINED

Large photomicrograph: Pablum mixed with cold water —portion of large flake. Pablum flakes are honeycombed with "pores" or air-spaces (note light areas). This porosity permits ready absorption of digestive fluids by the entire flake. No starch granules appear—they have been completely ruptured.

Inset: Farina cooked ½ hour—clump of tissue including starch granules. Note density of clump and lack of porosity. Many starch granules, such as are present in raw cereal, remain unchanged in form.

Table shows that maltose production is much greater for Pablum prepared with cold water than for other cereals cooked 4 hours. Ross and Burrill (J. Pediat., May 1934) conclude from this and from the total soluble carbohydrate formed that starch digestion of Pablum is more rapid than that of 6 other cereals.



BESIDES being thoroughly cooked and readily digestible, Pablum supplies essential vitamins and minerals, especially vitamins A, B, E, and G, and calcium, phosphorus, iron, and copper. It is a palatable cereal consisting of wheatmeal, oatmeal, cornmeal, wheat embryo, alfalfa leaf, beef bone, brewers' yeast, and salt.

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THE WISCONSIN MEDICAL JOURNAL

Volume XXXIII
Number 8

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Yet all these measures are being used at the present time prior to or during the application of radium to the cancerous cervix.

The barn door is being locked after the horse has been stolen.

In other words, *traumatism*—physical, chemical, thermal or electrical—to the cancerous cervix militates tremendously against the patient's permanent recovery by facilitating metastasis.

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THE WISCONSIN MEDICAL JOURNAL

Volume XXXIII AUGUST, 1934 Number 8

Maxillo-Facial Injuries

By MATTHEW N. FEDERSPIEL, D. D. S., M. D.,

Professor of Oral and Plastic Surgery, Marquette University Schools of Medicine and Dentistry, Milwaukee

THE complex anatomical relation of the dento-naso-facial area, that is productive in giving the individual a harmonious and beautiful facial outline, necessitates careful consideration of the underlying surgical, orthodontic and prosthetic principles when treating fractures of the maxillary and adjacent bones with laceration and destruction of the soft tissues.

To restore these bones, when broken, to a normal relation, and to hold in correct position during the process of healing, to maintain a normal occlusion of the teeth so as to establish the highest degree of mastication, to correlate the adjacent structures to permit nasal breathing as well as to reconstruct the normal facial outline, cannot be accomplished successfully as a surgical problem alone unless the principles of orthodontic and prosthetic technic are given consideration.

Stabilizing broken and displaced bones of the dento-facial area with mechanical devices such as tooth bands, wires, springs and screws which are constructed and fitted as according to orthodontic technic, offers the oral surgeon advantages that greatly assist and simplify his work when attempting the immobilization of serious fractures. Furthermore, when there is a loss of tissue, it is possible to restore function by the replacement of the lost structures with artificial prosthesis.

So closely is the science of orthodontics and prosthetics related to surgery of the mouth, jaws, nose and face, that in order to fulfill the highest degree of efficiency and provide the patient with a repair that not only re-establishes a good facial outline and appearance, but also provides a good function, it is necessary, fitting, and proper that the oral and plastic surgeon incorporate in his practice the principles and technic of the above sciences.

It is natural and human for any individual to seek relief from injuries that produce horrible mutilation and destruction of the dento-facial area. Plastic surgery alone falls short of accomplishing the best results, but with the application of orthodontic and prosthetic principles and technic, one is assured of a prognosis that is not only gratifying to the surgeon, but offers the patient a good functional and anatomical result.

In order to more clearly demonstrate the advantages that accrue from the combined application of surgical, orthodontic, and prosthetic principles in the correction and treatment of facial injuries and mutilation, I will endeavor to report the following cases.

CASE REPORTS

Miss Elsie Z., adult female, 23 years old, was riding in an automobile which collided with another car. The force of the collision was sufficient to throw her against the front dash of the car, crushing and breaking the bones of her face and jaw. See Fig. 1.

When I saw her, which was three days after the accident, she was suffering severe headaches. The eyes could not be opened and the periocular tissues were very much discolored. The nose was flattened and turned to the right. The soft tissue of the nose and lips was lacerated, bruised and discolored. The maxilla was broken from its attachment to adjacent structures and dropped downwards about ⅜ of an inch. The centrals $\frac{1 \mid 1}{}$ were fractured at the middle of the crowns exposing the pulp. The face was badly swollen and discolored, the tongue swollen and lacerated at the tip, the pharynx congested, and the neck semiedematous. The vomer was fractured and buckled, the left lower turbinate partly torn loose. The nostrils, because of the flattening of the nose, were occluded and filled with clotted blood.

X-ray Findings. Stereoscopic antero-posterio films and right and left lateral films of the skull revealed multiple fractures which involved the right zygomatic bone, the left and right superior maxilla with fractures through the medial and lateral walls of both antrums and with considerable depression of

Fig. 1. Notice crushing and flattening of the nose and dento-facial area, badly swollen face, and severe lacerations. Photograph taken third day after accident.

the fragments, also depressed fracture of the nasal bone. There appeared to be a fracture through both orbits into the frontal sinuses. Additional fractures involving the vomer, the ethmoid bones, and other structures in this region might have been present, but were not clearly demonstrable because of the confusion of shadows in this region.

While the patient had difficulty in swallowing, in chewing her food, and in breathing through the nose, her physical condition was fair. The facial structures, however, were badly swollen, lacerated, discolored, and mutilated, and because of the many fractures of the facial bones, especially the multiple compound fracture of the jaws and nose, I feared the development of bone infection which might complicate and delay the treatment in obtaining a rapid cure and a favorable prognosis.

In this case, the principles and technic of orthodontics and prosthetics were an important addition to the surgical care. Careful planning and construction of appliances was most essential to stabilize the broken bones.

A heavy alignment wire arch (German silver 15 gauge) was adjusted and fitted in place and all the maxillary teeth firmly wired to it. See Fig. 2. This appliance not only immobilized the loose teeth, but also held the fractured alveolar process in place.

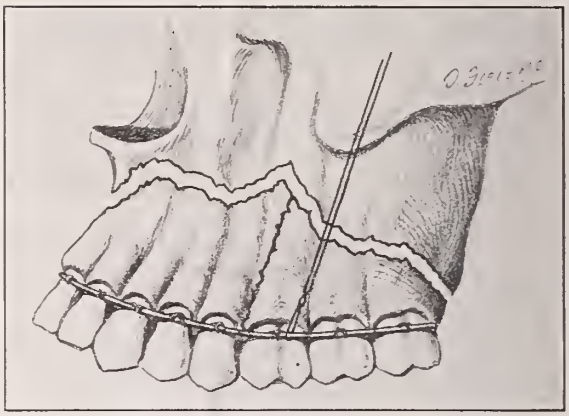

Fig. 2. Showing the maxilla loose from its attachment. Notice alignment arch gauge 15 wire to all the teeth. The wire attached to the arch at the first molar was passed through the cheek.

The maxilla as a whole remained loose from its attachment, and with the fractured vomer was pulled downwards and to the left side. By manipulation and force, the maxilla could be placed in a position so that the lower teeth would be in correct occlusion with the uppers and at the same time would force the vomer upwards. Thus the immobilization of the maxilla was a step forward in improving the nose. The antrums were opened and thoroughly mopped clean and then washed out. Large clots of blood were removed which at this time manifested a foul

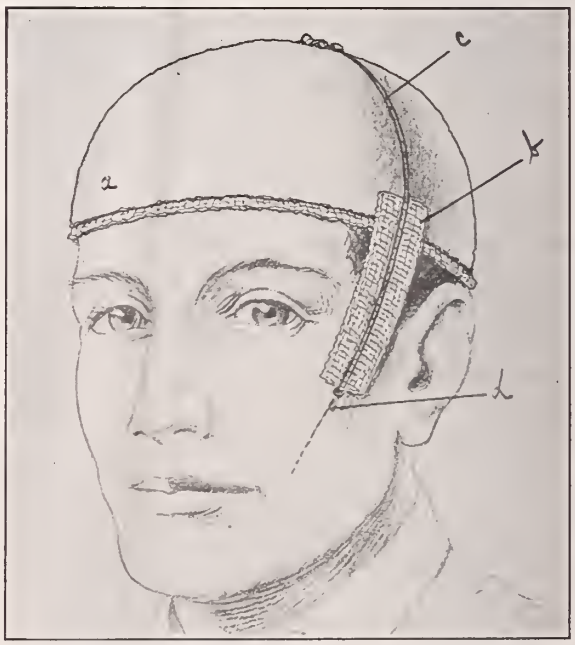

Fig. 3. Schematic drawing illustrating:
(a) Plaster paris cap.
(b) Gauze pad.
(c) Copper wire.
(d) Opening into cheek.
By twisting the wire on top of the head, the maxilla was drawn into correct position.

Fig. 4. Showing improvement in dento-facial area except the fractured centrals. These teeth had the pulps removed, the canals thoroughly reamed, sterilized, filled and sealed by performing an apiectomy. These teeth were later repaired by the fitting of porcelain jacket crowns.

Fig. 5. Result showing patient six months after the operation. Notice the repair of the centrals with porcelain jacket crowns, and the contour of the facial outline.

odor. The outer wall which was depressed into the right antrum was pressed in normal position and the cavity packed with iodoform gauze. The operative procedure was similar to a Cudwell–Luc operation. A plaster paris cap was then neatly fitted to her head in order to provide firm anchorage to support and hold the floating and downward displacement of the maxilla and vomer. Copper wires were then drawn through the cheeks close to the alveolar cul-de-sac (Fig. 3), fastened to the alignment wire arch on each side and then over the plaster cap and twisted together which pulled the maxilla and vomer in place. It was surprising as well as gratifying to note the improvement of the nose when the maxilla was in correct anatomical position.

The partially torn turbinate on the right side was clipped away and the opening in the antrum was made through the inferior meatus for drainage. With the aid of hemostatic forceps, I moulded the broken fragments of the nose bridge into place and by the insertion of rubber tubing in each nostril to which a silver wire was attached, passed through the nose on each side, and fastened to the anchor cap, I succeeded in holding the nose in position as well as supporting it from sagging. The tip of the lacerated tongue was freshened and sewed as well as the intra-oral cuts. After this extensive surgical and orthodontic procedure, there was a decided improvement in the dento-facial outline, and nasal breathing was restored. See Fig. 4.

The postoperative care was one of careful and systematized routine treatment. The cleansing of the nostrils and antrum and the proper medication, the cleansing of each individual tooth, the orthodontic appliance, the gingival tissue, and the spraying of the throat, required about thirty minutes and was done three times a day. This not only aided the patient in obtaining comfort, but kept the tissues free from the accumulation of food, desquamated epithelium, and loose fragmentary sloughs.

The recovery was rapid. See Figs. 5 and 6.

Mr. Pat R., age 57, entered Milwaukee Hospital August 27, 1930, suffering from severe lacerations of the left face in the region of the infraorbital area, and fracture of the left maxilla. The injury was caused when the grab handle of a reamer, which he was operating in a freight shop, came loose and struck him on the left side of the face.

X-ray examination of the left side of the face revealed a fracture of the maxillary bone through the orbital edge, and a fracture through the floor of the left maxillary sinus.

Clinical examination revealed a severe laceration of the soft tissues beneath the left lower eyelid.

Fig. 6. Lips closed. Showing a very slight elevation of the right nostril. This has since been corrected. Compare with Fig. 1.

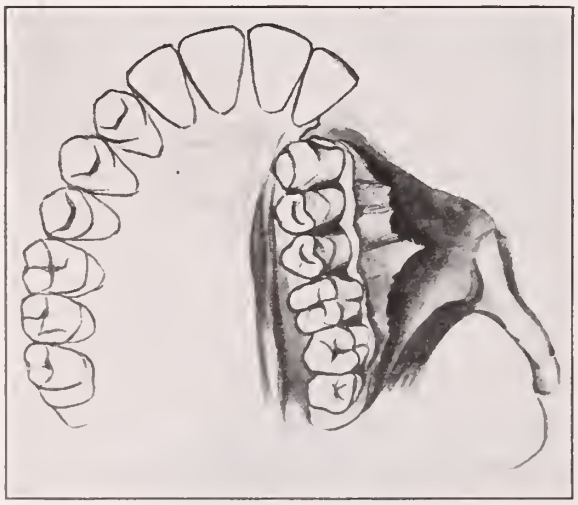

Fig. 7. A fracture of the left maxilla exposing the antrum. The 345678 with the alveolar process was shifted inward.

The antral wall (infraorbital area) was crushed and pushed inward. The left maxilla was partially torn loose and dropped downwards. See Fig. 7.

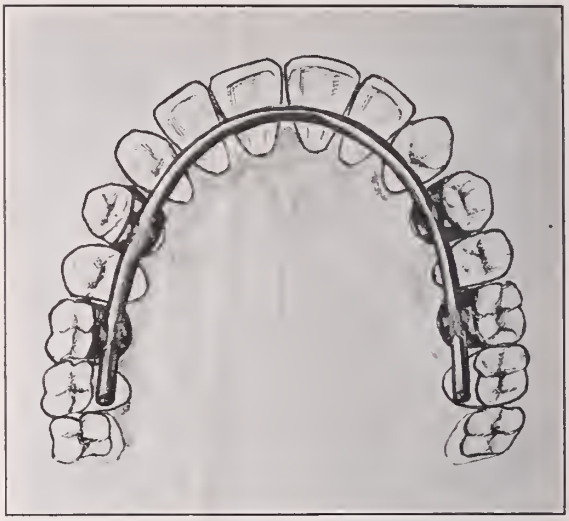

Fig. 8. This appliance stabilized the fracture as is illustrated in Fig. 7.

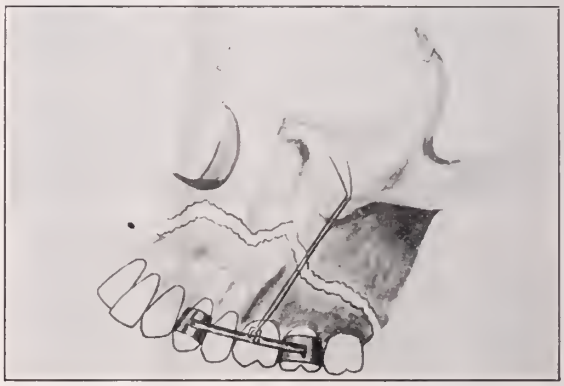

Fig. 9. Showing a cross bar with a loop to which copper wires are fastened which pass through the cheek on each side and then over the plaster paris cap and twisted together forcing the maxilla in normal position, and at the same time immobilizing it.

Naturally, this condition prevented normal occlusion of the teeth. However, when the teeth were occluded forcibly, the maxilla could be shifted to its normal position, and when the jaws were opened, the left maxilla dropped downwards and turned inwards.

In order to stabilize the maxilla in correct position, orthodontic appliances were fitted to the teeth of the maxilla as is illustrated in Fig. 8. This appliance immobilized the buccal-lingual movement so that the dental arch remained in correct alignment. This, however, did not prevent the downward displacement, therefore, a cross bar with a center loop was soldered to the bands on the buccal side (Fig. 9); so when the plaster of paris head cap was in place, copper wires were fastened to the loop and passed through the cheek on each side, and then over the plaster paris cap and twisted together. This forced the maxilla upwards and in normal

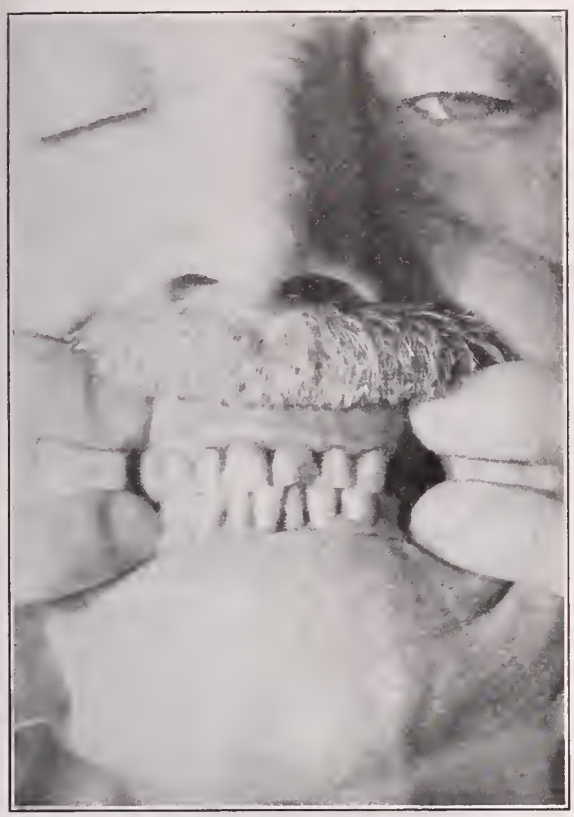

Fig. 10. Showing the normal occlusion of the teeth after the appliances were removed.

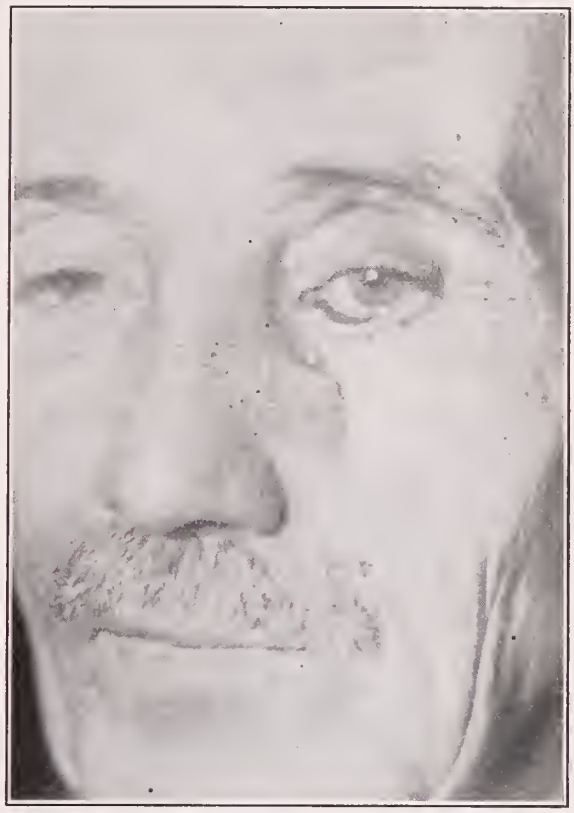

Fig. 11. Ectropion and excessive scar formation over the infra-orbital area. This necessitated a plastic repair.

position so that the teeth would occlude normally. See Fig. 10.

The outer wall of the antrum which was crushed and pushed inwards, was carefully forced in position, and the antrum washed so as to remove any remaining blood clots.

Recovery was rapid. There were no complications. The healing of the face and scar formation (Fig. 11) caused an ectropion of the lower eyelid. This necessitated a plastic repair which I did November 10, 1930. See Fig. 12.

Mr. K., age 27 years, was blasting rocks. A premature explosion caused a severe injury to the lower jaw. On examination, I found a fracture of the neck of the condyle on the left side with the condyle torn out of the glenoid fossa and lying in front of the eminentia articularis, a compound fracture between the left cuspid and lateral and another fracture between the right second bicuspid and first molar complicated by a perimaxillary phlegmon with pus flowing freely.

The left lower lateral and left central were knocked out at the time of the explosion and from the sockets of the lost teeth pus was oozing. A subperiosteal abscess had developed below the chin. Upon passing a probe through either one of the sockets it would pass through the bone into the subperiosteal abscess.

The compound fracture on the right side of the

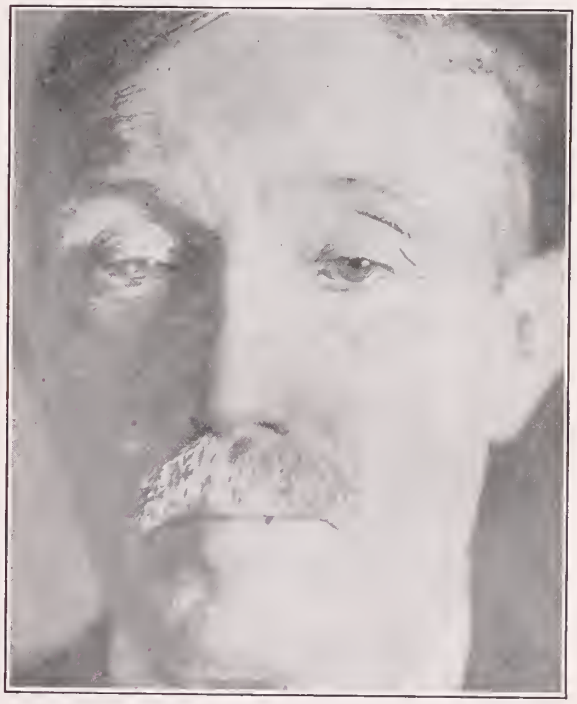

Fig. 12. Showing the result following the plastic repair.

Fig. 13. Showing the condyle that was removed.

Fig. 14. Showing a shifting and contraction of the mandibular arch, and distortion of the facial outline.

Fig. 15. Under orthodontic care the lower arch was widened to provide sufficient space to place two artificial incisors.

Fig. 16. Notice improvement of the facial outline.

mandible, which was between the second bicuspid and the remaining diseased root of the first molar, was also suppurating into the mouth, and the gland below it was very much enlarged. On account of the neck of the left condyle being fractured and the condyle torn from the socket, rotated and lying in front of the eminentia articularis, the jaw shifted backwards causing the facial lines to be very much distorted.

Bands of German silver were fitted to the molars on each side. A tube, gauge 16, was soldered to the bands and cemented in place. Plain bands with small hooks attached were cemented on the teeth anterior to the molars. The next day, under local anesthesia, I curretted the diseased bone at the fractured points, opened up the subperiosteal abscess, drained the wound with iodoform gauze and extracted the diseased roots of the lower right first molar. An alignment wire, gauge 16, was then

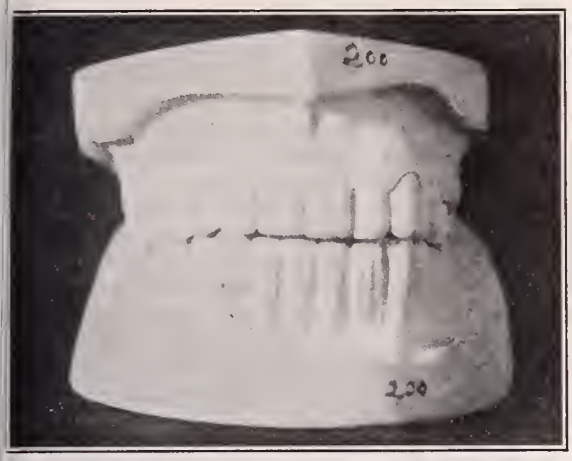

Fig. 17. Plaster cast showing improvement after orthodontic and prosthetic care.

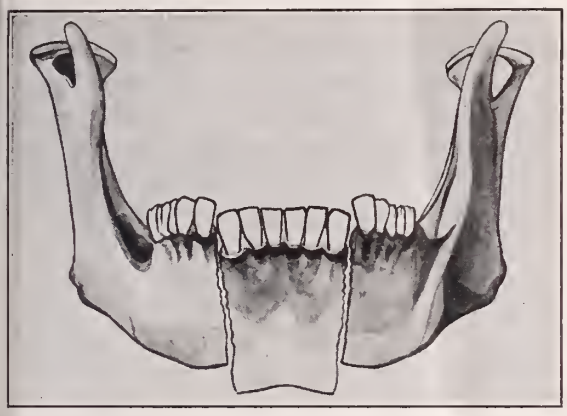

Fig. 18. A bilateral compound fracture of the mandible.

shaped so it rested neatly on the labial surfaces of the teeth. The fractured parts were then brought together and the teeth firmly ligated to the alignment wire with bronze wire, gauge 28.

This simple appliance firmly immobilized the broken bone, the jaw was then bandaged and treated daily by cleansing the teeth and changing the gauze. After four weeks the patient was ready to have the condyle removed. The condyle which was found lying in front of the eminentia articularis and rotated was freed from the soft tissues, removed, (Fig. 13) and the wound closed. Healing took place without any complications. Four weeks later, he left the hospital. By this time, the mandible had united at the fractured points. Due to the loss of the lower left central and lateral and the necrosed bone in that region and the loss of the left condyle, the arch had contracted and shifted to one side. This condition produced a marked distortion of the facial lines. (Fig. 14). This necessitated orthodontic care in order to correct the malocclusion and provide sufficient space to replace two artificial incisors. (Fig. 15). This procedure improved the facial outline and the malrelation of the mandibular teeth. See Figs. 16 and 17.

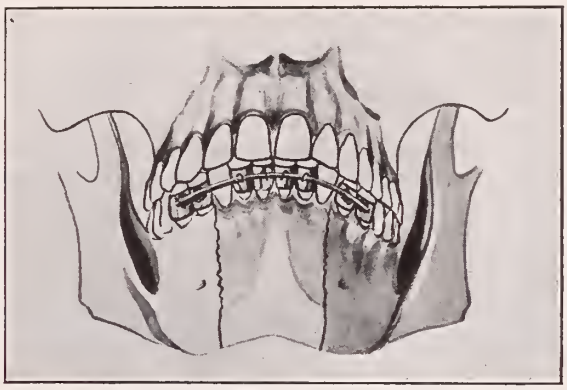

Fig. 19. Illustrates the value of an orthodontic appliance to immobilize the broken mandible.

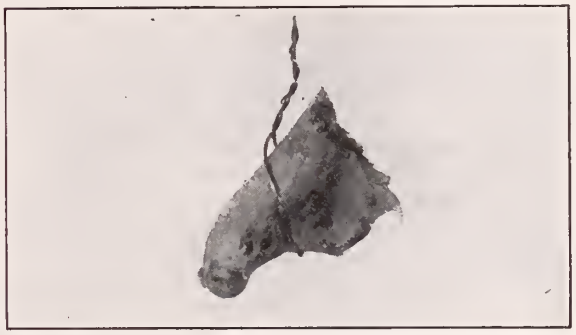

Fig. 20. Condylar process which was removed in a young man 17 years of age. There is no displacement of the lower jaw or disfigurement of the facial outline. Function is normal.

Fig. 18 illustrates a bilateral, compound fracture of the mandible. The central portion supporting $\frac{|}{321 \mid 123}$ was pulled down by the action of the anterior belly of the digastric and the geniohyoid muscles. The patient, a young lady, had been injured in an automobile accident. Here again, was a case of beautiful teeth necessitating accurate and careful alignment of the teeth in correct anatomical dental occlusion.

Bands were fitted on the following teeth $\frac{|}{5421 \mid 1245}$, and hooks were soldered to the bands on $\frac{|}{21 \mid 12}$. An alignment wire (15 gauge German silver) was shaped to rest against the labial surface of the lower anterior teeth and soldered at each end to the bands on the bicuspids, and cemented in place. The displaced central portion of the mandible was then gently forced into normal position. The bands with hooks on the incisors were cemented into place so that each hook rested on the alignment wire. This simple appliance firmly immobilized the fractured bone. See Fig. 19. The patient could move the mandible during light feeding without any discomfort. This form of appliance eliminates the necessity of bandaging. Cleansing the teeth by brushing and washing the mouth with a suitable

antiseptic could be done while consolidation of the broken bones took place.

Mr. C. H., age 17 years, suffered a severe injury of the mandible from the explosion of an air compressor.

The right mandible was fractured in the region of the second lower molar and the neck of the left condyle broken and the condyle torn out of the glenoid fossa and protruding externally through the capsular ligament and lying on the external surface of the zygoma. The right corner of the mouth had a severe tear backwards and downwards about two inches in length. After I made several attempts to adjust and replace the condyle in its correct position, I made an exploratory incision over the posterior border of the ascending ramus and retracted the soft structures. The broken surface of the neck of the condylar process of the mandible was exposed and found to point distally. The condyle was resting forward and outside of the external lateral ligament where it is attached to the outer surface of the zygoma. This peculiar position accounts for the failure I had to replace the condyle in the glenoid fossa and immobilizing the fracture. Therefore, I removed the condylar process (Fig. 20) with little or no injury to the periosteal and fascial ligaments and immobilized the fractured mandible intraorally with an orthodontic appliance.

From my experience, I have learned that when a condyle is fractured at the neck and torn out of the glenoid fossa with a complete rupture of the investing capsule, that restoring the condyle to its former position and immobilizing the fracture usually develops postoperative complications with a rather unfavorable prognosis. The mandible remains limited in movement for a long time and sometimes permanently. The patient complains of pain in the region of the joint during jaw movement. This, I attribute to the torn capsule which upon healing loses its flexibility. The removing of the condyle when completely torn away from the investing capsule gives the patient a very favorable prognosis. The jaw moves free and easy, there is no displacement of the jaw and the patient is free from pain.

In this case, recovery was rapid, with no loss of function and no disfigurement of the facial lines.

SUMMARY

Maxillo-facial injuries necessitate extreme care in order to obtain not only functional but anatomical results. Unless these cases are given the proper care, by that I mean surgical, orthodontic and prosthetic care, one cannot hope for results that restore function and correct facial deformities.

Maxillo-Facial Injuries

By R. P. GINGRASS, D. D. S., M. D.
Milwaukee

THE increasing frequency of injuries to the soft and hard tissues of the face, especially as the result of automobile accidents, has created a necessity for more careful attention to this particular field than the surgeon has given it in the past. Special necessities in the form of splinting apparatus to obtain the best results have not always been recognized by many surgeons, nor have the surgeons always available proper cooperation in this respect from dentists. Owing to the lack of available dental cooperation or to ignorance of its importance, the surgeon, when confronted with extensive wounds of the face, is frequently apt to ignore underlying bone displacements and give all his attention to repair of the soft tissues. This is a mistake, because serious preventable deformity and functional disability will almost surely result if the displaced bones are not replaced in proper position early.

Many of these severe injuries of the face and jaws are complicated by shock, cerebral concussion, fracture of the skull and injuries to other parts of the body.

The general principles of treatment may be outlined as follows:

1. Care of the patient.
2. Care of the soft tissues.
3. Care of the hard tissues.

Considering the care of the patient it is obvious that the patient's life is of the utmost importance. Arrest of hemorrhage is the first and most urgent consideration. Treatment of shock is next in importance. Tetanus and gas bacillus antitoxin should be administered.

As soon as the general condition permits, an examination of the wound is made to ascertain its extent, the structures involved, position of fractures, and presence of foreign bodies. The surrounding skin should be cleansed with soap and water, and foreign material such as dirt, stones, broken teeth, and bullet particles removed. It may

not be possible to remove all foreign bodies at this time. The wound should be iodinized. All devitalized tissue should if possible be cut away, although extensive débridement of soft tissue wounds of the face is not so necessary as in wounds of other parts of the body. The blood supply of the face is very rich, and the tissues recover and wounds heal in a way that has no parallel in the rest of the cutaneous surface of the body. Motor nerves should be united by fine sutures. Injuries to salivary ducts are treated by making provision for the saliva to flow from the cut duct into the mouth. Muscles that are completely divided should be sutured. The skin and mucous membrane should be accurately sutured, and the sutures removed in about four days. Most wounds of the face can be closed without drainage. Emphyseme is best combated by insuring free egress of air through the nose and mouth. In rapidly extending emphysema plugging the posterior nares is beneficial. Cold, in the form of an ice bag, is the most efficient means of preventing or treating the swelling due to the infiltration of the tissues with serum. The cold should best be applied to cool, but not freeze, the tissues. If, owing to swelling, breathing is labored, it can be partially relieved by dropping ephedrine into the nostrils. Injury to the fifth nerve may be evidenced by an anesthesia over the area of distribution of whatever branch is involved. Injury to the facial nerve will be evidenced by a paralysis of the facial muscles. Sepsis is to be combated by frequent irrigation of the nasal and oral cavities, and if the antrum is widely open, this should receive the same treatment. If the antrum contains an infected blood clot, it should be opened and cleansed. Forceful irrigation is to be avoided. The patient should be in a sitting or semi-erect position. Obstruction of the naso-lacrymal duct that is not relieved with the subsidence of the swelling would need special attention later.

A roentgen ray examination should be made to show position of fractures, foreign bodies, etc. Any completely detached bone fragment should be removed. But bone fragments having any attachment to the soft tissues should be allowed to remain, as they frequently keep their vitality and aid in restoring the continuity of the bone. If removed the resultant defect may require grafting at a later date. Fractured roots of teeth and very loose teeth in the line of fracture should be removed as they invite sepsis. If the teeth in the line of fracture are not very loose they should be retained, as they aid in restoring the continuity of the bone. If the line of fracture is evidently infected, it is better to extract such teeth at once. It is obvious that the fractures should be reduced to as nearly the correct position as possible. Restoration of bone fragments to approximately normal position and immobilization should be done as soon as the patient's general condition permits. If this is done early the patient will be more comfortable and sepsis will be less.

MANDIBLE

Because of its exposed position, fracture of the mandible is more common than any other facial bone. Fractures of the mandible are double in about one-third of the cases, consequently both sides, and the symphysis should be radiographed. Fractures of the body are usually compound. The occlusion of the teeth is the guide in reducing fractures of the mandible and the maxilla. Intermaxillary wiring according to the principle of Gilmer is the simplest and most efficient method for the great majority of cases. Modifications of technic are made necessary according to the number of teeth present, displacements, edentulous fragments, etc. The eyelet method as developed in the U. S. Army is easily applied, and permits access to the inside of the mouth when occasion arises without destroying the entire hook-up. Should several teeth be absent from either jaw, or both jaws, a German silver or brass arch wire may be applied to the labial and buccal surfaces of the teeth of each jaw and then connected by wire ties.

In completely edentulous cases the dentures worn by the patient may serve as an intra-oral splint supplemented by a head and chin bandage. Circumferential wiring of the bone over the artificial denture or over a vulcanite splint is preferable.

MAXILLAE

A unilateral fracture of the upper jaw may be successfully treated by pushing the fragment back in place until the teeth are in occlusion, then wiring the teeth of the sound side of the maxilla to those of the lower jaw.

In bilateral fracture of the upper jaw, support must be obtained from the bones of the skull by means of a head apparatus. Many forms are on the market, they are costly and not preferable to a plaster of paris head cap, which can quickly be constructed and is inexpensive. A metal splint must be adapted to the teeth, from this splint metal bars emerge at the corners of the mouth which pass back and are attached to hooks embedded in the plaster of paris head cap. The antrum is frequently involved in fractures of the maxillae and appropriate treatment must be instituted.

NASAL BONES

Fractures of the nasal bones with backward displacement and lateral deviation should if possible be corrected immediately, otherwise the swelling may mask the deformity. The bones may be placed in their proper position by smooth beaked forceps introduced through the nostril, combined with external digital manipulation. Intranasal packing is rarely sufficient. In case they do not remain in correct alignment after reduction a roller bandage may be applied to each side of the nose and taped in position or a nasal clamp may be used. At other times a pressure pad of dental compound on a wire attached to a plaster of paris head cap may well be used. An adjustable splint attached to the teeth serves well to control displacements in any direction. A lateral deviation may be anchored by an interstitial wire attached above to the mobilized nasal bridge and below to a molar tooth of the opposite side. A crushing injury to the nose usually tears or crumples the septal cartilage, and this should be immediately straightened to its natural position and all gaping tears in the lining should be repaired when the bridge is elevated. The replaced septum gives support to the bridge. For malunions and growth deformities, the chisel may have to be used freely. If the nasal bones remain unreduced for ten days to two weeks, correction can rarely be accomplished without refracture.

ZYGOMATIC BONE (MALAR)

Fractures of the malar bone may be through the lines of articulation or through the body and result in a depression below and lateral to the orbit of that side of the face. Frequently the bone is displaced en masse and pushed into the antrum. The zygomatic arch may be fractured, the depressed fragment impinging on the coronoid process of the mandible interfering with opening the mouth. They are readily treated by elevation by any one of a number of methods provided the patient is seen not later than ten days to two weeks after the injury. By the method of Gillies a broad flat elevator is introduced beneath the depressed bone through a small incision in the temporal region. A strong, sharp steel hook may be inserted through the tissues to engage on the various edges of the bone. There is little tendency for the deformity to recur, unless the bone is terribly shattered. Going through the antrum to elevate the depressed bone is not recommended.

Some of the methods described enable one to give immediate and satisfactory attention to hospital cases. Unfortunately, the patient's general condition is frequently so grave as to delay corrective measures. Many times the delay is unnecessary. Secondary infection and lack of early treatment are important factors in deformity on healing. This leads to the necessity for various plastic operations for reduction of scars and the building up of lost parts of soft tissue and bone. Permanent losses of bone in the upper jaw, generally speaking, are best restored by intra-oral prosthetic appliances. In the lower jaw, losses of bone continuity, even so much as three or four inches, can be successfully treated by bone grafting. Grafts for the lower jaw are best taken from the crest of the ilium or osteoperiosteal grafts from the tibia. Costal cartilage is the best material for building out the bridge of the nose and malar depressions.

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The Rationale of Bromide and Belladonna Therapy in the Treatment of Peptic Ulcer

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SEVERAL factors are necessary for the successful treatment and prevention of disease.

An exact knowledge of the etiology and pathogenesis is of paramount importance. Lacking this knowledge, treatment becomes symptomatic and frequently does not eliminate the basic cause of pathology.

In determining whether a specific disease shall receive surgical or medical treatment, the decision depends, in a large measure, upon the first factor; or a knowledge of the etiology and pathogenesis of the condition. Under this consideration there are three main types of disease from the standpoint of treatment: (1) those conditions which are purely medical in their management: (2) those conditions which are purely surgical in their treatment: and (3) those conditions which receive their best care when there is close cooperation between the internist and surgeon.

Finally, the human element must be taken into consideration. Every patient must be treated as an individual and in most instances as a different individual from every other patient.

An examination of the status of the present day treatment of peptic ulcer, in the light of the above factors, reveals the following information. The aim of the medical treatment has been to encourage healing of the ulcer, largely by reducing the acidity of the gastric juice. This is accomplished by regulation of the diet and the ingestion of antacids. The aim of the surgical treatment has been exactly similar; namely the alteration of the composition of the gastric juice, more or less permanently by admitting the alkaline duodenal secretions into the stomach through a gastrointestinal anastomosis, or the removal of the secreting glands by partial gastric resection. Both of these methods of treatment are based on the assumption that the etiology and pathogenesis of peptic ulcer lies in the walls of the stomach itself. The fact that neither the present medical nor surgical methods of treatment have been entirely satisfactory in many cases, leads to the assumption that all of the factors in the etiology and pathogenesis have not been completely taken into consideration.

Careful history taking, physical examination, and observation reveals the following pertinent points in ulcer patients. Almost without exception they are "highly strung" emotional individuals. The local symptoms of ulcer are markedly exaggerated under conditions of psychic and emotional stress and strain. Conversely, the local symptoms are markedly improved or entirely disappear under conditions of psychic and mental rest and relaxation. Furthermore, under conditions of psychic and emotional disturbance, symptoms exactly similar to those from which ulcer patients suffer may appear in some patients who have no ulcer formation.

These neurological or mental factors are familiar to all clinicians and their presence is so common in ulcer patients that they have received the appellation of "Ulcer Diathesis". The statement that the patient should receive complete mental and physical rest is uniformly present in every discussion of the treatment of peptic ulcer. I believe that the mental rest has not received the attention

which its importance in treatment demands. In most instances, at the beginning of the medical treatment the patient is put to bed and the clinician assumes that this will entail mental as well as physical rest and relaxation. In my opinion, the very act of putting the patient to bed increases any psychic or emotional disturbances from which he is suffering. He is deprived from a certain amount of time at a gainful occupation and the freedom of the mind from business or occupational responsibilities allows him more time to worry or fret about his physical ailments or other distressing circumstances.

METHOD OF TREATMENT

Four years ago I began to place the primary emphasis in treatment upon the elimination of the psychic, emotional, and mental disturbances occurring coincident to peptic ulcer. The local factor of hyperacidity was also eliminated by the administration of a proper diet together with the ingestion of antacids. In every instance careful inquiry into the patient's psychic and emotional life was made and so far as possible all distressing mental factors were eliminated. In addition every patient was kept on full tolerance doses of sodium bromide and tincture of belladonna throughout the course of the medical treatment. The patient was placed on a modified Sippy diet and this diet was maintained for two years with increases from time to time in the quantity and character of the food. There was no use of the stomach tube as a routine measure, since I have found that this treatment increases rather than alleviates gastric irritation and pylorospasm. The results were uniformly successful in that there was a complete cure with no return of symptoms for at least three years.

CASE REPORTS

The number of patients makes a relatively small group since the report comes from a general medical practice and only those cases are listed which have been on treatment for at least three years. In addition to the cases reported here, six additional cases are on treatment of the same kind and showing the same results.

Case No. I, E. F. Patient is a white adult male 50 years of age. Reveals a definite nervous temperament. Traveling salesman by occupation. Inquiry into the patient's mental background reveals:—Proven infidelity on the part of the patient's wife. Two sons who have been jailed on several occasions and are frequently in difficulty because of drinking, gambling, and thieving. Classical ulcer symptoms of two years' duration. X-ray proof of duodenal ulcer. Treatment started in September 1929. Careful, guarded advice about the existing conditions causing emotional and mental disturbances. Sodium bromide gr. x, tr. belladonna mm. x. Modified Sippy diet and antacids. The patient began having immediate relief and there has been no return of symptoms since the first week of treatment. The patient starts taking bromide and belladonna whenever signs of nervousness become apparent.

Case No. II, Miss. E. A. This patient was a white, adult, spinster female of forty-five years of age. In addition to working in a university library and taking care of an exacting, widowed mother, the patient's main occupation in life was taking care of her health about which she was always needlessly concerned. Classical symptoms of peptic ulcer of six months' duration. X-ray proof of duodenal ulcer. Treatment started in September 1929. The patient was given temporary relief from her library duties and the exacting demands of her mother by hospitalization. Sodium bromide gr. x, tr. belladonna mm. x, three times daily. Bed rest with rigid Sippy diet and antacids. The patient became entirely free from ulcer symptoms for one year at which time the x-ray findings were negative. The patient was symptom free for the next six months at the end of which time she developed an acute ruptured appendix. At operation a healed duodenal ulcer was found. The patient died as a result of the ruptured appendix.

Case No. III, E. L. D. This patient is a white adult male forty-two years of age. A typical "highly strung" vagotonic individual, tremendously introspective about his health. Farmer by occupation and dissatisfied with a farmer's lot. Ulcer symptoms of one year's duration. X-ray positive for gastric ulcer. Treatment started in October 1929. General advice to eliminate the emotional and mental factors. Sodium bromide gr. x, tr. belladonna mm. x, three times daily. Modified Sippy diet, antacids. The patient immediately became symptom free. There were no symptoms of ulcer for two years at the end of which time an x-ray examination proved the ulcer healed. The patient has been seen on an average of once every two weeks since that time, there have never been any abdominal symptoms. His improved physical condition has resulted in a definite change for the better in his mental attitude.

Case No. IV, Mrs. C. H. D. This patient is a white adult female 30 years of age. For ten years she has been a grade school kindergarten teacher. Her pupils have been for the most part from poor

homes, mainly Italians and Negroes and are difficult to manage. She has been married for two years but her husband is a young lawyer just starting practice and is unable to furnish support for the family. In the fall of the year when school begins there has been nervousness and worry consequent upon organization of classes. Again in the spring of the year she becomes tired and nervous as a result of the long school year. It has been at these two periods that she has suffered ulcer symptoms. Intermittent classical ulcer symptoms in the spring and fall of the year. X-ray diagnosis duodenal ulcer. Treatment started in October 1929. Sodium bromide gr. x, tr. belladonna mm. x, three times a day. Modified Sippy diet with antacids. The patient takes the bromide and belladonna mixture for one month before and one month after the beginning and close of the school term every year. There have been no local ulcer symptoms since the beginning of the treatment. The patient has paid no attention to her diet for the past two years.

Case No. V, Miss. D. K. This patient is a white, adult, spinster female 48 years of age. She is a tremendously nervous, "highly strung", vagotonic individual. She has never married because her mother has been a chronic invalid requiring a great deal of care. Her position makes it necessary for her to travel for the greater part of the school year. Intermittent peptic ulcer symptoms with associated spastic colitis of seven years' duration. Positive diagnosis of gastric ulcer. Treatment started in May 1930. Because of the patient's high grade of intelligence, she was given a detailed explanation of the relation between nervous manifestations and ulcer symptoms. Ext. belladonna gr. ⅛ and sodium bromide gr. x, three times daily. Smooth diet with supplemental feedings of milk between meals and antacids. The patient became symptom free during the first week of treatment and there has been no return of symptoms for three and one-half years. Whenever she finds herself becoming nervous she starts the bromide and belladonna medication.

Case No. VI, J. K. This patient is a white adult male 24 years of age. He is an electrician by occupation and lives with his widowed mother whom he supports. For the past eight months he has been worried because his company has been laying off men and he will be the next to lose his position. Classical symptoms of ulcer for the past six months. Positive x-ray diagnosis of duodenal ulcer. Treatment started in May 1930. Sodium bromide gr. x, tr. of belladonna mm. x, three times daily. Modified Sippy diet with antacids. The patient immediately became free from pain but at the end of two weeks there was a return of typical symptoms. Inquiry revealed the fact that the patient had lost his job. After discussion of the patient's financial situation and reassurance he again became symptomless. Fortunately the patient soon obtained employment and he has been free from symptoms for the past three years.

Case No. VII, R. W. N. White adult male 46 years of age, dentist by occupation. The patient is of a nervous temperament highly introspective and always thinking of his physical condition. For the past three years he has been worried about the condition of his gastro-intestinal tract. There have been recurrent symptoms of pain before eating relieved by taking food or alkalis. Two x-ray examinations on different occasions have been negative for pathology. A third examination during a period when the patient was having symptoms was positive for duodenal ulcer. Treatment started in June, 1930. Sodium bromide gr. x, tr. belladonna mm. x, three times daily. Modified Sippy diet with antacids. The patient immediately became symptomless and there has been no return of symptoms for the past three years.

Case No. VIII, L. B. White adult male, married, has one child. High school athletic coach and manual training teacher. The patient has been working on a small salary for the past year after having been out of work for a year following graduation. Intermittent classical ulcer symptoms of two years' duration. Positive x-ray diagnosis of duodenal ulcer. Treatment started in August 1930. The patient has obtained a better position. Sodium bromide gr. x, tr. belladonna mm. x, three times daily. Modified Sippy diet. The patient has remained symptom free for the past three years.

Case No. IX R. N. White adult male 45 years of age. "Highly strung" nervous individual. The patient has been sick off and on for most of his life but never very seriously. He is given to self medication of all kinds. Intermittent ulcer symptoms of four years' duration. Positive x-ray diagnosis of duodenal ulcer. Treatment started in September 1930. Sodium bromide gr. x, tr. belladonna mm. x, three times daily. The patient has been free from symptoms for the past three years in spite of the fact that it was impossible to keep him on a definite diet. He has, however, continued the bromide and belladonna medication.

Case No. X, G. W. T. White adult male 47 years of age, printer by occupation. The patient is an extremely nervous, "highly strung" individual. Printer by occupation, he has a contract to print a daily, school, newspaper, publication. The student newspaper staff changes its personnel every year and often has difficulty in meeting its financial obligations. These financial difficulties have been especially acute during the past three years. Intermittent peptic ulcer symptoms for the past two years. X-ray diagnosis of duodenal ulcer positive. Treatment started in October 1930. Sodium bromide gr. x, tr. belladonna mm. x, three times daily. Modified Sippy diet. The patient has been symptom free for the past three years. Whenever he finds himself becoming nervous he starts taking the bromide and belladonna mixture.

DISCUSSION

It will be seen in this small group of patients that the primary emphasis in treatment has been placed on the elimination of psychic, emotional and mental disturbances occurring coincident to peptic ulcer. The rationale of this emphasis is amply justified by the mass of examples scattered through medical literature on gastro-intestinal ulcers, haemorrhagic erosions, gastromalacia, etc., occurring secondary to primary lesions of the central nervous system or peripheral nerves to the stomach.[1] On the other hand, the local factor of hyperacidity which is probably responsible for the chronicity of gastric and duodenal ulcers has received ample treatment through dietary regulations and the ingestion of antacids. Experimentally, ulcers may be produced by upsetting the antagonistic balance between the stimulating cranio-sacral (para-sympathetic or autonomic) and depressing thoraco-lumbar sympathetic nervous systems. Ulcers may be produced by peripheral mechanical or central drug or mechanical stimulation of the para-sympathetic nervous system. They may also be produced by mechanical paralysis of the thoraco-lumbar sympathetics. Keppich[2] and Stahnke[3] have produced chronic gastric ulcers in rabbits and dogs by repeated intermittent electrical stimulation of the parasympathetic nerves to the stomach. Haemorrhagic erosions, perforations and chronic ulcerations of the stomach and duodenum have been produced experimentally by Shiff[4] Preuschen and Pomorski[5–6] and Mogilnitzki and Burdenko[7] as a result of unilateral intracranial lesions. These lesions affected the principal descending fiber tracts and the resulting ulcers were produced by stimulation of the parasympathetic fibers or paralysis of the thoraco-lumbar fibers and not by involvement of the vegetative nerve centers as shown by their location (Spiegel[8] and Beattie).[9] Westphal[10] produced haemorrhagic erosions and ulcerations of the stomach by the subcutaneous injection of large (toxic) doses of pilocarpine and physostigmine, Light, Bishop, and Kendall[11] found that very small doses, 10 milligrams of pilocarpine introduced intraventricularly almost invariably produced gastric erosions in rabbits; whereas large doses, 75 milligrams, of the same drug were necessary subcutaneously to produce the same results. Cushing[12] found, in this connection, that pituitrin introduced subcutaneously or intravenously stimulates the thoraco-lumbar sympathetic system; while injection of the same drug into the cerebral ventricles stimulates the craniosacral sympathetic system. Durante,[13] Gundelfinger,[14] Finzi,[15] Gibelli,[16] and Mann[17] have shown that erosions and acute ulcerations are produced with ease by severance of the splanchnic nerves, extirpation of the coeliac plexus, or bilateral adrenalectomy. These procedures result in paralysis of the thoracolumbar fibers which is equivalent to stimulation of the vagal fibers. Electrical or drug stimulation in the region of the tuber or supraoptic cluster of para-sympathetic nerve cells results in hypersecretion, hyperchlorhydria, hypermotility, and hypertonicity of the stomach. If this stimulation is prolonged the resulting muscular and blood vessel spasm produces local areas of ischemia which are acted on by the hyperacid secretions of the stomach to produce ulcerations. Cannon and Britton,[18] Bard[19] and Fulton and Ingraham,[20] have shown that at least some of the vegetative nerve centers are affected by cerebral functions. Furthermore, the production of hypersecretion, hyperchlorhydria, hypermotility, and hypertonicity in the stomach as a result of stimulating the tuberal centers of parasympathetic control, can be eliminated by the administration of atropin.

These experimental facts together with clinical observations put forth a very strong argument in favor of the use of bromides and belladonna in the medical treatment of peptic ulcers. The bromides or other suitable sedative medication together with psychic suggestion to allay emotional and mental disturbances and thus decrease the stimulation of the para-sympathetic nerve centers. The belladonna or atropin to interrupt the pathway along which these stimulating effects travel to the stomach and duodenum.

Ulcer formation as a result of emotional or mental disturbances probably occurs only in those individuals who suffer from the para-sympathetic or vagotonic type of ner-

vous instability. Unquestionably ulcers do occur in individuals who are not of the vagotonic type. However, they probably are reflexly produced through irritation of the vagus by a primary disease somewhere else in the body as suggested by Professor Roessle[21] of Jena.

Ordinarily prophylaxis is looked upon as being possible mainly in those acute infectious conditions for which we possess a specific, prophylactic vaccine. In my opinion, ulcers can be and have been prevented by the judicious use of atropin and sedative medication in many patients suffering from vagotonic nervous instability with consequent nervous indigestion or primary spastic colitis.

CONCLUSIONS

1. The successful treatment of peptic ulcer as well as any other disease depends upon a complete understanding and the elimination of all of the factors responsible for its etiology and pathogenesis.
2. The neurogenic factor in the cause of ulcer is dependent upon stimulation of the para-sympathetic or paralysis of the thoraco-lumbar sympathetic nervous system.
3. This stimulation or paralysis may be central or peripheral in its production.
4. The use of bromides to eliminate the stimulation of the tuberal centers by psychic, emotional, or mental disturbances and belladonna to interrupt the pathway if this stimulation does take place, should prove of definite value in the treatment and prevention of peptic ulcer.

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Headaches From the Standpoint of the Neurologist*

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I WILL only touch on a few of those types of headaches that are due to some disturbance within the cranial cavity. The neurologist considers head pains as one of the cardinal symptoms in practically all of the problems that come to him for consideration.

The headaches associated with acute brain injuries are usually of a throbbing, beating character. In the very mild cases there may be only a very dull, heavy feeling in the head. In the more severe cases, where consciousness remains, the headache is of the typical splitting type. In these cases the headaches are due to increased pressure either from hemorrhage or cerebral oedema of varying degree. In the mild cases the headache persists for several days or until the oedema has subsided. In the more severe cases where there is a clear cut history of unconsciousness the headaches may persist for months or years or may never entirely disappear. It may, however, gradually become less constant and only appear in paroxysms during the day on physical exertion.

The headache in brain tumor when due to the pressure of the tumor upon the dura and the skull is often associated with localized tenderness on percussion, over the site of the tumor. Again, there is a referred pain with the complaint of superficial tenderness over a large area of the head or even down the neck and over the shoulders. It may be due to increase in intracranial pressure as the result of the tumor or it may also be due to direct pressure of the tumor upon the Gasserian ganglion in which case the pain is referred to that area of the skin supplied by one or more divisions of the trigeminal nerve.

Frequently, in the headache of brain tumor there are quite characteristic symptoms. In the early tumor the head pain is entirely absent or slight and intermittent. The headache at this time may have no special location. It is probably more often frontal or occipital and less frequently parietal or at the vertex. The headaches increase with the growth of the tumor, and may be precipitated by anything that produces increased intracranial pressure such as coughing, vomiting, straining at stool or mental excitement. Again, it may be relieved by lying down and if the patient is kept quiet the pain may disappear for weeks. The headaches are usually dull, heavy and persistent, frequently are worse in the morning and subside in the afternoon or at night. Again, they are more severe in the afternoon or so bad at night as to prevent sleep. It has been said that in cerebellar tumors there are local occipital pains, pain in the neck and retraction of the head. We know, however, that the headache of a cerebellar tumor is frequently in the frontal region.

In 27 per cent of Frazier's series of 100 cases of pituitary tumor, the headache was the initial symptom, a later symptom in 61 per cent, severe in 37 per cent, moderate in 15 per cent and slight in 9 per cent. In this series the location was, in the majority of the cases, frontal, and then in order of frequency occipital, general and bitemporal. While headache was regarded as severe in one-third of the cases, in only five cases was it the outstanding symptom for which the patient sought relief. In other words, it was not because of headaches that the patient applied for help, but because of failing vision, which was found in 87 per cent of the cases.

In internal hydrocephalus due to tumor obstructing one or both of the Foramena of

* Symposium on Headache, Mt. Sinai Hospital, Milwaukee, January, 1934.

Monro there are characteristic types of headaches. The tumor may be mobile and with resulting intermittent obstruction the patient may have paroxysms of headache and vomiting relieved by altering the position of the head.

In headache of acoustic neuroma the pain is usually paroxysmal and occipital and at times frontal.

In syphilitic diseases of the brain, especially in meningeal and gummatous forms, headache is one of the most constant early symptoms. At times it is very severe with nocturnal exacerbations, often circumscribed and deep-seated and frequently with local tenderness. The headache may come on without any apparent cause. Again, there are often exacerbations followed by other symptoms as ptosis or amblyopia.

The headache of a brain abscess oftentimes is without any outstanding features. The head pain after a mastoid operation, for example, is frequently minimized until it becomes very marked or is associated with other evidence of intracranial disturbance. In the first stage of brain abscess there is usually the history of a severe constant headache, not localized and persisting for days. Again, the headache may localize in the area of the abscess, but often-times the site of the pain is at some distant point. In the period of remission the headache may entirely disappear. Later, with the encapsulation of the abscess there may be little discomfort, but during this period the headaches are frequently very intense. In the paralytic stage, with its sudden onset, the headaches usually have no special characteristics but there are other symptoms to warrant a diagnosis such as Jacksonian seizures, paralysis or weakness of one-half of the body and fever.

In acute meningitis, both the epidemic and purulent, the type of headache is, from the onset, very violent. It is usually diffuse but in the epidemic form is often more intense in the occipital region.

The head pain in cerebral hemorrhage of the capsular type, usually one of the premonitory symptoms, is throbbing and frontal or occipital.

At the onset, in the headache of subarachnoid hemorrhage, or before the rupture of the vessels, there may be the complaint of headache. It has been said that the head pain in this stage is of localizing value. Immediately following the rupture of the vessels with a slow leak the patient frequently complains of intense headaches with vertigo and nausea or vomiting. The patient soon becomes unconscious, but if at any time there is return to consciousness he usually complains of severe throbbing head pain, often radiating down the back of the neck.

A very large percentage of our cases show no definite organic lesion. It is in this group that I must of necessity resort to the diagnosis of some type of psychoneurosis. Very few neurotic individuals are free from headaches. Their head pain is frequently grotesque and bizarre. They commonly complain of a feeling of a tight band around the head, a sensation of pressure or fullness within the skull. This headache or discomfort is usually worse in the morning and tends to subside during the afternoon.

CONCLUSION

In conclusion allow me to say that headache is one of the most constant symptoms of brain disease. Its diagnostic importance is, however, considerably diminished by the fact that it may be evidence not only of a brain disease but also of a functional disorder and even of the most varied diseases of other organs. It is impossible to assign any definite indication by which a headache due to organic brain disease can be distinguished from one due to other causes. It is only the association of these symptoms with other signs and symptoms that one can, with any degree of accuracy, point to the site and nature of the lesion.

GRADUATE FORTNIGHT AT NEW YORK

The Seventh Annual Graduate Fortnight of The New York Academy of Medicine will be devoted to a consideration of Gastrointestinal Diseases. The Fortnight will be held October 22 to November 2. Sixteen important hospitals of the city will present coordinated afternoon clinics and clinical demonstrations.

The profession generally is invited to attend. A complete program and registration blank may be secured by addressing Dr. Frederick P. Reynolds, The New York Academy of Medicine, 2 East 103d St., New York, N. Y.

Calcification of the Gall-Bladder; Report of a Case

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THE sparcity of the literature available on this condition is an indication of its rare occurrence. There are only 18 references to date in the literature, six in the French, two in the German, and ten in the English.

There exist eight specimens in museums, three of which are in the college of Surgeons Museum, Edinburgh, and five in the Hunterian Museum, London.

Its rare occurrence is proven in a paper by Fowler. Fowler communicated with authorities both clinical and rontgenological when he discovered his case in 1921. From Pfahler he received the following statement: "I have never to my knowledge found any calcareous deposits in the gall-bladder wall. It cannot be frequent for I make a gall-bladder study of every gastro-intestinal study and have done so for a good many years." Roberts in a communication to Fowler says that he "has observed calcareous deposits in the gall-bladder wall but only on a few occasions."

Osler says calcification is commonly a condition terminating suppurative cholecystitis. There are two separate forms: Incrustation of the mucosa with lime salts and the true infiltration of the wall with lime, the so-called ossification.

Moynihan in his book on Gall Stones and Their Surgical Treatment, states that "complete calcification is rare, though examples are to be found in a few museums." In Moynihan's book there is a case recorded by Riedel. This is a very remarkable case in which the calcification of the gall-bladder was of such a density as to require the use of a chisel and mallet before removal could be effected.

J. J. Robb reports a case in which the gall-bladder is filled with calculi, these being cemented together with hard calcium salts, the whole surrounded by a thickened and fibrosed serous lining. The calcification of the wall is confined entirely to the parts surrounding the calculi and does not extend beyond them in the direction of the cystic duct. This relationship he believed significant.

Fowler reports having removed an irregular, pear-shaped gall-bladder with a sharp constriction at a point one-third the length from the duct. This gall-bladder was pale with hyperaemic serosa, very hard on palpation, and with an evidently thick wall. One section on the gall-bladder wall seemed stony and the contents below the constriction were found to be semi-fluid, containing a great amount of suspended matter which was finely granular with some coarser particles. Above the constriction the contents were a solid friable mortar-like mass, containing stones up to 7 cm. in diameter, and adherent to the wall. The wall was from 2 to 4 mm. in thickness. The mucosa was missing throughout, and there was extensive interstitial calcification of the wall. Microscopic examination revealed: Mucosa missing, wall composed of hyalin connective tissue, and a dense polymorphonuclear and endothelial cell infiltration of the inner surface of the wall. A few calcified areas were found on section, for which a non-calcareous area was chosen.

In Talbot's case the gall-bladder and first part of cystic duct contained calculi and both were calcified. That part of the cystic duct containing no calculi remained normal.

Robb in his article reports on specimens in the Hunterian Museum, London, and College of Surgeons Museum in Edinburgh. In one the gall-bladder is completely calcified, and its interior is fully occupied by four cholesterin stones. No evidence of infection is present. In another "the cystic duct was blocked by the only gallstone which the gall-bladder contained." The wall was completely calcified. This case closely resembles the one we report.

The above reported cases are examples of the true infiltration of the wall with lime, the so-called ossification, classified by Osler.

It is interesting to speculate on the possible etiology of such a condition of a gall-

bladder. Osler's statement—that calcification of the gall-bladder follows suppurative cholecystitis—is rather hard to accept. One becomes suddenly aware of the fact that the cases of calcified gall-bladder are strikingly symptomless. It is decidedly rare to find a suppurative cholecystitis of severity enough to cause a resulting degeneration and calcification, relatively symptomless. As you will note, the symptoms in our case are rather vague.

Sternberg states that as a result of long continued chronic inflammation, the gall-bladder often becomes smaller and can, as a consequence of suppurative process, shrink into a scarcely cherry-stone size, densely fibrous. Not rarely, also, it becomes a calcified body, enclosed in pseudomembrane.

Robb states that this type of chronic infection causes a tissue degeneration and fibrous metaplasia and that the inevitable progressive scar contraction follows slowly eliminating the vitality of the tissue and the deposition of calcium salts within it results. This type may or may not contain gallstones.

The review of the literature reveals that in all cases calcified gall-bladder was accompanied by gallstones and it may be that these are of significance. Robb points out that the calcified areas in the gall-bladder were confined entirely to the parts adjacent to the stones and believes that these changes were due to trauma of the sac contracting against the stones which resulted in "degeneration and fibrous replacement of the tissues", a process of contraction and pressure atrophy. It is granted that infection plays a great part in the etiology of calculi but it seems to play only a small part in the process of calcification.

CASE REPORT

Mrs. M. S., case #19842, married, white female born in Wisconsin, of Scot Irish and English descent and a housewife by occupation, was admitted to Mercy Hospital, March 30, 1930, was operated April 1, 1930, and discharged from the hospital April 14, 1930.

Chief Complaint—Catch in right side and loss of weight with a duration of six months.

Present Illness—About a year ago patient had lower teeth out; could not become accustomed to artificial denture and could not eat well; started losing weight. When she was on her feet a great

deal her right side would bother her like a side-ache; for four or five years she had had gas especially if she ate certain types of food, which attacks would often come on right after eating. Otherwise the history was negative.

Past Medical History—Patient has had scarlet fever, influenza, pleurisy, inflammation of the bladder, and repeated colds; no injuries; no operations.

Family History—Father dead, arteriosclerosis; mother dead, carcinoma of the stomach. One brother living and well, two brothers dead, one of cerebral hemorrhage, one of Tabes. One sister died in infancy.

Marital History—Negative.

Physical Examination—Reveals a white female five feet three inches tall with a normal weight of one hundred twenty-eight pounds and a present weight of one hundred twenty-one pounds, duration loss of weight three months; loss of strength (basis four) one; systolic blood pressure one hundred fifty-five, diastolic eighty; pulse sixty-five; temperature ninety-eight. Patient is thin; skin rather dry; shows evidence of loss of weight. Examination of the abdomen on the right shows mass coming down with deep inspiration, palpation reveals an irregular, hard, tender mass in the upper right quadrant which goes down with deep inspiration; remainder of abdomen is negative. Anterior curvature of the upper spine; some enlargement of the finger joints. Physical examination otherwise negative.

Clinical Laboratory Reports—Urine chemically negative; microscopic showing occasional pus cells. Blood—hemogloblin 92%, erthyrocytes 4,300,000, leucocytes 7,000. Blood Wassermann negative; blood chemistry within normal limits.

X-ray Examination—Flat abdominal plate—antereo-posterior view. In the upper right quadrant there is a large pear-shaped mass, the edges of which are very dense, with mid-portion very mottled in appearance, and the upper portion appears to be attached to the liver and has a small indentation. Diagnosis: calcification of a greatly distended and enlarged gall-bladder probably filled with stones.

With the stomach filled with barium, this mass seems to impinge on the duodenum preventing its filling.

Pre-operative diagnosis and Indications for Operation—Cholelithiasis with calcareous deposit in the gall-bladder wall. Operation was indicated by x-ray and physical findings.

Operative Technique and Findings—High right rectus incision; exploration revealed a very large calcified gall-bladder with a stone in the cystic duct about the size of a walnut; round ligament was clamped and tied and used as a retractor, whole mass brought up and a pack placed back of the liver. The gall-bladder removed by clamping the cystic duct and dissecting from below upward; one flat rubber drain and one cigarette drain was used, wound closed in layers. Patient's condition good.

Gross and Microscopic Diagnosis—This specimen consists of a gall-bladder measuring 8 centimeters in length of 6½ centimeters in diameter over the fundus. The cystic duct contains at opening a firmly impacted gallstone measuring 3 contimeters in diameter, which dilates and completely obstructs the duct. A similar 3 centimeter sized faceted gallstone is present in the fundus which is filled with thick, yellow, grumous material. The mucosa is absent and replaced by a smooth lining membrane. The wall in numerous regions is calcified and reveals white, firm plaques extending throughout the wall. The serosa is pale gray and covered with fibrous tags. The wall of the cystic duct is thickened and similar to that of the gall-bladder except that it is not calcified. There is a marked calcification and fibrinous thickening at the point of entry at the cystic duct and at the point of entrance into the gall-bladder. Diagnosis: 1. Chronic Cholecystitis and Cholelithiasis. 2. Calcification of the Gall-bladder.

Section reveals the wall of a gall-bladder which is greatly thickened by dense fibrous tissue. The mucosal villi have been flattened and almost entirely replaced, although in regions they remain covered over by a layer of flat epithelial cells and covered with debris. There are areas of purple calcified tissue within the fibrous wall. Another section reveals a similar picture with considerable mucous lymphoid infiltration.

Final Diagnosis—Cholelithiasis, cholecystitis and calcification of the wall of the gall-bladder.

Progress During Stay in Hospital—Patient entered March 30, 1930, with acute cholelithiasis and enlarged gall-bladder filled with stone mass. April 1, 1930, gall-bladder was removed under spinal anaesthesia. Condition of patient following operation was good. April 7, 1930, temperature, pulse and respiration were within normal limits. Has had some tympanitis. General condition very good. April 14, 1930, patient dismissed in good condition, slight drainage.

Condition on Discharge—Patient had recovered and was in very good physical condition. This patient was returned to her home doctor for post-operative treatment.

COMMENT

Our case presents a somewhat different problem from those cited from the literature. Here we have calcification of the whole wall and only two large stones present, one of which completely blocks the cystic duct. The question arises, Can simple dilatation atrophy cause this condition? Robb believes, and one is inclined to agree, that if contraction and pressure atrophy can cause a calcification, a simple dilatation atrophy can do the same. He cites a specimen in Surgeons Museum, Edinburgh, in which the gall-bladder was markedly dilated and the cystic duct was blocked by only one gallstone, similar to our case. Robb explains the calcification on the basis of a blockage, resulting in a "mucocele with resulting distention, loss of function leading to atrophy in the muscular strata fibrous replacement, and finally calcification."

It is noteworthy that calcification has

taken place in the wall and the duct around the gallstone, and that similar to our case the part of the cystic duct lower down remains normal, indicating, as Robb believes, that the stress of dilatation and of contraction and pressure atrophy are the chief causal factors in the calcification.

The other type of calcified gall-bladder which Osler mentions is "the incrustation of the mucosa with lime salts." In this case the mucosa is the only layer involved. The etiology of this condition is difficult to explain and the literature is void of an adequate explanation.

One would classify these gall-bladders according to Osler—diffuse calcification of the gall-bladder wall, and selective calcification of the gall-bladder mucosa. The former divides into infective and non-infective types, according to Robb.

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Pellagra

By E. F. ANDRE, M. D.
Kenosha

THE impression that pellagra is not now prevalent in this country and that cases are diminishing yearly is without foundation. It is a noteworthy fact that pellagra goes hand in hand with periods of economic depression and that the lowest points in recorded pellagra prevalence are those years marked by a high degree of prosperity.

Pellagra has been recognized as a disease for more than two hundred years and many countries the world over have been affected by its presence, it was not until 1907 that the United States knew anything of its endemic nature. As yet, there is some scientific uncertainty about the disease, and one is astonished to see an absence of recent literature in medical journals; and textbooks, with few exceptions, omit a comprehensive discussion of the disease.

Pellagra, may be defined, as an endemic disease, occurring usually in temperate and sub-tropical countries, characterized by dermatological lesions in combination with gastro-intestinal disorders and nervous phenomena of various types and intensities. Any one of the symptoms may be entirely lacking or may be outstanding.

The name of Goldberger is probably foremost in the list of those making special studies of this disease. The mass of evidence he accumulated has few equals in the history of medical sciences. And when all the evidence has been examined one cannot escape the conviction that the underlying cause is a specific fault, and rests on a basis as sound as that upon which scurvy and rickets are founded. It has been definitely established that a lack of vitamin B/2, also called G. or E. is the causative factor.

During periods of economic stress the more widely available non-perishable and comparatively cheap foods as, cornmeal, flour, rice, lard, molasses, salt pork, dried fruits, and the less expensive canned goods are, for the most part, the main dependence for subsistence for long periods of time. Throughout the last few years the main diet of indigents, being supported by the various towns and cities, has consisted of these. It is a wonder to me that pellagra has not become more prevalent.

Within the last few years I have seen a few cases of pellagra, all of which gave histories of subsisting for long periods on the more staple foods, and which responded to high vitamin, anti-pellagric diets.

CASE REPORTS

Case (1). Female, age 23 years, divorced, one child 3 years old. She moved to this city one month prior to December, 1932, from northern Wisconsin. For three months she had suffered from diarrhea, having as many as fourteen stools in one day. Within the last two weeks she has had a burning sensation in her mouth and throat, and has noticed that her tongue has become very red. For six months prior to her moving to this city, she had been living on the township, and her food had consisted of the cheap staples. Her child, however, had plenty of fresh foods. After a few weeks of this type of food she had noticed a change in her appetite, even to the point that she loathed foods of all kinds. The diarrhea developed insidiously and was intermittent in type when it began. One month before she came to me, she had been told she was suffering from "autointoxication" and advised to go on a diet of toast, tea and crackers. This only seemed to aggravate her condition. She claimed to have lost 21 pounds in the previous six months. She stated that she had always been well before this. Her family history was negative.

Physical examination revealed a young female showing evidences of a loss in weight and considerable dehydration. The essential physical changes follow. Nose showed evidences of a chronic rhinitis. The gums did not bleed and no ulcerations were present. The tongue was red, and showed a definite loss of epithelium on both lateral margins. No ulcerations were present. The tonsils were normal, the pharynx showed some hyperemia. Abdomen showed numerous striae, no masses, no liver or splenic enlargements, no rigidity present. There was, however, a generalized tenderness along the course of the large colon. Vaginal examination showed a slight discharge, otherwise normal. Bimanual examination was negative. The anus showed two small external hemorrhoidal masses. Digital examination of the rectum had to be dispensed with due to extreme pain. Skin examination was entirely negative. No blemishes of any kind were present. Knee reflexes were hyperactive, no Babinski, Romberg was negative. Temperature was normal, blood pressure within normal limits.

Laboratory examinations showed, Blood—Hgb. 56%, red count 3,770,000, white 7,560. Differential was normal. Urine was negative. Stool was acid, foamy, contained numerous pus and red cells. Positive chemical reaction for blood. Culture was negative. Wassermann, Widal, and Malta fever tests were all negative. Blood culture negative. Gastric analysis done after an Ewald test meal showed a lack of free HCL. Throat cultures were negative. Vaginal smears were negative.

The treatment in this case consisted of a well balanced, high vitamin content diet, given in three large meals with three small meals interspaced. Small moderate feedings seem to be better tolerated by some of these cases. All fresh fruits and vegetables of any type and quantity were allowed. Meats consisting of beef, fish, liver, sweetbreads, and lamb were included in the diet. Two quarts of milk were given daily. Dilute HCL in divided doses of five minims each, and totaling fifteen minims were given during the morning, noon and evening meals. Viosterol, in doses of fifteen minims was given T. I. D. before each main meal. Dried brewers yeast, in dram and a half doses was given four times daily.

Moist heat was applied to the abdomen to relieve spasm and tr. opium in twenty minim doses was given for abdominal cramps when severe. Soothing mouth washes were used as were hot olive oil retention enemas. The treatment was mainly dietary.

Within six days the diarrhea had ceased entirely, but abdominal cramps were complained of for seven days after. The tongue cleared up within nineteen days. The burning sensation in the mouth and throat caused after the fourth day of treatment. To date the woman has been symptom free. For one week each month she has been taking dried brewers' yeast in dram doses T. I. D. It has been shown that this form of yeast will prevent recurrence of symptoms if continued, even though the diet may become changed in variety. To date the patient has gained 12 pounds.

Case (2). Male, age 31, unmarried, carpenter by trade, came complaining of diarrhea of six weeks duration. About six months ago he had a sore tongue for two weeks. This however cleared up and recurred about three months ago, and has since become progressively worse. Within the last two weeks he has noticed a roughness of the skin on the back of both wrists but claims that he has had that since being "frost bitten" one month ago. He stated that he had lost 24 pounds in the last year and a half. His family and personal history were of no consequence.

Physical examination revealed a well developed male, showing evidences of a loss in weight. Essential changes noted. Teeth were in fair condition, the gums bled easily and numerous aphthous ulcers were present along the gingival margin. The tongue was red, and there was a definite loss of epithelium on the margins as well as the dorsum of the tongue. The throat showed a general hyperemia. The abdomen was tender throughout. There was no palpable liver or splenic enlargement, no masses, no rigidity. Reflexes were normal. Temperature normal, blood pressure within normal limits. The skin except for a mild erythema and roughness on the dorsum of both wrists was negative.

Laboratory examinations; blood—Hgb. 72%, red count 3,960,000, white count 10,360, differential normal. Urine normal. Wassermann, Widal, Malta fever were negative. Stool—alkaline, much mucus, no pus but numerous blood cells. Strong chemical reaction for occult blood. Culture negative. There was a lack of free HCL in the gastric contents. Throat cultures were negative. Blood cultures negative. Prostatic secretion negative.

The treatment as outlined before was instituted

and within three weeks the patient was symptom free. The roughness of the wrists persisted for six weeks and finally disappeared. Once daily this patient takes one dram of yeast. To date he has gained 16 pounds.

Case (3). Male, age 67, heavy periodic drinker. Has loss of appetite, sore tongue, blush on wrists, and diarrhea, which recurs regularly near the termination of his alcoholic sprees. This is to show this type often seen in chronic alcoholics, which has been called by some a "pseudo-pellagra". When this man resumes his regular habits after these sprees he quickly becomes symptom-free, and remains so until his next debauch. The cause in this case is not that of improper food primarily, but of voluntary abstinence from food. Treatment is of no avail during his indulgences.

Case (4). Female, age 19, unmarried, clerk. Has had rash on neck and on dorsum of wrists for three months which was diagnosed as "eczema". Intermittent diarrhea for three weeks. Within the last ten days has had a burning sensation in her mouth. Personal and family history were negative. There was however a definite history of improper dieting for 18 months. This young woman thought it very fashionable to be thin and had reduced her foods in quantity as well as in quality. She had lost 15 pounds in the last six months. Her condition was quickly rectified, except for the skin condition which did not clear up for five weeks, by orders to eat until satisfied, and to forget about her weight. To date her weight is the same as before her self-enforced dieting.

It is not unusual to find some manifestations after prolonged periods of self denial of foods or after months of restricted diets for gastric ulcers, gall-bladder conditions, etc., which strongly suggest a pellagra-like condition. There is little doubt that such avitaminosis cases represent an avitaminosis and as a rule, quickly respond to a full, well rounded diet.

The outstanding symptom in all these cases is a diarrhea, which varies in type and intensities. With any chronic type of diarrhea, whether dermatological lesions, mouth symptoms, or nervous phenomena are present or not, one must be on the look-out for a possible pellagra. I cannot help but feel that many cases of chronic diarrhea go undiagnosed properly because this condition is not suspected.

CONCLUSIONS

(1) Pellagra and pellagrous-like manifestations are not uncommonly seen in private practice but are often overlooked by the general practitioner.

(2) Pellagra is definitely tied up with the economic order and is more often seen during periods of depression.

(3) The foods as supplied to indigents by various relief organizations are for the most part composed of the cheaper staples and over long periods of time such subsistence may cause the typical pellagra syndrome.

(4) Pellagra is a definite avitaminosis and is as well established as any other deficiency disease.

(5) The treatment consists in the institution of a high vitamin content diet.

(6) Dried brewers' yeast is an excellent source of vitamin B/2, and if given to those having had pellagra will definitely prevent future attacks.

(7) Self imposed diets, chronic alcoholism etc., will, if persisted in for a long time, cause pellagra-like symptoms and may eventually lead to a true pellagra.

(8) One must constantly keep in mind that any one of the symptoms of pellagra may be present or absent.

(9) Mental phenomena are not as a rule seen in pellagra of short duration.

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The Purposes of Prenatal Care

By ROBERT E. McDONALD, M. D.
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THE subject of prenatal care is not a new one, but since the mortality rate among mothers and newly born infants remains amazingly high it seems that too much consideration cannot be directed toward this important field of preventive medicine. The rapidly and progressively declining birth rate stresses the great importance of conserving infant life.

Much has been accomplished by the more forward looking members of our profession in the past decade by their insistence upon patients seeking care and supervision early in pregnancy. The same may be said for the younger lay generations who, especially among the more intelligent classes, have come to realize the advisability of prenatal care and are beginning to demand it. As yet, however, there remains a relatively large percentage in each of these two groups who have not accepted the challenge of better obstetrical practice. This has as its ultimate aims the reduction of maternal and infant mortality and morbidity, the prevention of variable degrees of maternal disability from avoidable causes, and a reduction in the number of catastrophies which still harass the lives of infants during the first and second stages of labor. Regarding this last consideration, let it be said that many birth injuries to the newborn resulting in temporary or life-long mental and physical abnormalities may be prevented by timely recognition of factors predisposing to dystocia and by judiciously aiding nature's forces to minimize the trauma to the baby and the mother.

Pregnancy and labor are essentially normal, physiologic and biologic conditions with which the larger percentage of mature women are confronted sometime in their lives. However, as Williams has aptly stated, "nowhere is the borderline between health and disease less clearly defined than in pregnancy." Slight indispositions at this time, much more so than during the nonpregnant state, may be the precursors of pathologic conditions which may seriously endanger the life of the mother, the baby, or both.

The science of obstetrics has been slow in gaining its proper position to rank on an equal level with general surgery, the surgical specialties and internal medicine. Though the causes are manifold, several reasons are outstanding. Midwifery, as practiced by self-trained and improperly prepared women, the casual manner with which women in the past have regarded pregnancy, and the failure of physicians to recognize and evaluate the pitfalls incident to pregnancy are factors which have conspicuously shared the responsibility for the slow elevation of obstetrics to the plane which it deserves. Great strides have been made and are constantly being made by those men who have realized that prenatal care is an important step forward in the field of preventive medicine, who whole-heartedly believe in it, and who have taken the initiative in teaching their colleagues and the people of their communities.

There are few women in this day who cannot be taught to appreciate the value of supervision through their pregnancies. This is particularly true when they learn that much may be accomplished to improve their health and happiness and that many babies, formerly lost, might be saved if the opportunity for recognition of abnormalities in pregnancy is made available before it is too late.

Those of us who practice obstetrics, and that includes the majority of medical men, have a double responsibility. What more sacred duty is performed than that by a woman who becomes a mother and a vital director in the organization of society? Ours is a duty second only to hers. We must utilize every bit of knowledge that we possess, and practice obstetrics as an art with the view to enabling our mothers to enjoy the best possible health throughout their pregnancies, delivering them with the minimum of injury to themselves and their off-

spring, and restoring each mother, with her baby, to society in good condition to resume her place of usefulness.

Before considering some of the more specific phases of prenatal practice, let us first briefly consider some of the facts which may help to emphasize the goal which we are all striving to attain, namely the reduction of maternal and infant mortality.

The immediate and remote effects of childbirth claim annually in the United States the lives of approximately 25,000 mothers. In the neighborhood of 100,000 babies are stillborn each year and many more infants, probably equal in number, die in the early neonatal period. These figures are appalling when we are confronted with them. Most discouraging of all, however, is the knowledge that a large number of these deaths, both stillbirths and neonatal deaths, are preventable. Another phase of maternal and infant welfare deserving of our careful attention is brought to us through contacts of every day practice and not through statistics. Here I refer to the invalidism and wretchedness of mothers and loss of infants due to hasty and unwarranted obstetrical interference. While this particular subject is a digression from the principal consideration of this paper, it is of sufficient importance to justify its mention. Birth injuries to babies, notably those of cerebral type, are important here in that many are unquestionably preventable. By proper antenatal examination the discovery of cephalo-pelvic disproportion may many times guide one in choosing the proper course for delivery and thus reduce the incidence of cerebral injuries and stillbirths resulting from the passage of a normal size or a large baby through a contracted or a deformed pelvis.

INDIVIDUAL REQUIREMENTS

Each prenatal case should be looked upon as an individual problem and should not be grouped in a class to which "blanket instructions" are given. There are, however, certain general procedures to be followed in all or most instances with special procedures and advice to be reserved for the abnormal cases. All patients should be urged to seek the services of their physician as soon as pregnancy is suspected. It makes very little difference whether the pregnancy be the first or the tenth. Prenatal supervision is important in all and because a woman has safely passed through one or more confinements does not necessarily imply that she will continue to be so fortunate.

Customs vary somewhat as to the number of antenatal visits that should be required of patients, but it is well to say that at least one visit a month through the seventh month, two in the eighth, and weekly visits from that time until delivered should be advised for the woman who is well and normal throughout the period. Abnormal cases or those presenting special problems may be required to carry out a different course as seems best to fit their needs.

A careful history is essential and is best taken at the first visit. Points of special importance include: Information relative to past history, previous pregnancies and deliveries, and the menstrual cycle. Points of secondary importance are the family history, marital history and information, if possible, as to the character of the patient's mother's deliveries.

History of past or present tuberculosis and of venereal infection are of paramount importance. Cases of "healed tuberculosis" must be diligently watched for the ever-present possibilities of a breakdown and recrudescence under the strain of pregnancy and labor. Active cases present a much graver problem and a decision as to the proper course to follow necessarily depends upon the state of activity present. Sanatorium care with all its facilities for treatment of the tuberculous patient is here, as in the non-pregnant woman, the most satisfactory. Many of these patients can be successfully carried through to term with a reasonable chance for improvement in general health through the latter two-thirds of the pregnancy. Labor is the second critical stage and it should be terminated in a manner which imposes the minimum of strain upon the patient. The third period is that of lactation, which should be absolutely avoided. Nursing should not be permitted and immediate measures must be taken to dry the breasts.

Gonorrhea may and should be actively treated up to the onset of labor. Syphilis is responsible for many stillbirths, abortions, and premature labors. Habitual abortion should arouse suspicion of syphilis and warrants careful serological tests in an effort to establish a cause. Hypothyroidism also is responsible for early abortions so that, having ruled out syphilis, it is well to determine the basal metabolic rate of the patient. Thyroid gland therapy, to restore a lowered basal metabolism to normal or near normal limits, will protect some patients against early abortion. Very little need be said in regard to the treatment of syphilis except to stress the need for the early recognition of the disease in prospective mothers and the value of beginning treatment early in pregnancy. Preconceptional treatment of syphilis is, of course, the most desirable. If, however, the woman is already in the early months of pregnancy, immediate and adequate anti-luetic treatment may prevent abortion and make possible the birth of a normal infant.

It is not my purpose to outline or suggest treatment for the many adverse conditions which may arise during pregnancy. Neither can one begin to enumerate the multiplicity of abnormal states for which one must be on the alert. It is, however, my purpose to stress the fact that lack of prenatal supervision or poor and inadequate care is responsible for many obstetrical difficulties which might be avoided.

AVOIDING DIFFICULTIES

No more striking example of the benefits of prenatal care are to be cited than the early recognition of developing toxemias. Some women console themselves with the thought that vomiting and nausea are evils of early pregnancy which must be endured. That much of this condition can be relieved and that the early days of their pregnancy may be made more pleasant not all women know. A prenatal regime begun at this time would spare them much discomfort. We know, however, that the great majority of women will suffer no untoward effects, but merely distress, from gastric upsets in the first trimester. On the other hand, could not much be accomplished for the exceptional case that tends to progress into the stage of pernicious or toxic vomiting if she had presented herself early to a physician? It is to protect this minority group that we should spread the propaganda for thorough prenatal supervision which should be begun when the woman first believes herself to be pregnant.

Late toxemias, seen for the first time in convulsions, are serious problems at best. The acute, fulminating type of eclampsia will probably always be one of the less frequent menacing conditions in obstetrics. It must be dealt with as a serious situation per se. Most toxemias of the eclamptic type, however, are ushered in by the warning preeclamptic state. Here it is that by careful observation of the patient's general condition, blood pressure readings and urinalysis, we may recognize and take measures to arrest the progress of toxemia at its inception. If, under proper treatment, there seems to be no improvement, a premature delivery is to be considered. This procedure, while undertaken in behalf of the mother, will at the same time often be the means of securing a living child which might succumb with the mother were the toxemia to progress.

A common symptom syndrome in pregnancy is that of tetany. Richardson, by his excellent studies in metabolism, has shown this to be due to a deficiency in the calcium-phosphorus content of the blood. This deficiency, though it may be either actual or relative, causes symptoms of actual tetany which in many cases go unrecognized. Notable among these disturbances are cachexia, muscular weakness, crampy pains in the legs from muscular contractures, puffiness of face, hands and legs with numbness and tingling. "Pressure upon deep pelvic nerves" is the explanation frequently given the patient as the cause of leg cramps and numbness of the lower extremities.

It is surprising to note how rapidly the above symptoms will disappear in the majority of cases when calcium is administered in one of the more assimilable forms (Calcium Diphosphate, Calcium Gluconate) together with viosterol.

Calcium given during pregnancy is prob-

ably better utilized when given with viosterol although cases of extreme deficiency may be more promptly benefited by the intravenous administration of calcium gluconate.

Though lacking irrefutable evidence, it seems reasonable to believe that the incidence of dental caries in the mother should be lessened by the administration of calcium, phosphorus and vitamin D.

Rickets, a metabolic disease due to dietary deficiency and doubtless due to lack of vitamin D, may be prevented in the child by the addition of these necessary elements to the mother's diet during pregnancy.

Richardson further states that the progress of many toxemias of the pre-eclamptic variety is arrested by heavy doses of viosterol plus dietary restriction, and that post-partum hemorrhage is definitely lessened through more rapid coagulation time of the blood. I have become convinced of the latter contention, but have had too meager an experience with the use of viosterol or other calcium preparations in toxemias to make any statement.

Another consideration worthy of attention during the antenatal period is that of posture. Elementary though it may seem, this is a subject upon which too little attention is focused. Back strain, fatigue and lower abdominal pain are often the result of poor posture, either through faulty carriage or from improperly fitted and high-heeled shoes. Patients should be advised that their general condition will be markedly improved if they will but give some attention to posture. Many of the annoying aches and pains and much of the discomfort and fatigue incident to the later stages of pregnancy in these cases will promptly disappear.

There is still much that might be said on the subject of prenatal care, especially if one were attempting to outline a regime or to consider in detail its multiple phases. Such is not the purpose of this paper. As I have said before, the subject is not a new one, but its importance cannot be refuted and I believe that in medicine, as elsewhere, things worth while are impressed on our minds through repetition. The advisability for proper supervision throughout pregnancy is accepted by most medical men and by a large part of those women who make up our practices, especially the younger women. Unfortunately, there are still many in both of these classes who do not appreciate this phase of medical practice as a major step forward in the field of preventive medicine.

Arteriovenous Aneurysm; Its Effect on the Heart

A Brief Review of the Literature and Report of a Case

By JOSEPH DEAN, M. D., and JOSEPH C. DEAN, M. D.
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IT IS only within the past ten years that it has become generally recognized that arteriovenous fistulae, if occurring in vessels of considerable caliber, have a definite injurious effect on the heart. Halstead, Reid, Matas, Holman and others have clearly demonstrated that arteriovenous fistulae have such a serious effect on the heart that an early death from cardiac failure will result in a great proportion of cases if the fistulae are not cured by surgical means. Our interest in this subject was aroused by contact with a case of arteriovenous aneurysm between the femoral artery and vein. This case demonstrated the effect that these fistulae do have on the heart.

Callendar (1) in 1920 made a thorough study of the literature and found 447 cases reported. He accredits Hunter (1757) as being the first to recognize and understand arteriovenous aneurysm. Stewart (2) in 1913 was probably the first to state that arteriovenous fistulae exert a deleterious effect on the heart. He reports a case in which extirpation of the aneurysm with restoration of the vessels was followed by the disappearance of a heart murmur and a decrease in the size of a moderately enlarged heart. Makin (3) in 1916 observed a duplicate apical murmur in cases of arteriovenous aneurysms (Makin's murmur) and observed cardiac irregularities associated with this

condition. He was inclined to think, however, that these phenomena were only temporary. Osler (4) followed two cases of arteriovenous aneurysm for a number of years. These two patients died of cardiac failure without the aneurysm being suspected as the cause of the cardiac condition. Reid (5) in some very conclusive experiments on dogs and clinical observations on patients reported in 1920 that he considered arteriovenous aneurysms a very definite cause of serious cardiac disturbances which could be prevented or cured by curing the aneurysm. This was further substantiated by Matas (6), Holman (7) and others. In 1925 Reid (8) reported 33 cases of arterivenous aneurysm, 27 acquired and 6 congenital. Of these 26 were cured by operation, 3 improved, 2 died and 2 were not operated. Branham (9) noticed that in cases of arteriovenous fistulae, if one occluded the fistula by manual compression, there was an immediate drop in the heart and pulse rate and an increase in blood pressure especially the diastolic pressure. Matas (6) gave to this the name "Branham's Brachycardia Phenomena."

There are two forms of arteriovenous aneurysms; varicose aneurysm in which the communication between the artery and vein is indirect and a sac exists between the vessels; and aneurysmal varix in which the blood flows directly from the artery to the vein. These aneurysms may be congenital or acquired. The most frequent cause of the acquired type is trauma, a gunshot wound being the common cause. The modern bullet which makes a small puncture is very likely to cause an injury of this type. Formerly when bleeding was in vogue, arteriovenous aneurysm at the elbow with a communication between the brachial or the ulnar artery and a vein was comparatively frequent. Hunter's cases were of this type. Fractures and stabs or indirect injuries also may result in arteriovenous fistulae, and occasionally it occurs spontaneously, which is rare and is probably due to some degeneration in the wall of the artery which permits perforation at that point. The distal portion of the artery becomes contracted, the pressure in it being lower because part of the blood passes into the vein. The central portion of the artery, however, becomes greatly dilated. Halstead (10) suggests that this dilatation may be due to a greatly lowered pulse pressure at the site of the fistula. Others have maintained it is a true hypertrophy in effort to bring enough blood to supply the affected extremity.

Locally arteriovenous fistulae are characterized by a throbbing, pulsating mass. Pain, distal to the fistula, is a common occurrence and was a very prominent feature in the case presented below. A venous hum and roar can be heard over the fistula. Frequently the superficial veins draining into the region of the fistula are very much engorged and pulsations can be seen and felt in them. Blood taken from these veins shows a high percentage of oxygen and low carbon dioxide as compared with blood from a vein in another part of the body. The extremity distal to the fistula is colder than the normal one and pulsation in the larger arteries is very weak or absent to palpation. Persons with arteriovenous fistulae between vessels of relatively large caliber usually have symptoms referable to the heart, such as palpitation, dyspnoea and edema. In cases of long standing extreme cardiac decompensation may occur resulting in death of the individual. Reid (11) describes a case in which the heart was so completely decompensated that the patient had general anasarca and had been bedridden for six months. Excision of the fistula relieved completely all symptoms and restored the heart to competency for normal work and exercise. An increase in the heart rate is also present but manual occlusion of the fistula results in a marked drop in the number of beats per minute (Branham's Brachycardia Phenomenon). A duplicate apical murmur is commonly found (Makin's murmur). Manual occlusion of the fistula usually results in immediate disappearance of this murmur. Blood pressure is affected in the presence of arteriovenous aneurysms, the systolic pressure being elevated and the diastolic lowered with a resulting increase in the pulse pressure. Occlusion of the fistula manually results in some lowering of the systolic pressure but more markedly an increase in the

diastolic with a lowering of the pulse pressure (Hill's and Flack's sign). Blood pressure reading in the affected extremity is very low or cannot be obtained at all. A capillary pulse is sometimes described.

The cause of the cardiac hypertrophy and irregularity is disputed. Holman says it is entirely mechanical. He proved that the heart does handle an increased amount of blood while the fistula is open and stated that the rapid pulse and cardiac hypertrophy were due to an increase in the volume of blood passing through the heart per unit of time, and that the cardiac dilatation was due to a general dilatation of the system, artery, fistula and vein. Lewis and Drury (12) noted the low diastolic pressure, the high pulse pressure and the capillary pulse and stated that a large arteriovenous fistula produces the hydrodynamics of aortic regurgitation. Reid (13) in a recent article states that he believes that the increased amount of blood handled by the heart in cases of large fistulae is not the only cause of the cardiac hypertrophy and dilatation although it is probably the primary cause. Lewis and Drury compared the amount of blood leaking back into the left ventricle in a case of aortic regurgitation to that passing from the artery into the vein in an arteriovenous fistula. A leaking aortic valve disturbs the normal pressure in the arterial system. Blood passing from a large artery directly into a vein without passing through the smaller vessels and capillary bed must result in a sudden drop in the peripheral resistance at that point. Is the low diastolic pressure associated with a lowered peripheral resistance? It would seem that a disturbance of normal peripheral resistance might be just as important a factor in the cardiac abnormalities as the increased amount of blood handled by the heart, if not more.

CASE REPORT

The patient, a young male, age 17, was first admitted to the hospital on October 7, 1929, complaining of a swelling of the right thigh and hip. History also elicited palpitation on moderate exertion. The swelling in the leg began two years previously and the patient gave a history of a fall with injury to his leg, four years previous to admission. Examination revealed cardiac enlargement, (49% by orthodiagram), rapid pulse, (100), and a systolic murmur at the apex which was poorly transmitted to the axilla. One observer noticed a definite capillary pulse. The pulse pressure was somewhat elevated and a diagnosis of aortic valvular disease was suggested. The Wassermann was negative. The patient was seen by a medical consultant who suggested a mitral insufficiency either relative or organic with a possibility of congenital heart disease. The patient gave no history of rheumatic fever, chorea or frequent sore throats. There was a fusiform swelling of the right thigh. X-ray report was positive for bone disease and a diagnosis of bone cyst or Brodie's abscess was made. An incision was made laterally on the thigh and a depression on the posterior surface of the bone filled with engorged tortuous veins was found. Bleeding was excessive and the wound was packed, with no further procedure. Convalescence was uneventful and the patient was discharged unchanged.

The patient was seen again in the clinic in June 1932. He was complaining of palpitation and a visible and audible pulsation on the right thigh and a humming noise in the leg which kept him awake at night. He also had dull pain and cramps in the leg. He stated that he had always been short of breath and could not play games as well as his companions. Examination revealed the above cardiac condition and a pulsating mass in Scarpa's triangle just below Poupart's ligament but the patient could not give any history of injury in childhood. All the signs of an arteriovenous fistula of the femoral artery and vein were present, i. e., a marked thrill and venous hum and roar over the pulsating area. A systolic murmur (not typically Makin's) was heard at the apex of the heart. Compression of the mass so as to close the fistula resulted in an immediate disappearance of the murmur. On occlusion of the fistula, the pulse dropped from 90 to 70 (Branham's sign). Differential blood pressure readings in the arm and leg were present (Hill and Flack sign). Occlusion of the fistula resulted in a change of pressure especially in the diastolic as is usual in these cases. In the left arm the pressure was 132/48 and rose to 138/96. In the right arm it was 140/50 and rose to 150/70 on occlusion of the fistulous opening. No pressure readings could be obtained on the right leg below the fistulous opening. No pulse could be felt in the dorsalis pedis or posterior tibial arteries before or after occlusion. Dilated veins were visible over the abdomen and the thigh and definite pulsations were felt over these. Blood drawn from these veins was definitely arterial in appearance as compared with that from the veins in the arm. Laboratory examination revealed that the carbon dioxide content of the blood from these veins was very low. X-ray showed that the heart occupied 56.2% of the thorax as compared to a normal of 42 to 48%. (Fig. 1) The right leg was somewhat colder than the left. Manual occlusion of the fistula did not result in any precordial distress and it was considered safe for surgical procedure. The patient was operated on July 11, 1932. It was

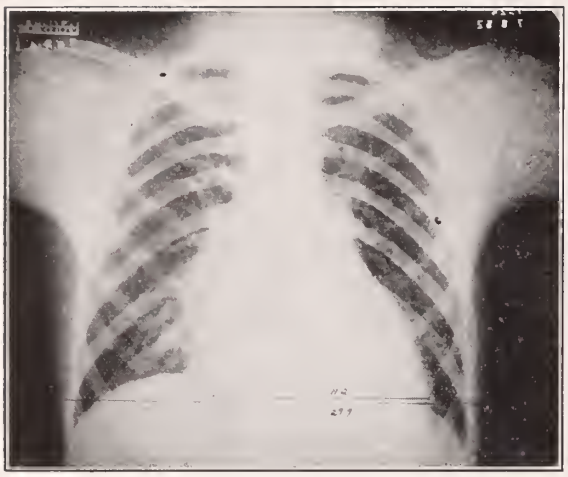

Fig. 1. X-ray of chest showing size of heart before operation.

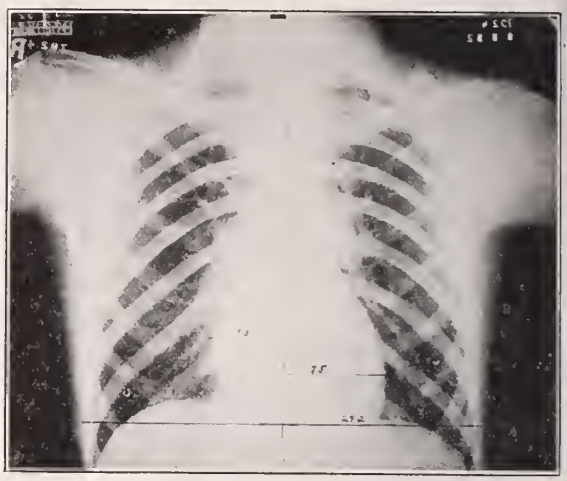

Fig. II. X-ray of chest showing size of heart one month after excision of aneurysm.

found impossible to do a restorative angiorrhaphy so an excision was done by quadruple ligation of the artery and the vein with careful ligation of all laterals entering the fistulous area.

Convalescence was uneventful. An x-ray taken one month after the operation showed that the transverse diameter of the heart had decreased 4 cm. and its relative size from 56.2% to 43.8%, a decrease of 12.4%. (Fig. 2) When last seen, two months after the operation, the patient stated that his cardiac symptoms had entirely disappeared and that he felt better than at any time in his life. At this time no cardiac murmur was audible. The blood pressure in his left arm was 114/66, in his left leg 114/64 and in his right arm 128/78. Therefore, it shows a considerable rise in his diastolic pressure with a drop in the pulse pressure. Considerable edema appeared in the right leg after the operation. When last seen this had decreased about 50% and will probably disappear eventually. However, no pressure readings could be obtained in the leg. The pulse was 84 while previous to the operation it was around 100. The enlarged veins on the abdomen and thigh had completely disappeared. It is, of course, evident that the fistula was present at the time of his first examination, but was missed at that time.

TREATMENT

The treatment of arteriovenous aneurysm is surgical. Arteriovenous fistulas occurring in vessels of small caliber have no deleterious effect on the heart but they are very annoying and the patient usually desires their removal. Osler (14) in reporting his cases counselled against operation because of fear of gangrene and states that one patient "narrowly escaped operation in Dublin". All are agreed that operation should not be done at the time of injury and the production of the fistula because waiting a few months results in the formation of collateral circulation, makes dissection easier and because occasionally spontaneous healing occurs. Three types of procedures have been suggested: (1) single ligation, (2) quadruple ligation with extirpation of the sac and part of the artery and vein, and, (3) restoration of continuity by an endoaneurysmorrhaphy. Ligation alone is not sufficient as small intermediary branches may keep the fistula open. However, in the cranium where extirpation or endoaneurysmorrhaphy is impossible, ligation of the common and internal carotid is the only procedure possible. Quadruple ligation with extirpation of the sac and vessels gives good results. Often angiorrhaphy is impossible and extirpation is the only procedure feasible. Matas (6) states that if one vessel is sacrificed to save the others, it is better to sacrifice the vein and preserve the artery. Reid (15) and Holman (16) both advise that if the artery is ligated, the vein must also be ligated in order to prevent an arteriovenous imbalance. Reid (15) and Holman (16) at one time believed that extirpation was preferable to restoration of continuity by angiorrhaphy. Holman (17) later stated that restoration of continuity was preferable when possible. Stewart (2) in reporting his case in 1913 said that extirpation was the only rival of angiorrhaphy. The restoration of continuity by the Matas principle of endoaneurysmorrhaphy is theoretically the best procedure

because here one does not have to rely on collateral circulation. Matas (6) suggested that before operating, tests for the efficiency of the collateral circulation should be made. Reid (18) has shown, however, that an arteriovenous fistula is the most powerful stimulus to a collateral circulation and that efforts to promote a collateral circulation are useless. All writers are agreed that manual occlusion of the fistula should be done before operation to observe the effect on the heart. Many patients complain of a tight or dyspnoeic feeling in the chest on manual occlusion and in these sudden permanent closure of the fistula might result in cardiac failure. In these cases the heart must be prepared for permanent closure by a period of manual occlusion until such a procedure no longer causes cardiac distress. Holman (16) warned that a prolonged convalescence with rest in bed is necessary after operation in cases with marked dilatation of the heart in order to give the heart time to adjust itself to an increased diastolic pressure.

SUMMARY

(1) Arteriovenous aneurysms, if occurring in vessels of large caliber, have a marked deleterious effect on the heart with cardiac hypertrophy and dilatation. Closure of the fistula relieves cardiac symptoms and causes the heart to return to normal size.

(2) The cause of this effect on the heart is not known. One factor is undoubtedly the shunting of a large amount of arterial blood back to the heart with a resulting increase in the amount of blood handled by the heart. A more important factor might be a lowered peripheral resistance with resulting hydrodynamics similar to that of aortic regurgitation.

(3) The heart must be prepared for permanent closure of the fistula by a period devoted to temporary manual occlusion.

(4) Extirpation of the fistula and restoration of continuity of the vessel by the Matas principle of endoaneurysmorrhaphy is the procedure of choice. When this is not possible, quadruple ligation with extirpation of the sac and adjacent artery and vein gives excellent results. The collateral circulation is always well developed.

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APPENDICITIS WARNING

Through the cooperation of the Wisconsin Pharmaceutical Association, the State Medical Society of Wisconsin, and the Wisconsin State Board of Health, a joint warning has been issued to the public on the dangers of giving laxatives in the face of abdominal pain. The warning was printed by the State Board of Health and is reproduced herewith.

A copy of this warning placard has been sent to each of the fourteen hundred licensed drug stores in Wisconsin, to health officers in larger cities, and to others interested. Sixteen hundred of the placards have been published by the State Board of Health.

WARNING

In the presence of abdominal pain

Never give a laxative or physic
Give nothing by mouth
Call your family doctor

Abdominal pain, cramps, or soreness lasting for four hours is usually serious.

This warning is issued jointly by

The Wisconsin { **Pharmaceutical Association**
State Medical Society
State Board of Health

Wisconsin State Board of Health

Iodine in the Treatment of Exophthalmic Goiter*

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THE part played by iodine in the treatment of various diseases of the thyroid gland has been varied, and opinions regarding some aspects of its use have been contradictory. At present there is unanimity of opinion concerning the use of iodine as a prophylactic measure, but there are still many points of conflict concerning its use in cases of exophthalmic goiter. Iodine has been accused of having a place in the etiology of exophthalmic goiter, but this accusation has not been substantiated. Evidence has been presented that iodine administered to patients with adenomatous goiters has been a factor in inducing hyperfunction of the adenomas. This opinion, although difficult to prove, is the result of such extensive, accurate observation that it must be accepted and must influence physicians in the treatment of patients with adenomas. I wish to present some of the different phases of the use of iodine in exophthalmic goiter.

H. S. Plummer has separated the hyperthyroid states into two: hyperfunctioning adenomatous goiter and exophthalmic goiter. Characteristically, hyperfunctioning adenomatous goiter produces in the patient a physiologic status that can be reproduced experimentally by administration of desiccated thyroid gland. The patient with exophthalmic goiter gives evidence, as a rule, of the same status, and in addition of a physiologic disturbance characterized by exophthalmos, or of other ocular signs such as frequent winking, retraction of the upper eyelid, and spasm of the orbicularis oculi muscle; other signs are the gastro-intestinal crisis with diarrhea and vomiting, a characteristic psychic status and movements, and the separation of the nails from the nail beds. All or none of these phenomena may be seen in any cases of exophthalmic goiter, but usually careful observation will make some of them evident. The effect of iodine on the phenomena characteristic of exophthalmic goiter is very striking. In the state of crisis, administration of large doses of iodine is usually followed within twenty-four to forty-eight hours by complete cessation of vomiting and marked improvement in the general condition of the patient. Infections commonly seen during the crisis usually begin to clear rapidly unless they have progressed too far. The characteristic movements and the psychic status of exophthalmic goiter usually disappear after a few days of treatment. The ocular signs respond in varying degree to treatment with iodine. As a rule, the progress of exophthalmos is stopped. The abnormal contractions of the ocular muscles, winking, and the retraction of the eyelids, usually diminish within a few days. The evidences of hyperthyroidism do not disappear except in rare, isolated cases.

The place in the body of the action of iodine in exophthalmic goiter is not known definitely, nor is its mode of action known. The time of action varies. As stated in the foregoing, some of the phenomena of exophthalmic goiter disappear within twenty-four to forty-eight hours after the institution of treatment with iodine. As a rule the maximal effect of iodine probably has not been obtained until it has been administered for about seven days.

Variations in dosage have received a great deal of consideration. Thompson has found that very small doses of iodine have had as marked an effect as larger doses. This is undoubtedly true in many cases; however, in some cases larger doses have proved of greater value than smaller doses. It is not an uncommon experience to see patients who have been taking small doses for weeks show striking improvement, with further drop in basal metabolic rate, after institution of larger doses. The loss of effect of iodine varies considerably, probably largely because of variation in the stage of the disease. In many cases serious evidences of exophthalmic goiter may develop within a few days

* Read before the 8th annual meeting of the Fourth Councillor District of the State Medical Society of Wisconsin, Lancaster.

after administration of iodine is stopped. In others, usually milder cases, the disturbances may not appear for one or two weeks after administration of the drug has been discontinued.

In general use, doses of iodine vary only a little. In the case of moderate severity, 30 drops of compound solution of iodine daily is sufficient. There seems no good reason for using smaller doses. Patients in crisis may be more greatly benefited by the administration of large doses for the first two or three days. Doses of 100 drops or more daily are usually given in the crisis. This may be given by mouth in most cases, even though vomiting is present. If necessary, it may be given by rectum, diluted in physiologic solution of sodium chloride. The efficacy of sodium iodide injected intravenously has not been proved, and necessity for administration by this route is rare.

Iodine may be used as a diagnostic aid in many doubtful cases. The effect of iodine in cases of exophthalmic goiter is so striking that the change in the physiologic status may often be observed. In addition, it is wise to have a sufficiently long series of determinations of the basal metabolic rate before iodine is given, so that the true level of basal metabolism may have been determined with accuracy. A drop in basal metabolic rate after administration of iodine is of considerable significance if the previous metabolic level was accurately determined. Similarly, a rise in metabolic rate after administration of iodine is discontinued is of diagnostic significance. Iodine as a diagnostic aid is most commonly employed in mild cases, and naturally the changes resulting from its use are less marked than in frank, severe cases. It has been of great benefit in this regard, and also in cases in which the differential diagnosis is obscured by complicating diseases such as essential hypertension and Parkinson's syndrome, and in cases of neurosis.

The use of iodine in cases of emergency deserves some mention. It may be of help from the diagnostic standpoint as well as from that of treatment. Patients with cardiovascular disturbances should always receive careful consideration from the point of view of hyperthyroidism. Cardiac decompensation is frequently precipitated by hyperthyroidism in cases of organic heart disease and in a few cases hyperthyroidism alone may suffice to induce cardiac decompensation. In any case in which hyperthyroidism is suspected during the course of acute cardiac decompensation, iodine should be given. The same statement applies to cases of severe gastro-intestinal disturbance with vomiting. Coma of diabetic patients is occasionally induced by associated hyperthyroidism, and whenever the response to insulin is not as expected, exophthalmic goiter should be considered. In any such case, doubt as to the presence of associated exophthalmic goiter is an indication for treatment with compound solution of iodine and such treatment will occasionally produce brilliant results.

Patients with exophthalmic goiter who are first seen when taking iodine often present unusual difficulties in diagnosis, especially if the disease was mild before the institution of treatment. Rarely, in cases of exophthalmic goiter, the disease is almost, or completely, controlled by iodine alone, or else brought into temporary remission. In order to establish definitely the diagnosis for some patients who are already taking iodine, the medication must be stopped and further observations made. Usually evidences of exophthalmic goiter will appear within four or five days after administration of iodine has been stopped, but in some cases they have not appeared for almost two weeks, at which time they have become frankly apparent. If the disease is in a natural remission, a longer time may be needed. The greatest difficulties in this group of cases occur in the presence of nervous fatigue or essential hypertension. In these cases it is often difficult to determine whether slight elevations of the basal metabolic rate and slight nervous manifestations suggesting exophthalmic goiter, are the results of incompletely controlled exophthalmic goiter, or of the other condition. Observation in some cases, without the use of iodine, may have to be carried on for a few weeks to clear up the diagnosis.

RECURRING TYPE

Iodine has played a significant part in the treatment of recurring exophthalmic goiter. As is well known, exophthalmic goiter will recur after thyroidectomy in a definite but small percentage of cases, no matter how skillful the surgeon may have been. It is probable that these patients have, as a group, more intense exophthalmic goiter than those who do not have recurrences. The removal or destruction of so much thyroid gland that the basal metabolic rate is not held up to normal levels is not proof against subsequent recurrence of the disease. In a recent review of a group of cases of recurrent exophthalmic goiter, certain data have appeared that allow the establishment of some criteria as to results of treatment in the group. However, each patient who suffers from recurrence must be treated individually. In a certain number of such cases, probably about 25 per cent, complete and permanent control of the recurrence will take place following administration of iodine alone. In most of the cases in which such control is possible, the thyroid remnant either is not palpable, or very slightly enlarged. In cases in which there is considerable regeneration of thyroid tissue, or in which large amounts were left at operation recurrence is less likely to be controlled without second operations. There is some evidence to show that early treatment of recurrence may be more likely to bring about control by iodine alone than late treatment. These statements are not necessarily true of any individual case. It is impossible, when a physician first sees a patient with exophthalmic goiter, to know what the subsequent course of the disease will be. Cases of recurrence in which there are very small thyroid remnants and in which the disease is not controlled by iodine, form a small but very interesting group. Pemberton and I soon will report the cases of two such patients; in each case secondary thyroidectomy was necessary to control the disease, and 1 gm. or less of thyroid tissue was removed from each patient at the second operation. Phemister has recently reported one case in which he could not find any thyroid gland either at operation or, later, at necropsy, although the patient presented evidence of severe recurrence of exophthalmic goiter.

In cases of recurrent exophthalmic goiter in which control with iodine is possible within a reasonable time, that is, a few months, the desired effect usually will take place within the first few weeks of treatment. This, I believe, obviates the necessity of any prolonged trial of administration of iodine with the hope of ultimate control, a procedure which is objectionable as a long period of uncontrolled exophthalmic goiter may have serious results in injury to vital organs.

One phase of the use of iodine for exophthalmic goiter which has been the subject of much dispute is that regarding the time over which iodine may be used safely. It has been contended that iodine must be used only in preparation of patients for operation, and that the therapeutic effect once having been obtained, this effect was soon lost, and could not be obtained again. Some facts contradict these opinions, at least in part. The condition of some patients with recurrent exophthalmic goiter has been constantly controlled with iodine for periods of more than five years. Other patients have taken iodine almost constantly for as long a time, then, during brief intervals when they have stopped taking it, have given frank evidences of exophthalmic goiter and these evidences have again subsided at once after they have resumed the taking of iodine. In several cases patients have gone into the crisis of exophthalmic goiter within two or three weeks of ceasing treatment, when they had previously been in comparatively good condition when taking iodine. Resumption of the taking of iodine in these cases has controlled the crisis, and so far as could be seen, it has had as great a beneficial effect as could be anticipated. It is impossible, of course, to state positively that the effect was as good as though the patient had never had iodine, but as a rule no difficulty has been encountered in preparing these patients for operation. It seems, therefore, that iodine should be given continuously to patients who have exophthalmic goiter, that its adminis-

tration should not be discontinued until the disease has gone, but that it should not be used as an attempted substitute for operation. Any patient who has exophthalmic goiter, or recurrent exophthalmic goiter which is not rapidly brought and maintained under complete control with iodine should, of course, have further measures taken to complete the control of the disease.

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The Ambulatory Treatment of Varicose Veins in the Clinics of Vienna and London

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THE techniques that will be described have been observed and studied in visits at the various Varicose Vein Clinics of Vienna and London.

At Vienna the choice for intravenous medication of varicose veins without ulceration is a 66 per cent dextrose solution. Injections are given once per week. The patient stands on a table or is in a reclining position. A tourniquet is applied above and below the vein to be injected. A twenty-five gauge needle on a 10 c. c. syringe is inserted and the blood stripped from the vein. Five to 10 c. c. of a 66 per cent dextrose solution is then injected slowly into the collapsed vein. Pressure at the site of injection is obtained by a compress. This pressure agglutinates the inflamed walls of the vein, leading to the rapid formation of a fibrinous network, and an adherent thrombus secondary to the endophlebitis is formed. The tourniquets are allowed to remain on for about ten minutes before removal. The injection treatment is frequently followed by pigmentation which disappears in three to four months.

Treatment with "Varicose Complex" (Stasis Dermatitis) consists of injections with dextrose solution and Unna's (zinc-gelatin-glycerin) paste.

When varicose ulcer and stasis dermatitis are present, the ulcer is touched with "Metin" a 4 per cent silver chloride in a colloid vaseline base. Ichthyol zinc paste is placed about the inflamed borders of the ulcer. Injections are then made in the veins above the stasis dermatitis and a roller bandage or Unna's boot is applied.

If the ulcer does not granulate properly with the above treatment, Nobl[1] uses the rubber sponge, which he originally introduced in the treatment of varicose ulcer. Nobl's method is to cleanse the skin and ulcer and then apply "Metin" or a 10 per cent silver nitrate to the ulcer. This is followed by the application of ichthyol zinc paste about the ulcer, then by several layers of gauze over the affected area. This finally by a rubber bath sponge slightly larger than the ulcer itself. The above is held firmly in place with a gauze bandage. A supportive bandage is then applied from the instep of the affected extremity to a point above the rubber sponge pressure pad. The patient is instructed to use the limb, for, in walking, the muscular movement causes this sponge to massage the ulcer area thus producing the so called "venous heart". This in turn produces the action beneficial for the formation of granulation tissue and also absorbs the accumulative secretion and blood. In stubborn varicose ulcer cases Teirch graft transplants are indicated.

In the London clinics the choice of the drug injected is a 5 per cent sodium morrhuate solution. The sodium morrhuate is warmed to body temperature, 0.5 to 2 c. c. is injected into the parent vein of the vein group selected for injection and 0.5 to 2 c. c. into the branches of this parent vein, each injection spaced 4 to 6 inches apart. No tourniquet is used, and at the withdrawal of the needle the puncture is compressed with gauze, held in place by adhesive strips. Almost immediately the vein swells visibly,

which indicates that a satisfactory reaction has taken place. Variable degrees of stiffness and discomfort are present in the limb for about 48 hours.

If one fails to obtain desired results with 5 per cent solution, the 10 per cent solution of sodium morrhuate can be used. If veins do not react favorably to morrhuate 30 per cent lithium salicylate or 30 per cent sodium chloride is used.

A. Dickson Wright, of St. Marys' Hospital, London, combines sodium morrhuate injections with elastoplast strappings when stasis, edema and varicose ulcers are present. Wright's methods in brief, if ulcerations are present follow:

Strips of elastoplast about 9 inches long are laid longitudinally on the sides of the leg above the ankle and over the varicose ulcer to prevent cutting and creeping of the bandage when strapped. The highest visible varicose veins are injected with a 5 per cent sodium morrhuate solution, and the leg is firmly encased from foot to knee in a 3 inch spiral bandage of elastoplast adhesive. The advantages of compression quoting Wright[2]:

"(1) It abolishes the varicose circulation (2) It diminishes the oedema, in some cases reducing the volume of the leg by four or five pints (3) It thus reduces the girth of the leg in oedematous cases, and thereby reduces the width of the ulcer by the same amount before any healing takes place at all (4) It approximates the edges of the ulcer (5) It protects new epithelium and delicate granulations from dressing trauma (6) It presses down and softens the raised margins of an indurated ulcer, so rendering it flat instead of excavated (7) It provides a "pansement spécifique" (8) It abolishes pain in the majority of cases. (9) It permits full functional activity, and patients who work and take exercise are cured more quickly than those in bed. (10) It saves the expense of dressings and lotions. (11) It requires no particular skill. (12) In early ulcers (up to six months' duration) there are numerous invisible islets of epithelium buried in the granulations, pressure brings these to the surface and they quickly cover the ulcer. Frequently an ulcer of the size of the palm, if of short duration, will heal within seven days. (13) It cleans the ulcer more quickly than any antiseptic method, and the feter rapidly disappears. (14) It brings to the surface varicose veins which were deeply buried in oedema thus rendering injections possible which otherwise could not be attempted. (15) It gives a supple scar which loses its adherence to the underlying bones."

The technique of the treatment is to wind, at weekly intervals, sticking plaster very tightly around the leg, with pressure proportionate to the amount of induration and oedema present. Each time the plaster is removed, the visible veins are injected. In this connection it should be noted that in many cases no injections can be given until the compression has disclosed the veins. When the ulcer has healed, injections generally have to be continued until all the veins are thrombosed, and with this treatment the ulcer is usually healed before the veins are cured. When the oedema is completely expelled, a gelatine stocking is applied for a varying length of time until the leg loses its tendency to swell.

The "venous heart" is applied when the ulcer is deep and does not granulate properly. Adhesive strappings are applied over the rubber sponge. For extensive ulcer, Wright[3] removes a strip of skin from the forearm to include cuticle and cutis vera about 3/32" x 1" in size. This strip is then divided into pinch graft sections. These islets of skin are embedded beneath the granulation tissue. The leg is then firmly bandaged with elastoplast. The pressure of the adhesive strips forces these islets to the surface and new epithelium is formed. After healing is complete the support is continued for three months by means of Unna bandages.

If the veins do not react to the various sclerosing solutions Wright[4] sterilizes the skin over the "parent vein" and obtains anaesthesia by the injection of 2 per cent novocain solution. An incision half an inch long is made across the line of the vein and the vein is picked up and freed from connective tissue and elevated out of the wound. While so held 2 c. c. of 5 per cent sodium morrhuate solution is injected into the lumen. The object of this injection is to

"fix" the thrombus which will form both above and below the ligature. Two ligatures of catgut are now passed round the vein, at least an inch apart, and the vein divided between them. The wound is then closed. This procedure is fairly certain, to produce results, whereas injections alone are often disappointing. The veins below the ligature collapse, so that bulky clots do not form; there is less pain; the induration of the vein resolves more quickly, and recurrences are less apt to occur.

COMMENT

Sodium morrhuate as a sclerosing agent is equal to glucose and gives no general systemic reaction. Combined with elastoplast strappings the patient is made comfortable; pain is relieved; and the ulcer and varicose veins resolve more quickly than with other methods.

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Treatment of Tuberculosis in General Practice VI

By ANDREW L. BANYAI, M. D.
Clinical Director, Muirdale Sanatorium, Wauwatosa

INTESTINAL TUBERCULOSIS

Prophylaxis. The following preventive measures are important: 1. The avoidance of swallowing tuberculous sputum. 2. The administration of dilute hydrochloric acid in the subacidity cases. 3. The prevention of intestinal stasis and the eradication of all forms of constipation. 4. Prompt and comprehensive survey of every tuberculous dyspeptic.

Diet. The food given in intestinal tuberculosis must be simple, bland, easily digestible and leave a small residue. Milk can be ordered in small amounts, namely, three glasses a day, if well tolerated by the patient. The addition of two teaspoonfuls of lime water to each glass of milk may improve its digestibility and prevent diarrhea. Cocoa with or without milk is given in liberal quantities. It is sometimes feasible to serve smaller amounts of food in six meals instead of the customary three large meals a day. When diarrhea is pronounced the patient should be placed on a liquid diet. One must be cautious not to cause unnecessary fermentation or increase the diarrhea by too much milk.

Medicinal treatment. Calcium carbonate is the most useful calcium preparation given by mouth for this condition. Its dose is 15–30 grains three times a day. Prompt symptomatic relief is often seen from the intravenous injection of calcium chloride. Ten cc. of a 10 per cent solution are injected twice a week until the desired effect is obtained. The oral administration of bismuth and tannic acid preparations may control diarrhea and relieve intestinal distress. Bismuth subnitrate, subcarbonate, subsalicylate or subgallate are prescribed in 7½ grain doses three times a day. Tannic acid, tannalbin, tannigen are prescribed in the same doses. Tablets of atropin each containing 1/100 of the drug, diminish intestinal peristalsis and alleviate abdominal pain. It is given three times a day, as long as no toxic symptoms from its administration arise, such as dryness of the throat, dilatation of the pupils, or visual disturbances. Powdered opium in ½–1 grain doses or ½–1 ounce of paregoric tincture, given from one to three times daily, are resorted to only when the administration of other medicines proved to be ineffective, or the patient is suffering with intense pain. Bismuth salts can be prescribed in combination either with ½ grain of extract of belladonna or powdered opium. Suppositories, consisting of

bismuth salts and powdered opium or extract of belladonna, are of value in relieving tenesmus and abdominal pain. Colon irrigations with astringent solutions will quiet intestinal spasm and aid in the healing of the lesion. The washing of the intestine must be done slowly and gently to avoid sudden distressing dilatation. The following solutions at a temperature of 105 F. are of value: tannic acid (2:1000), silver nitrate (1:1000), mercurochrome (1:5000).

Excellent results were observed after treatment with natural and artificial sunlight.

The repeated intraperitoneal injections of 5–800 cc. of oxygen has been found to give very satisfactory symptomatic and curative results. The procedure, if carried out cautiously and aseptically is without danger. The treatments are given by means of an artificial pneumothorax apparatus. A common long needle can be used.

Early exploratory laparotomy and the removal of the diseased portion is justified in mildly active or quiescent pulmonary tuberculosis in which intestinal tuberculosis is well localized to the terminal ileum, cecum or the colon.

LARYNGEAL TUBERCULOSIS

The treatment is based on the following principles: 1. General measures, such as rest, fresh air, adequate diet, and light treatment, the latter, when the pulmonary condition does not contraindicate it. 2. Measures directed toward the diseased lung. The cough must be reduced to a minimum, compatible with effective expectoration, to avoid harmful strain on the diseased larynx. Improvement of the laryngeal condition often parallels the healing of the pulmonary process, brought about by artificial pneumothorax, phrenic nerve block or thoracoplasty. 3. Local measures. Enforced silence insures the greatest possible physiological rest for the diseased areas. The patient must be instructed not to use his voice; not even whispering should be allowed. The patient should use paper and pencil for communicating with others. Such vocal rest should be continued until evidence of healing appears. Spices that may cause irritation must be excluded from the diet. The patient can be taught how to use a spray directed toward the larynx. Alkaline cleansing sprays are applied for the removal of tenacious irritating mucus. Two ounces of sodium chloride and four ounces of sodium bicarbonate, dissolved in a quart of water, will serve this purpose. Laryngeal discomfort is often effectively relieved by the repeated spraying with chloretone inhalant, 10–20 per cent menthol in liquid petrolatum, 4–10 per cent cocain spray before meals, by the insufflation of orthoform, or anaesthesin, or by allowing a menthol or euphagin tablet to slowly dissolve in the mouth. When persistent pain is present menthol and euphagin tablets may be given four–six times a day. Not very extensive superficial ulcers are favorably influenced by the intralaryngeal application of a 20–80 per cent solution of lactic acid preceded by local anethesia. Lukens found satisfactory results, particularly relief from pain on swallowing as well as healing of the tuberculous process, by the laryngeal application of chaulmoogra oil. The Wolfenden or "horse position", in which the patient leans over the edge of the bed, having the head and shoulder lower than the level of the bed, when eating and then swallowing "upward", sometimes permits the taking of nourishment by eliminating the weight of food on the larynx when swallowing in the upright position. Electrocautery and resection may induce excellent results in the hands of experienced men. An often used palliative measure is the alcoholic injection of the superior laryngeal nerve.

TUBERCULOSIS OF THE LYMPH NODES

There are two main groups of lymph node tuberculosis, namely, that occurring in the superficial and that found in the deep or internal lymph nodes. The prototype of the first is cervical adenitis; the second group includes tuberculosis of the hilar and mesenteric and retroperitoneal nodules. For the treatment of deeply situated lymphadenitis, the same methods that proved to be useful in the treatment of tuberculosis, rest, fresh air, light, proper diet and medication, are consistently applied. All cases of cervical and other types of superficial tuberculous adenitis

should be subjected to the basic general management of tuberculosis. The best results were seen in my experience by prolonged ultra-violet irradiation. Sunlight with graded exposure and careful supervision should be used in summer, quartz mercury lamp or carbon arc lamp in winter. (See chapter on light treatment.) If abscess is present, or develops during treatment, it should be aspirated. Aspirations are repeated as frequently as pus accumulates. Local anesthesia should be used, approaching the abscess from an area where the skin is not involved. A large, long needle (gauge 16–18) will aid in the removal of thick purulent contents. Aspiration over the abscess, where the skin and subcutaneous tissues are inflamed, and the skin is reddened and thin, causes sinus formation, mixed infection, and a very protracted healing. When the pus cannot be withdrawn easily, small amounts of 10 per cent iodoform glycerin should be injected and aspiration attempted in 24 or 48 hours. Incision of these abscesses is never justified, because it may lead to mixed infection, sinus formation, amyloidosis or generalization of the tuberculous process through the blood stream and death. Ultra-violet irradiation may be combined with x-ray treatment when the healing process is slow. Our experience taught us that radical surgery is rarely, if ever, indicated in these cases.

SPONTANEOUS PNEUMOTHORAX

In the cases seen commonly spontaneous pneumothorax develops with alarming symptoms. The patient complains of sharp thoracic pain, tightness and marked shortness of breath, and appears to be in great distress, cyanotic, and has a high respiratory and pulse rate. Immediate intervention is imperative for the relief of pain and anoxemia. Hypodermic injection of ¼ of a grain of morphine, to be repeated once or twice within the first two hours, should be the first measure. This is followed by aspiration of the air in sufficient amount to alleviate pressure and respiratory distress. An artificial pneumothorax apparatus is the best instrument for this purpose. The following technic should be used: The second bottle of the pneumothorax apparatus is filled with water, stained with mercurochrome. The valve leading to the manometer is closed. (The manometer is a U-shaped glass tube, containing water, stained with methylene blue.) The water level should be at the zero line of the scale behind both arms of the manometer. The valve between the pneumothorax bottles is opened and by elevating the second bottle the water is forced to flow into the first bottle, leaving just enough water in the second bottle to cover the lower end of the glass tube which is connected with the first bottle. Then the valve connecting to the discharge tube is closed, the second bottle put back to its original place on the stand. The valve between the two bottles is left open and that of the manometer opened, and the apparatus is ready for use. Rubber tubing leading to the discharge tube of the apparatus is attached to the needle (2½″ long, 19 gauge). The skin is nicked by a fine scalpel and the needle is inserted slowly into the pleural cavity. In the presence of spontaneous pneumothorax the intrapleural pressure is positive or neutral instead of the normal negative. After the manometer reading is taken, the manometer valve is closed, the valve to the discharge tube is opened and the water begins to flow from the first into the second bottle (siphonage effect). This flow creates a rarified air space in the first bottle and draws air from the pleural cavity into the first bottle. If, because of emergency, faster aspiration is desired, it can be easily accomplished by removing the second bottle from the stand and lowering it. From time to time the valve of the aspirating tube is shut off and that of the manometer opened for registering the intrapleural pressure. The manometer valve must be closed, before further evacuation of the air is continued. If a pneumothorax apparatus is not available, the air can be discharged through a large needle introduced into the pleural cavity. Preservation of an approximately neutral pressure in the pleural cavity will aid in the healing of a pleural tear. If the symptoms of spontaneous pneumothorax are not very marked, one-quarter (¼) grain of morphine should be given hypodermically, and the pa-

(Continued on page 640)

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OFFICIAL PUBLICATION OF THE STATE MEDICAL SOCIETY OF WISCONSIN

« « « EDITORIALS » » »

Surgery in the Treatment of Pulmonary Tuberculosis

THE surgical treatment of pulmonary tuberculosis is considered a development of the present century. One is impressed, however, by the remarks of Carson over one hundred years ago. He realized that the successful treatment of this disease must come about through the employment of some mechanical means or surgical operation. Some sixty years later Forlanini and Potain arrived at the practical application of these ideas and gave artificial pneumothorax.

Brauer, an internist of Marburg, soon realized that artificial pneumothorax was not a universal panacea. He suggested the first extrapleural paravertebral thoracoplasty. This was performed successfully by Friedrich in 1907. His work was accepted by two German surgeons, Wilms and Sauerbruch. To these men we owe the continued success of this form of treatment.

Progress has been rapid; and many less radical procedures have been instituted, all of which have a place in treatment. It has long been realized that functional rest of the diseased lung is the most important factor in treatment. The present surgical armamentarium includes operations capable of giving rest through various mechanical and functional means. These in each instance must be employed in conjunction with a well regulated sanatorium regimen if success is to be obtained.

The retarded progress of surgery in the treatment of these cases has been due to three reasons. It was at one time considered by those ignorant of the methods employed nothing more than a useless mutilation of very ill patients who were already doomed to an early death. This attitude of the reactionists has been responsible for much unwarranted procrastination. Originally it was thought that every patient suffering with pulmonary tuberculosis should be placed in a sanatorium only to remain there for weeks or months taking the so-called rest cure before adjunct procedures were permitted. This resulted in loss of valuable time. In many instances no further form of treatment was instituted. Sometimes it was called for only after the optimum time had passed and no further hope could be entertained through the employment of any procedure. A few desperate chances were taken and failure resulted. The blame was then placed upon the surgeon or the procedure instituted and not on the one directly responsible for the delay.

Too many physicians treating pulmonary tuberculosis have failed to acquaint themselves with the value of the surgical procedures available. This has contributed a

great deal to the retarded progress of this form of treatment during the past quarter century. Surgery has been successfully employed in treating a large number of patients with pulmonary tuberculosis. It is no longer experimental. Slowly but surely it has gained recognition as one of the most valuable therapeutic measures, and one which should frequently be used early in the disease. J. W. G.

Law Enforcement

FIVE years ago the Legislature, upon the recommendation of the State Medical Society of Wisconsin, passed a bill calling for an appropriation of $5,000 a year to employ and pay the expenses of a full-time investigator to weed out the major forms of quackery in this State. That this proposal has brought about an immeasurable amount of protection to the public from those who would prey upon the credulous sick by fraud, deceit and quackery, is attested to by the fact that the Legislature has twice renewed the appropriation.

The investigator, Mr. Walter Drews, is operating under the great handicap of a present budget that is cut exactly in two as part of the economy program. The amount now available for his travel and his necessary and most essential expenses is less than $2.00 a day. It will be obvious to the members that through no fault of his own, he is unable to carry on the program in the efficiency of previous years.

Weeding out the cancer quack, the ignorant, and the unlicensed is not just a matter of saving the public thousands of dollars annually. Most important, it results in saving the sick from a period of time wasted while consulting the quack,—a time that frequently is so precious if a cure is to be effected. The past has demonstrated all too frequently that time wasted can never be regained and that the result is not just loss of money, but loss of health and frequently a far too early death.

While Mr. Drews is operating under the economy budget we ask, more than ever, the cordial cooperation of all physicians. All should have an understanding of his difficulties that they may be of the greatest possible assistance to him in his fine public work.

Special Contribution

THE control of cancer necessitates its early recognition and proper treatment. This means that every physician must be alert to the possibility of cancer in every patient he sees and provided with the means necessary to carry out the best method of treatment for the case. Due to the intensive study of cancer in many research centers throughout the world, ideas as to what constitutes adequate treatment has and is changing radically.

It is impossible for physicians doing a general practice to read all of the literature on the subject. But if they are to keep informed on the generally accepted changes in methods of diagnosis and treatment they must do selective reading. Selection is often difficult for those who are not located close to a large medical library where journals and other literature dealing with highly specialized material can be found. This forces a dependence upon text books which are always behind the vanguard of changing thought and methods. For these reasons and because the State Medical Society's Committee on Cancer requires the actively energetic and hopefully enthusiastic support of every physician, if the Society is to be successful in the organization of a program for the control of cancer, it is encouraging to be able to announce the availability for all physicians of the Bulletin of the American Association for the Control of Cancer at a cost of one dollar per year.

This Bulletin is issued monthly and contains contributions from men throughout the country who have justly earned the right to recognition as authorities on cancer in the field of clinical practice and by others who in the field of pure science have produced information which affects materially the clinical approach to the subject. Subscription for the Bulletin should be addressed to the American Association for the Control of Cancer, 1250 Sixth Avenue, New York City. W. D. S.

Society Proceedings

BARRON–WASHBURN–SAWYER–BURNETT

A talk on "Acute Gall-Bladder Diseases" by Dr. T. J. O'Leary, Superior, President-elect of the State Medical Society, featured the meeting of the Barron–Washburn–Sawyer–Burnett County Medical Society held on June 10th at Rice Lake.

PIERCE–ST. CROIX

Dr. W. H. Hengstler of St. Paul was the guest speaker at a meeting of the Pierce–St. Croix County Medical Society held at New Richmond in Hotel Beebe. The subject of his address was "Head Injuries."

ROCK

The regular meeting of the Rock County Medical Society was held at the Beloit Country Club on June 26th. It was a joint dinner with the Auxiliary. Seventy members and guests attended the meeting. The following scientific program was given:

"Surgery of Gastric and Duodenal Ulcers and Cancer of the Stomach" by Dr. Nelson M. Percy of Chicago.

"Analysis of 1000 Consecutive X-Ray Examinations of the Stomach from the Clinical and Roentgenologic Viewpoint, with Lantern Slides" by Dr. D. S. Beilin of Chicago.

The papers of Drs. Percy and Beilin were discussed by Dr. Chester M. Echols and Dr. E. H. Mensing of Milwaukee.

VERNON–MONROE–JUNEAU

Over thirty physicians in Vernon, Monroe, and Juneau counties met at the Odd Fellows Hall at Viroqua at ten o'clock Tuesday morning, July 10th, to discuss the rendition of medical and surgical services under the Federal Emergency Relief system. Guests at the meeting were relief directors of the several counties: Dr. W. T. Clark, medical adviser to the State Relief Director, and Mr. J. G. Crownhart, Secretary of the State Medical Society. The discussion was in the nature of a round table and it was continued throughout the morning and early afternoon.

TREMPEALEAU–JACKSON–BUFFALO

Members of this Society met at Arcadia on June 8th. Following the dinner, the physicians adjourned to the offices of Drs. F. T. Weber and J. A. Palmer to discuss business matters. Drs. Peterson, Weber and MacCornack were appointed a committee to draw up a revised fee schedule for the three counties.

MILWAUKEE NEURO–PSYCHIATRIC

"The Embryology of the Nervous System" was the subject of the address given by Dr. J. M. Essenburg, assistant professor of anatomy, Loyola University, Chicago, before the annual meeting of the Milwaukee Neuro–Psychiatric Society which was held at the University Club on June 28th.

MILWAUKEE PATHOLOGICAL

"Medical Spanish America" was the subject of an illustrated talk given by Dr. M. Fernan–Nunez at the annual dinner and social meeting of the Milwaukee Pathological Society, held at the Schroeder Hotel on May 28th.

News Items and Personals

Dr. L. Milson of Green Bay returned the latter part of June from the east where he had been for six weeks taking postgraduate work in obstetrics and gynecology at Harvard University, Boston Lying-In Hospital.

—△—

Dr. C. F. Dull of Richland Center was appointed Designated Physician for the Veterans Bureau at Richland Center on June 27th.

—△—

Announcement has been made of the marriage of Miss Gertrude Allen, daughter of Dr. and Mrs. William J. Allen of Beloit to Mr. Ludwig J. Grauel at Rockford on June 20th.

Dr. E. H. Lechtenberg of Potosi took a six weeks postgraduate course in July and August in Chicago on eye, ear, nose and throat diseases.

—△—

Mr. J. G. Crownhart, Secretary of the State Society, was speaker before the general assembly on the Monday morning program of the Minnesota State Medical Association which met in Duluth July 16th. The subject of his address was "Federal Emergency Relief."

—△—

Dr. L. B. Hansen has purchased the interest of Dr. F. J. Diamond in the Diamond–Hansen Clinic–Hospital, Stevens Point. The name of the institution has been changed to The Hansen Clinic.

BIRTHS

A daughter to Dr. and Mrs. M. B. Byrnes, Milwaukee, on June 7th.

A son to Dr. and Mrs. M. C. Malensek, Milwaukee, on June 12th.

A daughter to Dr. and Mrs. H. E. Bardenwerper, Milwaukee, on June 14th.

ENGAGEMENTS

The engagement of Dr. Eugene C. Heifetz, Milwaukee, to Miss Selma Wahlberg, daughter of Mr. and Mrs. Joseph Wahlberg, was announced on June 24th.

MARRIAGES

Dr. Harry Tabachnick of Milwaukee to Miss Lillian Polli, Milwaukee, on June 25th.

Dr. Sylvester Darling, son of Dr. and Mrs. F. E. Darling of Milwaukee, to Miss Helen Barnes, Milwaukee, on June 25th.

Dr. Sven Gundersen, Brookline, Mass., son of Dr. and Mrs. Adolf Gundersen of La Crosse, to Miss Harriet Elizabeth Adams of Hancock Point, Maine, on June 21st.

Dr. Charles Fishback of Sharon to Miss Katherine Williamson of Madison, on June 24th.

SOCIETY RECORDS

New Members

J. C. Brewer, Jefferson.
William Lumsden, Menomonie.
J. C. Reichert, West Bend.
W. G. Frawley, Appleton.
Nathan A. Gendlin, Milwaukee.
Wm. F. Conlin, Hiles.
Harry Feldman, 1537 Jefferson St., Madison.
Russell G. Strong, Manitowoc.
Emil R. Krueger, Hayward.

Change in Address

C. E. Roach, Wisconsin General Hospital, Madison to 429 S. West Ave., Freeport, Illinois.

THE WOMAN'S AUXILIARY

MRS. EBEN J. CAREY, Milwaukee, *President*
MRS. ROCK SLEYSTER, Wauwatosa, *President-elect*
MRS. GEORGE H. EWELL, Madison, *Secretary*
MRS. R. G. ARVESON, Frederic, *Treasurer*
MRS. WALTER A. FORD, Sheboygan, *Press and Publicity Chairman*
MRS. JAMES BLAKE, Hopkins, Minn., *National President*

Auxiliary Plans Meeting at Green Bay

THE days September 11–14 are to be of great interest to the doctors and their wives when the State Medical Society of Wisconsin and the Auxiliary convenes at Green Bay.

Plans are being perfected for the entertainment of the ladies whether they are members of the Auxiliary or not. The Chairman, Mrs. A. J. McCarey, Green Bay, and her committees are putting forth every effort to make this Annual Meeting an outstanding event. The headquarters of the Auxiliary will be at the Northland Hotel.

Wednesday and Thursday, September 12 and 13 will be interesting days for all ladies attending the meeting. Musical programs, bridge, golf, and a tour of the city to points of historical interest are included in the carefully planned program. Dr. F. L. Rector, Field Representative of the American Society for the Control of Cancer will give an address of interest following the business meeting on Thursday morning. Business meetings will be held both Wednesday and Thursday mornings.

The officers of the Auxiliary are delighted that the members of the State Advisory Council, who guide and direct the work of the Auxiliary, have accepted the invitation to be present at the Executive Board dinner on Tuesday evening, September eleventh. The members of the Advisory Council of the Woman's Auxiliary to the State Medical Society are: Dr. A. W. Rogers, Oconomowoc; Dr. Rock Sleyster, Wauwatosa; Dr. C. A. Harper, Madison; Dr. Stanley J. Seeger, Milwaukee, and Mr. J. G. Crownhart, Madison.

Green Bay is Wisconsin's oldest settlement. This year Green Bay is celebrating

Fort Howard Built 1816

Tank Cottage Built 1795

her three-hundredth birthday. Those attending the Convention will be given the opportunity of reviewing Green Bay's picturesque past. A tour of the city will include Jean Nicolet's landing at Red Banks or Kish-ki-kwan-te-no, the Tank cottage, Eleazer Williams, Fort Howard Hospital and the Museum. Fort Howard is Wisconsin's first hospital. The Porlier–Tank cottage, located in Porlier–Tank Park on the southwest side of Green Bay, is said to be one of the oldest dwellings in the United States. Green Bay takes pride in her 300th birthday, for "though old in years, she is yet endowed with all the virility of youth. . . The people of today love their old La Baye, and it is enveloped by an atmosphere that appeals to visitors."

It is hoped that many will have the opportunity of attending the State Meeting in Green Bay. A genuine welcome awaits you.

WOMAN'S AUXILIARY

To The

STATE MEDICAL SOCIETY OF WISCONSIN

Green Bay

Sept. 11–14, 1934

Headquarters: Hotel Northland, Green Bay

PRELIMINARY PROGRAM

TUESDAY, SEPT. 11, 1934

P. M.

5:30 Executive Board dinner — Colonial Room, Northland Hotel. Advisory Council of State Auxiliary to attend dinner.

Executive Board meeting following the dinner. Mrs. Eben J. Carey, presiding.

WEDNESDAY, SEPT. 12, 1934

A. M.

10:00 General Meeting—Crystal Ballroom, Northland Hotel. Mrs. Eben J. Carey, presiding.

P. M.

1:00 Luncheon and orchestral program at Palm Garden. Transportation provided.

3:00 Tour of city to points of historical interest. Tea at Fort Howard Hospital.

8:00 Bridge party—Crystal Ballroom, Northland Hotel. Both auction and contract bridge. Light refreshments.

THURSDAY, SEPT. 13, 1934

A. M.

10:00 General Meeting—Crystal Ballroom, Northland Hotel. Mrs. Eben J. Carey, presiding.

Speaker—Dr. F. L. Rector of the American Society for the Control of Cancer.

P. M.

1:00 Luncheon at Oneida Golf Club followed by golf and bridge,

or

Luncheon at Bay Beach Pavilion with a program consisting of children's dances, a reading and a musical selection.

3:30 Post-Convention Board meeting — Italian Room, Northland Hotel. Mrs. Rock Sleyster, presiding.

6:45 Annual Dinner—Crystal Ballroom, Northland Hotel.

ATTEND YOUR STATE MEETING

We believe that the annual meetings are so important in the life of the Auxiliary that members should make every effort to attend, along with their husbands, the Annual Meeting at Green Bay. We sincerely hope that every Auxiliary member may attend the 1934 meeting and experience the pride and stimulation one feels in association with wide-awake wives of physicians from all over the state.

It is good to get away for a few days from our busy lives—to relax, and to gain inspiration from the contact with each other in these meetings. Delightful entertainment is being planned for the hours of relaxation. We shall find both pleasure and inspiration in Green Bay. May I hope to meet you there, one and all!

MRS. EBEN J. CAREY,
State President, 1933–34.

Committee Chairmen

Local arrangements for the Green Bay sessions are in charge of Mrs. A. J. McCarey, General Chairman. The president of the Brown–Kewaunee–Door Auxiliary, Mrs. D. F. Gosin, Green Bay, is working in close cooperation with Mrs. McCarey and has taken an active part in perfecting the plans. The wives of officers of the local Medical Society and officers of the Auxiliary will act as members on the Reception Committee at Hotel Northland, Beaumont Hotel, Columbus Club, Palm Garden, and Bay Beach Pavilion. Free transportation is being provided to the Palm Garden, Oneida Country Club and Bay Beach Pavilion.

Mrs. McCarey has appointed the following Auxiliary members who reside in Green Bay to serve as chairmen and co-chairmen:

Chairmen	*Co-Chairmen*
Reception	
Mrs. J. R. Minahan	Mrs. C. J. Chloupek
Social	
Mrs. W. H. Bartran	Mrs. A. O. Olmsted
Flower	
Mrs. H. S. Atkinson	Mrs. James Colignon
Hostess	
Mrs. L. D. Quigley	Mrs. W. W. Kelly

All women attending the annual session of the State Medical Society of Wisconsin are invited to participate in this program whether they are members of the Woman's Auxiliary or not.

Chairmen	*Co-Chairmen*
Transportation	
Mrs. W. C. Comee	Mrs. J. L. DeCock
Refreshment	
Mrs. W. A. Killians	Mrs. R. M. Carter
Information	
Mrs. I. E. Levitas	Mrs. E. M. Jordan
Ticket	
Mrs. R. W. Kispert	Mrs. W. E. Leaper
Telephone	
Mrs. G. F. Denys	Mrs. Fabian Gosin
Publicity	
Mrs. M. H. Fuller	Miss McKeough
Entertainment	
Mrs. W. J. Decker	Mrs. R. L. Cowles
Card Party	
Mrs. E. S. Knox	Mrs. W. E. Mueller
Golf Committee	
Mrs. W. P. Tippet	Mrs. J. J. Robb
Museum	
Mrs. P. R. Minahan	Mrs. R. M. Burdon

Annual Meeting Delegates

County	*Delegate*	*Alternate*
Columbia	Mrs. James Mac Gregor, Portage	Mrs. Hugh Caldwell, Columbus
Dane	Mrs. Arnold Jackson, Madison	Mrs. Harold E. Marsh, Madison
Douglas	Mrs. Thos. J. O'Leary, Superior	
Green Lake–Waushara–Adams	Mrs. Gustav Mueller, Princeton	Mrs. Orvil O'Neal, Ripon
Kenosha	Mrs. Cyril G. Richards, Kenosha	Mrs. Albert J. Randall, Kenosha
Manitowoc	Mrs. Wm. E. Donohue, Manitowoc	Mrs. Lawrence Gregory, Manitowoc
Marinette–Florence	Mrs. Harvey L. Jorgenson, Marinette	Mrs. T. A. Lid, Marinette
Milwaukee	Mrs. James Sargent	Mrs. Paul M. Currer
	Mrs. Harry Heeb	Mrs. Wm. F. Grotjan
	Mrs. Raymond Schowalter	Mrs. Dexter Witte
	Mrs. Wm. Jermain	Mrs. Francis Janney
	Mrs. Charles Fidler	Mrs. Irwin Schulz
	Mrs. Robert Fitzgerald	Mrs. Francis Murphy
Outagamie	Mrs. A. E. Rector, Appleton	Mrs. G. J. Flanagan, Kaukauna
	Mrs. E. F. McGrath, Appleton	Mrs. Albert Leigh, Kaukauna
Polk	Mrs. Arthur N. Nelson, Clear Lake	Mrs. George B. Noyes, Centuria
Portage	Mrs. George W. Reis, Junction City	Mrs. Earl E. Kidder, Stevens Point
Racine	Mrs. Edward C. Pfeifer, Racine	Mrs. Frank W. Pope, Racine
Rock	Mrs. Fred Sutherland, Janesville	Mrs. Harry Kasten, Beloit
Sheboygan	Mrs. T. J. Gunther, Sheboygan	Mrs. Carl J. Weber, Sheboygan
Waukesha	Mrs. John D. Wilkinson, Oconomowoc	Mrs. Henry A. Peters, Oconomowoc
Winnebago	Mrs. George Williamson, Neenah	Mrs. M. N. Pitz, Neenah

Preliminary Program Announced for Ninety-Third Anniversary Meeting at Green Bay, Sept. 11, 12, 13 and 14

A PROGRAM based on a concensus of requests of members throughout the State was announced early in August by Dr. Arnold S. Jaskson, Chairman of the Committee on Scientific Work for the Ninety-Third Anniversary meeting of the State Medical Society to be held at Green Bay on September 11–14. Over ninety Wisconsin members will participate in the scientific program for the 1934 session, as well as seventeen distinguished out-of-state guests.

"The general plan that has been used," declared Dr. Jackson, "is to arrange an entirely different type of program for each day so as to offer an appeal to every member of the Society. Dry clinics have been inaugurated to add more color and interest. Section meetings on Urology, Obstetrics, Radiology, and Nervous and Mental Diseases have been added to the usual ones on Medicine and Surgery. This plan is tried in the hope of interesting those specializing in these fields by concentrating their subjects rather than scattering one or two papers daily throughout the meeting. Symposiums have been arranged on subjects of general interest and the entire program has been built about the problems of the general practitioner. The programs of the general assemblies have been arranged to provide subjects of common interest, no matter in what field or specialty the listener might be engaged.

"It has been our thought," said Dr. Jackson, "that the majority of members of the Society come to this meeting with the desire to take home something of practical clinical value. We intend to fill that desire."

Distinguished speakers from without the State who will appear on this Ninety-Third Anniversary program are: Dr. Olin West, Secretary and General Manager of the American Medical Association, Chicago; Dr. Gilbert J. Thomas, Assoc. Prof. of Urology, University of Minnesota; Dr. Herman Kretschmer, Clin. Prof. of Surgery, Rush Medical College, Chicago; Dr. Fred J. Hodges, Prof. of Radiology, University of Michigan; Dr. Leo G. Rigler, Prof. of Radiology, University of Minnesota; Dr. Harry Mock, Assoc. Prof. of Surgery, Northwestern University; Dr. Loyal Davis, Assoc. Prof. of Surgery, Northwestern University; Dr. Herbert Giffin, Mayo Clinic, Rochester; Dr. Ellis Fischel, Assoc. Prof. of Surgery, St. Louis University School of Medicine, St. Louis, Mo.; Dr. Robert Dinsmore, Cleveland Clinic, Cleveland, Ohio; Dr. George Eusterman, Mayo Clinic, Rochester; Dr. E. W. Ryerson, Prof. of Orthopedic Surgery, Northwestern University; Dr. Dean Lewis, Retiring President of the American Medical Association, Baltimore; Dr. W. R. MacAusland, Boston; Dr. E. Starr Judd, Mayo Clinic, Rochester; Dr. James Hayes, Minneapolis.

The annual dinner of the Society will be held in the Crystal Ballroom of the Northland Hotel on Thursday, September 13. Dr. Dean Lewis, retiring President of the American Medical Association, and Dr. Olin West, its Secretary and General Manager for fifteen years, will present the addresses of the evening. Three Council Awards will be made prior to the addresses. A dance orchestra will play for the members and their wives following the speakers of the evening.

All scientific sessions of the Society will be held in the Columbus Club, just three blocks from the Northland Hotel. This large building has several separate meeting rooms for section meetings in addition to the large auditorium which will accommodate both the

HOTEL RESERVATIONS

All requests for hotel reservations for the Green Bay meeting should be addressed to Dr. A. J. McCarey, Northern Bldg., Green Bay. No reservations will be handled by the hotels direct to avoid confusion.

While early reservations are desirable, Dr. McCarey assures members and their wives of ample accommodations for the September meeting.

Panoramic View of Green Bay

scientific exhibits and the general assemblies. The commercial-technical exhibits will be placed in the corridor on the first floor and opposite the Rathskeller on the ground floor. Six special committees of the Brown–Kewaunee–Door County Medical Society have been appointed by President Stiennon to handle local arrangements for this meeting at Green Bay, which coincides with the Tercentennial year of that city. The committees appointed by President Stiennon follow:

General Committee

Dr. E. G. Nadeau, *Ch.*
Dr. O. A. Stiennon
Dr. A. J. McCarey
Dr. J. R. Minahan
Dr. R. L. Cowles
Dr. E. S. McNevins
Dr. W. P. Tippet
Dr. W. E. Mueller

Committee on Housing and Hotels

Dr. A. J. McCarey, *Ch.*
Dr. L. D. Quigley
Dr. O. W. Saunders
Dr. P. M. Clifford
Dr. W. W. Kelly
Dr. W. C. Comee
Dr. P. R. Minahan
Dr. A. O. Olmsted

Committee on Clinics

Dr. J. R. Minahan, *Ch.*
Dr. R. M. Carter
Dr. C. S. Williamson
Dr. W. A. Killins
Dr. E. M. Jordan
Dr. J. C. Colignon
Dr. W. E. Leaper
Dr. W. H. Bartran
Dr. R. L. Troup
Dr. G. M. Shewalter

Committee on Entertainment

Dr. R. L. Cowles, *Ch.*
Dr. E. S. Knox
Dr. G. F. Denys
Dr. H. Hendrickson
Dr. F. J. Gosin
Dr. J. P. Lenfesty
Dr. R. W. Kispert

Committee on Reception and Registration

Dr. E. S. McNevins, *Ch.*
Dr. M. H. Fuller
Dr. Frank Crikelair
Dr. George Senn
Dr. Warren Hagerty
Dr. Lewis Milson
Dr. Felix Rose
Dr. Robert Burns
Dr. A. A. Charbonneau
Dr. Karl Icks
Dr. G. F. Goggins

Committee on Golf

Dr. W. P. Tippet, *Ch.*
Dr. D. F. Gosin
Dr. J. J. Robb
Dr. R. C. Buchanan
Dr. W. J. Decker
Dr. E. S. Schmidt

The Northland Hotel

Committee on Smoker

Dr. W. E. Mueller, *Ch.*	Dr. T. J. Oliver
Dr. I. E. Levitas	Dr. H. S. Atkinson
Dr. W. W. Ford	Dr. T. S. Burdon
Dr. N. M. Kersten	Dr. C. J. Chloupek

ENTERTAINMENT

The annual golf tournament of the State Society will be held at the Oneida Golf Club course on Tuesday, September 11. Prizes topped by the President's and Secretary's cups will be awarded at a supper following the afternoon play. The morning will be devoted to practice rounds for those who desire to acquaint themselves with the course. Reservation blanks for entry in the golf tournament will be mailed all members late in August.

A special program of entertainment has been arranged for members of the Auxiliary and for all visiting ladies. This program is to be found in this issue of the Journal under the section on "The Woman's Auxiliary".

EXHIBITS

Scientific exhibits will occupy booths at the rear of the auditorium and will include the following:

1. Diseases of the Skin—Dr. R. L. McIntosh, Madison.
2. American Society for the Control of Cancer.
3. Radiological Section, State Medical Society.
4. Diabetes—University of Wisconsin.
5. Neuropsychiatry—University of Wisconsin.
6. Heart—Department of Anatomy, University of Wisconsin.
7. Radium—Dr. A. O. Olmsted, Green Bay.
8. Skull Fractures—Dr. Harry E. Mock, Chicago.
9. Bright's Disease—Dr. Francis D. Murphy, Marquette University.
10. Infra-Red Photography in Clinical Medicine —Mr. Leo Massopust, Marquette University.
11. Injection of Blood Vessels and the Bundle of His in the Heart—Dr. P. F. Swindle, Marquette University.

Commercial-technical exhibits will include the following firms:

1. Kremers–Urban Co., Milwaukee.
2. Medical Protective Company, Milwaukee.
3. Roemer Drug Company, Milwaukee.
4. Scanlan–Morris Company, Madison.
5. General Electric X-Ray Corp.
6. Mellin's Food Company, Boston.
7. Sharp & Smith, Chicago.
8. Physicians and Hospitals Supply Co., Minneapolis.
9. H. G. Fischer Company, Milwaukee.
10. E. H. Karrer Company, Milwaukee and Madison.
11.
12. Victor Hurley Company, Milton.
13. Mead Johnson Company, Evansville, Ind.
14. Victor Mueller Company, Chicago.

WEDNESDAY, SEPTEMBER 12

8:30–10:00 Dry Clinics

Case Presentations by Green Bay Physicians.

Extrophy of the Bladder.
Dr. C. S. Williamson.

Open Operation for a Foreign Body in the Lungs.
Dr. J. R. Minahan.

Demonstration of an early case of Complete Spondylolisthesis.
Dr. R. M. Carter.

Gas Gangrene Infection of Leg with Recovery.
Dr. Eugene S. Knox.

The Diabetic as a surgical risk.
Dr. E. M. Jordan.

Medical Discussion.
Dr. Harold E. Marsh, Madison.

Surgical Discussion.
Dr. F. Gregory Connell, Oshkosh.

Lighthouse at Green Bay

Club House, Oneida Golf and Riding Club, where the golf tournament will be played.

10:00–12:00 Section Meetings

Section on Medicine. Dr. W. A. Killins, Green Bay, Presiding

10:00 Agranulocytosis.
Drs. T. L. Squier and F. W. Madison, Milwaukee.
Discussion. Dr. F. Eigenberger, Sheboygan.

10:30 Artificially Induced Fever in the Treatment of Disease. Lantern Slides.
Dr. J. E. Rueth, Milwaukee.
Discussion. Dr. Edward D. Schwade, Milwaukee.

11:00 Scarlet Fever.
Dr. H. T. Barnes, Delafield.
Discussion. Dr. E. M. Jordon, Green Bay.

11:30 Complete Thyroidectomy as a Treatment for Certain Decompensated Heart Conditions.
Dr. Harold E. Marsh, Madison.
Open Discussion.

Section on Surgery. Dr. W. W. Kelly, Green Bay, Presiding

10:00 Pitfalls in Abdominal Surgery.
Dr. Victor F. Marshall, Appleton.
Discussion. Dr. Eugene S. Sullivan, Madison.

10:30 Treatment of Duodenal Ulcer.
Dr. F. Gregory Connell, Oshkosh.
Discussion. Dr. D. J. Twohig, Fond du Lac.

11:00 Carcinoma of the Large Bowel.
Dr. F. A. Stratton, Milwaukee.
Discussion. Dr. W. J. Tucker, Ashland.

11:30 The Prevention and Treatment of Complications Following Cholecystectomy.
Dr. James M. Hayes, Minneapolis.
Discussion. Dr. S. E. Gavin, Fond du Lac.

Section on Urology. Dr. Alf Gundersen, La Crosse, President, State Urological Society, Presiding

10:00 Tuberculous Disease of the Kidney.
Dr. Gilbert J. Thomas, Assoc. Prof. of Urology, University of Minnesota.
Discussion. Dr. W. M. Kearns, Milwaukee.

10:30 Prostatic Resection.
Dr. Herman L. Kretschmer, Clin. Prof. of Surgery, Rush Medical College, Chicago.
Discussion. Dr. W. J. Carson, Milwaukee.

11:00 Common Infections of the Urinary Tract and their Treatment.
Dr. James C. Sargent, Milwaukee.
Discussion. Dr. H. M. Stang, Eau Claire.

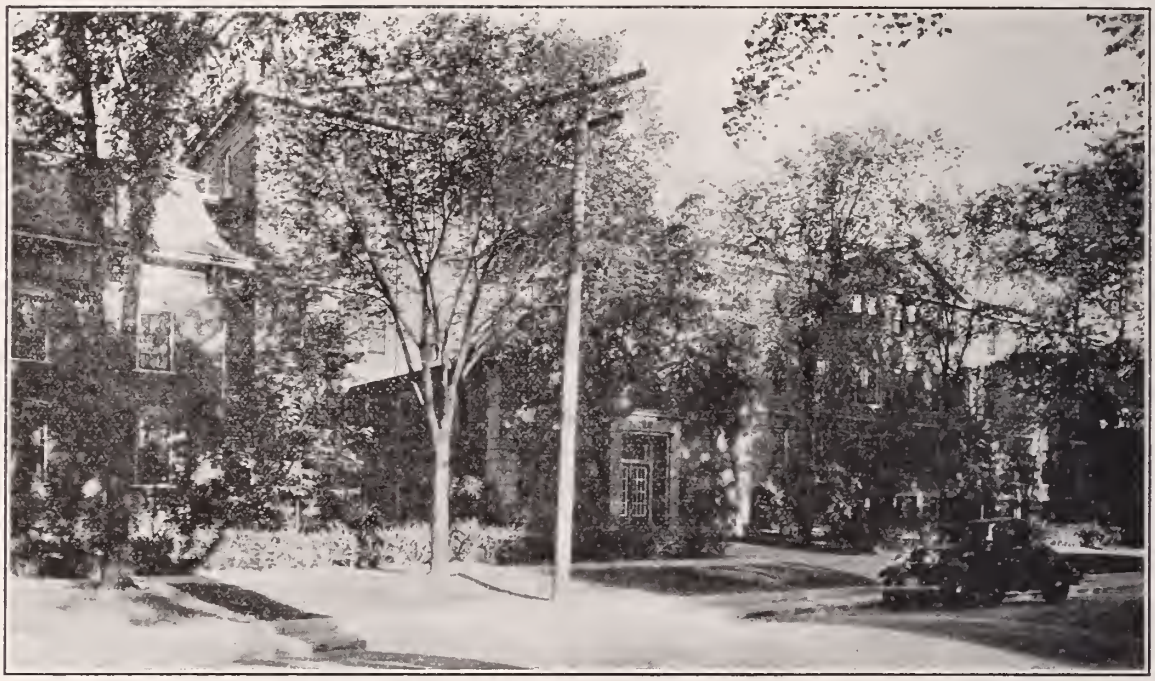
11:30 Abnormal Positions of the Kidney. Lantern Slides.
Dr. W. G. Sexton, Marshfield.
Discussion. Dr. Alf Gundersen, La Crosse.

Section on Obstetrics and Gynecology. Dr. W. E. Leaper, Green Bay, Presiding

10:00 The Management of Abortion.
Drs. R. S. Cron and A. H. Lahmann, Milwaukee.
Discussion. Dr. Carl S. Harper, Madison.

10:30 The Early Diagnosis and Treatment of Pyelitis of Pregnancy.
Dr. John W. Harris, Madison.
Discussion. Dr. Ira R. Sisk, Madison.

11:00 Diagnosis and Treatment of Diseases of the Cervix Uteri. Lantern Slides.
Dr. Carl H. Davis, Milwaukee.
Discussion. Dr. E. F. Schneiders, Madison.



St. Mary's Hospital.

11:30 The Treatment of Placenta Praevia.
Dr. H. J. Olson, Milwaukee.
Discussion. Dr. R. E. McDonald, Milwaukee.

Section on Radiology. Dr. L. V. Littig, Madison, Chairman, Section on Radiology, Presiding

8:30–10:30 Round Table—Case Reports with Films.

8:30 Carcinoma of Testicle.
Dr. F. H. Kuegle, Janesville.

8:40 Traumatic Arthritis of Hip.
Dr. J. E. Habbe, Milwaukee.

8:50 Case Report with Films.
Dr. R. L. Troup, Green Bay.

9:00 Case Report with Films.
Dr. R. P. Potter, Marshfield.

9:10 Hip Case.
Dr. R. F. Wilson, Beloit.

9:20 Case Report with Films.
Dr. I. G. Ellis, Madison.

9:30 Regional Ileitis.
Dr. H. B. Podlasky, Milwaukee.

9:40 Diverticulitis of Colon Simulating Carcinoma.
Dr. H. W. Hefke, Milwaukee.

9:50 Thoracic Neoplasm.
Dr. Theodore Sokow, Kenosha.

10:00 Lymphoblastoma of the Thorax.
Dr. E. F. McGrath, Appleton.

10:10 Xanthomatosis in Adults.
Dr. L. W. Paul, Madison.

10:20 Case Report with Films.
Dr. J. Newton Sisk, Madison.

10:30 Diseases of the Colon.
Dr. F. J. Hodges, Prof. of Radiology, Univ. of Michigan.
Discussion.

11:00 Early Diagnosis of Carcinoma of Stomach.
Dr. Leo G. Rigler, Prof. of Radiology, Univ. of Minnesota, Minneapolis.
Discussion. Dr. J. E. Habbe, Milwaukee.

11:30 Carcinoma of the Breast.
Dr. A. W. Erskine, Cedar Rapids, Iowa.
Discussion. Dr. E. A. Pohle, Madison.

12:30 Radiological Section Luncheon

Speaker — Economic Position of Radiologist.
Dr. H. B. Podlasky, Milwaukee.
Discussion. Dr. R. T. Cooksey, Madison.

1:30–5:00 General Meeting

Dr. S. J. Seeger, President, Presiding

1:30 Skull Fractures.
Dr. Harry E. Mock, Assoc. Prof. of Surgery, Northwestern University, Chicago.
Discussion. Dr. W. J. Bleckwenn, Madison.

2:10 The Surgical Treatment of Trigeminal Neuralgia.
Dr. Loyal Davis, Assoc. Prof. of Surgery, Northwestern University, Chicago.
Discussion. Dr. E. R. Schmidt, Madison.

St. Vincent's Hospital.

2:50 A Summary of the Causes of Anemia with Fundamentals Concerning Treatment.
Dr. Herbert Z. Giffin, The Mayo Clinic, Rochester.
Discussion. Dr. V. E. Eastman, Wausau.

3:30 Urological Problems in Children.
Dr. Herman L. Kretschmer, Clin. Prof. of Surgery, Rush Medical College, Chicago.
Discussion. Dr. G. H. Ewell, Madison.

4:10 The Diagnosis and Treatment of the Common Skin Diseases.
Dr. O. H. Foerster, Milwaukee.

4:35 The Relationship Between Physician and Pharmacist.
Mr. Ralph W. Clark, Ph.D., Chairman, Interprofessional Relationship Committee of Wisconsin Pharmaceutical Association.

5:00 Adjournment.

8:30 Smoker

Dr. E. G. Nadeau, Chairman of Local Arrangements, Presiding

The Presidential Address.
Dr. Thomas J. O'Leary, Superior.

The Development of Visualization.
Dr. Leo G. Rigler, Prof. of Radiology, Univ. of Minnesota, Minneapolis.

Report of Delegates to American Medical Association.
Dr. W. E. Bannen, La Crosse.

THURSDAY, SEPTEMBER 13

8:30–10:00 Dry Clinics. General Assembly

Case Presentations by Green Bay Physicians.
Extrophy of the Bladder.
Dr. A. J. McCarey.

Tumors of the Duodenum with a case history of Sarcoma of the Duodenum.
Dr. C. S. Williamson.

Demonstration of a simple method of treatment for a non-union of fractures.
Dr. R. M. Carter.

Sarcoma of the Rectum.
Dr. D. J. Gosin.

Repair of the Common Duct following the removal of the gall bladder.
Dr. J. R. Minahan.

Medical Discussion.
Dr. W. J. Egan, Milwaukee.

Surgical Discussion.
Dr. F. E. Butler, Menomonie.

10:00–12:00 Clinical Presentations

Dr. R. L. Cowles, Green Bay, Presiding

10:00 Encephalitis.
Dr. J. M. Freeman, Wausau.

10:15 Thyroid Disease in Children.
Dr. Karl Doege, Marshfield.

10:30 Summary of the Present Day Treatment of Arthritis.
Dr. A. A. Hoyer, Beaver Dam.

10:45 The Heart in Surgery.
Dr. A. J. Patek, Milwaukee.

11:00 Incipient Pulmonary Tuberculosis.
Dr. Oscar Lotz, Milwaukee.

11:15 Breast Tumors.
Dr. T. J. Snodgrass, Janesville.

11:30 Treatment of Allergic Sensitivity by the Ionization Method. A Report of 150 Cases.
Dr. J. A. Hurlbut, Madison.

11:45 The Management of Hypertension.
Dr. R. M. Kurten, Racine.

1:30–5:00 General Meeting

Dr. S. J. Seeger, President, Presiding

1:30 The Diagnosis and Treatment of Acute Intestinal Obstruction.
Dr. O. H. Wangensteen, Asso. Prof. of Surgery, University of Minnesota.
Discussion. Dr. James Dean, Madison.

Bellin Memorial Hospital

2:10 Some Everyday Problems in the Diagnosis and Treatment of Cancer.
Dr. Ellis Fischel, Assoc. Prof. of Surgery, St. Louis Univ. School of Medicine, St. Louis, Mo.
Discussion. Dr. F. A. Thayer, Beloit.

2:50 Marrow Insufficiency.
Drs. W. S. Middleton and O. O. Meyer, Madison.
Discussion. Dr. Vincent Koch, Janesville.

3:30 Report on Action of the House of Delegates.
Mr. J. G. Crownhart, Secretary.

3:40 Surgical Problems Associated with Cholelithiasis.
Dr. Robert S. Dinsmore, Cleveland Clinic, Cleveland, Ohio.
Discussion. Dr. Gunnar Gundersen, La Crosse.

4:20 The Management of Gastric Lesions. Lantern Slides.
Dr. George Eusterman, The Mayo Clinic, Rochester.
Discussion. Dr. James A. Evans, La Crosse.

6:30 Annual Dinner (Informal). Northland Hotel

8:10 Presentation of Council Awards.

8:20 Introduction of Guests. Dr. S. J. Seeger, Past President, Presiding.

8:30 Address.
Dr. Dean Lewis, Baltimore, Retiring President of the American Medical Association.

9:00 Address.
Dr. Olin West, Chicago, Secretary and General Manager of the American Medical Association.

9:30 Dancing.

FRIDAY, SEPTEMBER 14

8:30–10:00 Section Meetings

Symposium on Fractures and Orthopedics. Dr. R. M. Carter, Green Bay, Presiding

8:30 Pott's Disease. Symptoms and Treatment.
Dr. Chester Schneider, Milwaukee.

9:00 The Management of Hip Fractures.
Dr. James Jackson, Madison.

9:30 Lesions of the Knee Joint.
Dr. E. W. Ryerson, Prof. of Orthopedic Surgery, Northwestern University.

Symposium on Cancer. Dr. W. D. Stovall, Madison, Presiding

8:30 The Diagnosis and Treatment of Pre-Cancerous Lesions of the Skin.
Dr. H. J. Farrell, Milwaukee.

9:00 Round Table Discussion of Cancer.
Opened by Dr. Ellis Fischel, Assoc. Prof. of Surgery, St. Louis Univ. School of Medicine, St. Louis.

9:30 The End Results of Cancer Surgery.
Dr. Joseph F. Smith, Wausau.

Symposium on Cardiovascular Disease. Dr. L. M. Warfield, Milwaukee, Presiding

8:30 Coronary Thrombosis and Its Sequelae.
Dr. W. M. Jermain, Milwaukee.

9:00 The Differentiation of Genuine Cardiac Pain from Conditions Simulating it.
Dr. F. D. Murphy, Milwaukee.

9:30 The Differential Diagnosis of Unusual Aneurysms.
Dr. John Huston, Milwaukee.

Symposium on Nervous and Mental Diseases. Dr. A. W. Rogers, Oconomowoc, Presiding

10:00 The Neuralgias of the Head and Neck.
Dr. A. W. Bryan, Madison.

10:30 Neuralgia of the Trunk and Extremities.
Dr. A. I. Rosenberger, Milwaukee.

11:00 General Consideration of the Neuralgias.
Dr. J. L. Garvey, Milwaukee.

11:30 The Treatment and Management of Neuralgias of the Extremities from Orthopedic Point of View.
Dr. H. C. Schumm, Milwaukee.

Symposium on Diseases of the Gastrointestinal Tract. Dr. J. R. Minahan, Green Bay, Presiding

10:00 Appendicitis.
Dr. A. R. Tormey, Madison.

10:30 Perforated Ulcer.
Dr. Joseph Dean, Madison.

11:00 The Diagnosis and Treatment of Internal Hemorrhage.
Dr. Dexter H. Witte, Milwaukee.

11:30 Round Table Discussion.
Opened by Dr. Carl Williamson, Green Bay.

1:30–4:00 General Meeting

Dr. T. J. O'Leary, President, Presiding

1:30 Some Difficulties in the Diagnosis of Tumors.
Dr. Dean Lewis, Baltimore, Prof. Surg., Johns Hopkins University School of Medicine.

2:00 Congenital Anomalies of the Gastrointestinal Tract.
Dr. Albert H. Montgomery, Assoc. Clin. Prof. of Surgery, Rush Medical College.

2:30 The Present Status of Arthroplasty in Ankylosed Joints.
Dr. W. R. MacAusland, Boston.

3:00 The Prevention of Surgical Complication.
Dr. E. Starr Judd, The Mayo Clinic, Rochester.

3:30 The Medical Management of the Surgical Diabetic.
Dr. E. L. Sevringhaus, Madison.

House of Delegates Meets Tuesday, September 11

THE first session of the 1934 House of Delegates will be held in the Crystal Ballroom of the Northland Hotel at 7:15 Tuesday evening, September 11th. The second session will be held in the same room of the Northland Hotel at 6:30 Wednesday evening, September 12th, and the third session will be held at 8:30 Thursday morning, September 13th.

When the House is called to order, Speaker Ralph M. Carter, of Green Bay, will appoint four reference committees of the House. The first is on Credentials, the second on Resolutions, the third on Reports of Officers, and the fourth on Reports of Standing Committees. These committees will all report at the Wednesday evening session, at which time the reports will be before the House for final action. Opportunity will be given, however, at the first session Tuesday evening for any delegate or alternate to ask questions of committee chairmen with reference to their reports. All intended resolutions should be introduced at the first session Tuesday evening.

Following the summarization of reports of officers and committees at the Tuesday evening session there will be election for four councilors in the following order:

1. Third District to succeed C. A. Harper, Madison, term expires.
2. Fourth District to succeed Wilson Cunningham, Platteville, term expires.
3. Fifth District to succeed A. H. Heidner, West Bend, term expires.
4. Sixth District to succeed Stephen E. Gavin, Fond du Lac, term expires.

Nominations for councilors must come in the first instance from delegates residing in the districts that are affected. Thus delegates in the third district will be given an opportunity to caucus and present one or more nominations for their councilor. The same procedure is followed for the election of all councilors.

At the Tuesday evening session delegates from each district will select one of their number to be a member of the Committee on Nominations. This committee will present its report at the Thursday morning session with one or more nominations for each of the following offices:

A President-Elect.

A Speaker of the House of Delegates to succeed Dr. Ralph M. Carter, Green Bay, term expires.

A Vice-Speaker of the House of Delegates to succeed Dr. Gunnar Gundersen, La Crosse, term expires.

Two delegates to the American Medical Association to succeed: Dr. J. Gurney Taylor, Milwaukee, term expires; Dr. W. E. Bannen, La Crosse, term expires.

Two alternate delegates to the American Medical Association to succeed: Dr. F. Gregory Connell, Oshkosh, term expires; Dr. T. W. Nuzum, Janesville, term expires.

Nominations by the Committee on Nominations does not preclude additional nominations from the floor at the Thursday morning session.

At the Tuesday evening session the House will vote on an amendment to the Constitution as originally presented at the 1932 session by Dr. H. P. Bowen, of Watertown, delegate of Jefferson County. The effect of the proposed amendment is to provide for the election of councilors at district meetings instead of at sessions of the House of Delegates. The proposed amendment follows:

Amend Article IX (Officers), Section 2, to read:

1. Repeal all of Section 2 as now constituted.

2. Enact Section 2 to read: "Section 2. The President, President-Elect, Speaker and Vice-Speaker shall be elected by the House of Delegates. The Secretary and Treasurer shall be elected by the Council.

"Councilors shall be elected at a meeting of their respective District Societies. Notice of election shall be incorporated in a mailed notice to members at least seven days before such meeting. Election, where more than one nomination is received, shall be by ballot and a majority of votes cast shall be necessary to elect. Each candidate for councilor must be a resident of the district which it is proposed that he represent, and no person known to have solicited votes for or sought the office of councilor shall be eligible for the current election. Other procedure essential to the election shall be governed by Roberts' Rules of Order.

"The officers, except the councilors, shall be elected annually. The terms of councilors shall be for three years and all officers shall serve until their successors are elected and installed. Terms of councilors shall expire in the following order: Seventh, Eighth, Ninth, Tenth and Thirteenth Districts in 1935; First, Second, Eleventh and Twelfth Districts in 1936; and Third, Fourth, Fifth and Sixth Districts in 1937, and thereafter shall be elected in this order."

This amendment offered in 1933 is to be acted upon in 1934 and shall, upon adoption, be effective on January 1, 1935.

All members of the Society are welcome to attend all sessions of the House. A member, not a delegate or alternate, may address the House by notifying the Speaker of the House of his desires previous to, or during the session.

Members—1934 House of Delegates

County	*Delegate*	*Alternate*
Ashland–Bayfield–Iron	C. J. Smiles, Ashland	R. O. Grigsby, Ashland
Barron–Washburn–Sawyer–Burnett	H. H. Schlomovitz, Barron	R. W. Adams, Chetek
Brown–Kewaunee–Door	P. R. Minahan, Green Bay	W. Wochos, Kewaunee
Calumet	N. J. Knauf, Chilton	H. C. Krohn, New Holstein
Chippewa	W. C. Henske, Chippewa Falls	A. J. Somers, Chippewa Falls
Clark	H. H. Christopherson, Colby	A. L. Schemmer, Colby
Columbia	James W MacGregor, Portage	H. M. Caldwell, Columbus
Crawford	C. A. Armstrong, Prairie du Chien	J. J. Kane, Prairie du Chien
Dane	L. Peterson, Sun Prairie	Louis Fauerbach, Madison
	Joseph Dean, Madison	E. Schneiders, Madison
	H. Purcell, Madison	H. Keenan, Stoughton
Dodge	W. G. Riopelle, Beaver Dam	A. W. Hammond, Beaver Dam
Douglas	C. W. Giesen, Superior	C. H. Christiansen, Superior
EauClaire–Dunn–Pepin	R. E. Mitchell, Eau Claire	[illegible] E. Butler, Menomonie
Fond du Lac	David Twohig, Fond du Lac	C. Leonard, Fond du Lac
Forest	E. G. Ovitz, Laona	O. S. Tenley, Wabeno
Grant	W. Cunningham, Platteville	J. E. Donnell, Cuba City
Green	J. F. Mauermann, Monroe	W. G. Bear, Monroe
Green Lake–Waushara–Adams	A. J. Wiesender, Berlin	George Baldwin, Green Lake
Iowa	H. D. Ludden, Mineral Point	T. A. Hagerup, Dodgeville

County	*Delegate*	*Alternate*
Jefferson	H. P. Bowen, Watertown	W. S. Waite, Watertown
Juneau	Brand Starnes, New Lisbon	W. T. O'Brien, Mauston
Kenosha	G. F. Adams, Kenosha	A. F. Ruffalo, Kenosha
La Crosse	G. Gundersen, La Crosse	R. L Eagan, La Crosse
Lafayette	R. B. Quinn, Darlington	M. F. Stuessy, Blanchardville
Langlade	J. C. Wright, Antigo	J. W. Lambert, Antigo
Lincoln	E. O. Ravn, Merrill	K. A. Morris, Merrill
Manitowoc	R. W. Hammond, Manitowoc	L. W. Gregory, Manitowoc
Marathon	S. M. B. Smith, Wausau	E. E. Flemming, Wausau
Marinette–Florence	T. J. Redelings, Marinette	J. V. May, Marinette
Milwaukee	E. W. Miller	R. E. Fitzgerald
	H. W. Powers	H. C. Schumm
	H. J. Gramling	A. R. Langjahr
	J. C. Sargent	J. W. Smith
	Oscar Lotz	Edward Jackson
	G. W. Neilson	F. D. Murphy
	Millard Tufts	Wm. A. Ryan
	N. E. McBeath	S. M. Markson
	L. W. Hipke	T. S. O'Malley
	S. H. Lippitt	E. H. Gramling
	R. A. Toepfer	E. O. Gertenbach
	U. A. Schlueter	W. F. Grotjan
	Wm. M. Jermain	P. E. Oberbreckling
Monroe	G. C. Devine, Ontario	A. R. Bell, Tomah
Oconto	C. H. Kingsburg, Gillett	R. J. Rogers, Oconto
Oneida–Vilas	R. A. A. Oldfield, Eagle River	
Outagamie	A. E. Rector, Appleton	G. J. Flanagan, Kaukauna
Pierce–St. Croix	A. E. McMahon, Glenwood City	O. H. Epley, New Richmond
Polk	R. G. Arveson, Frederic	J. D. Nicholson, Milltown
Portage	H. P. Benn, Stevens Point	E. E. Kidder, Stevens Point
Price–Taylor	E. A. Riley, Park Falls	E. B. Elvis, Medford
Racine	H. B. Keland, Racine	T. C. Hemmingsen, Racine
Richland	B. I. Pippin, Richland Center	G. H. Benson, Richland Center
Rock	P. A. Fox, Beloit	W. J. Allen, Beloit
Rusk	W. F. O'Connor, Ladysmith	J. C. Baker, Hawkins
Sauk	H. J. Irwin, Baraboo	E. McGrath, Baraboo
Shawano	G. R. Stauff, Birnamwood	A J. Gates, Tigerton
Sheboygan	A. C. Radloff, Plymouth	Arthur Knauf, Sheboygan
Trempealeau–Jackson–Buffalo	C. F. Peterson, Independence	H. A. Jegi, Galesville
Vernon	W. M. Trowbridge, Viroqua	R. H. Ludden, Viroqua
Walworth	S. G. Meany, East Troy	J. W. Doughty, Delavan
Washington–Ozaukee	H. M. Lynch, West Bend	F. W. Lehmann, Hartford
Waukesha	H. A. Peters, Oconomowoc	H. T. Barnes, Delafield
Waupaca	J. W. Monsted, New London	S. Salan, Waupaca
Winnebago	J. W. Lockhart, Oshkosh	R. B. Rogers, Neenah
Wood	F. X. Pomainville, Wisconsin Rapids	K. H. Doege, Marshfield

Reports of Officers and Committees

CHAIRMAN OF THE COUNCIL

To the 1934 House of Delegates:

General policies governing all actions of your State Medical Society are those adopted and passed upon by the House of Delegates at its successive annual sessions. With the growth of the Society's effort in the past thirteen years, however, more and more important duties have developed upon the Council as the continuous executive body charged with the duty of supervising the execution of the policies adopted by the House during the twelve month interval when the House is not in session.

During the past year your Council has found its work so heavy that it has even required an executive committee of the Council, not to pass on policies, but to advise with the President and Secretary over the manner in which they may best discharge their responsibilities in a period of continuous emergencies. The Council itself has had two meetings in recent months but the executive committee of the Council has been in session on an average of once a month throughout the year. Your Chairman makes this preliminary statement only to point out that in any Society attempting to do a progressive piece of work in the interest of a great group of its membership, great demands are made upon the time, not only of the President and Secretary, but of all officers charged with the duty of executing those policies determined upon by the delegates themselves.

Two years ago the Council reduced the dues by 20% even though the House of Delegates had voted unanimously to continue them at $15.00. This has necessarily imposed some restrictions upon the work of the organization. So far as possible the budget

has been prepared with the utmost care to the end that all essential work of the Society might continue substantially unimpaired, despite the 20% reduction in income. The budget for the current year was published in the Wisconsin Medical Journal for February last. All minutes of the Council meeting are published in the first issue of the Journal following such meetings to the end that the entire membership, as well as delegates, may be acquainted with the work of the Council.

The Report of the Secretary—Managing Editor, relates in great detail the work of the Society during the past year. Without duplicating that report the Council would direct your attention to the fact that we have passed through a year of great emergency in which every possible effort of the Society and its officers have been strained to the end that medicine might continue unhampered in either opportunity or reward for its public service. It also has been called upon for many decisions vital to the welfare of the profession and the public. Councilors have been increasingly called upon to give of time and effort to attend the many meetings necessitated by the times. We are proud to report to you the continued progress of the Society in the interest of the great group of its membership, and we commend to your very careful attention the detailed report of the officers and committees to be contained in this issue of the Journal.

The Secretary will present a report on membership at the first session of the House, such report to be as of September first. It seems probable, however, that Wisconsin will again report an increase for the calendar year of 1934. The attention of each county society well may be directed to a consideration of whether the Society embraces all eligible and desirable men within its boundaries. At no previous time has it been so essential that organized medicine speak with a single voice that truly shall be representative of all ethical physicians of the state. Upon such cohesion undoubtedly will depend the future of medicine and the public health in this and other states.

ARTHUR W. ROGERS,
Chairman of the Council.

REPORT OF THE SECRETARY–MANAGING EDITOR

To the 1934 House of Delegates:

At the conclusion of the calendar year of 1932 the Society had 1,975 members. At the conclusion of the calendar year of 1933 the membership was 2,044. It appears probable that the membership for the calendar year of 1934 will exceed that of a year ago. Membership data for the first nine months of the year will be given to the House in a supplementary report at the first session.

The Journal

The report of the Editorial Board will be found elsewhere in this issue of the Journal and concerns itself with the Journal as a publication. As Managing Editor I have to report that the present publication loss is just under $250.00 an issue. Up to 1931 the Journal was fully self-supporting. Since that time loss of advertising and some increase in printing costs under the Code have been responsible for approximately half the publication loss. The other portion of the publication loss is due to the fact that additional allowances were given the Editorial Board from the General Fund for the purpose of increasing the scientific content of the Journal.

Despite the need for advertising revenue, the Journal has not sacrificed its high standards upon which the acceptance of advertising is based. These standards are those of the Council on Pharmacy and Chemistry and substantially those of the Journal of the American Medical Association. During the past three months, for instance, two pages of existing advertising contracts were cancelled by the Journal. There has been an increase in new contracts during the past six months and it is hoped that the present deficit of the Journal may be wiped out within the next eighteen months.

Travel

A special session of the Legislature necessitated the presence of the Secretary at his office during the early winter months. The Secretary has visited, however, district meetings in the Fourth, Fifth, Seventh, Ninth, Tenth and Eleventh Districts. He has also attended meetings of the Brown–Kewaunee–Door, Fond du Lac, Vernon, Juneau, Monroe, Eau Claire–Dunn–Pepin, and Milwaukee County Medical Societies. The nature of his work has made necessary several trips to the headquarters of the American Medical Association at Chicago. He has spoken before the annual meeting of the Minnesota State Medical Association at Duluth, and before the Northwest Officers' Regional Conference at St. Paul. In addition to this travel he has attended over thirty meetings of committees, most of which required his attendance at Milwaukee.

Auxiliary

The growth of the State Auxiliary has been constant with an increase of more than 200 members both in 1933 and 1934. The 1933 membership of the State Auxiliary showed an increase of approximately 55% over that of 1932. In 1932, when state and national dues were first collected, the Auxiliary reported eight organized counties with 367 members and at the close of the calendar year of 1933 there were thirteen auxiliaries with a paid membership of 569. Since the last annual meeting three county auxiliaries have been organized and today there are seventeen (17) organized auxiliaries with a membership of more than 700.

At its January meeting, your Council adopted a special resolution urging the Auxiliary to promote the distribution of Hygeia. The Auxiliary considered this an opportunity to do a definite and constructive piece of health work in an endeavor to place Hygeia, the health magazine, in doctors' offices, schools, libraries, homes, and so on, thereby giving the public authoritative health information. Various methods were employed to put this publication before the public,—one Auxiliary sent "Hygeia letters" to the 189 rural school principals in their county. The Auxiliary reports a splendid accomplishment in obtaining 300 subscriptions during the period of one year. The Wisconsin Auxiliary has attained second place among the 48 state auxiliaries in promoting Hygeia.

The county auxiliaries assist in carrying on health educational work by placing medical speakers before lay audiences. In attempting to combat quackery, health talks open to the public have been sponsored by practically every county auxiliary, — an auxiliary with a membership of 25 held an open meeting on the subject of "patent medicines" with an attendance of 700.

Every county auxiliary has studied the Copeland–Tugwell Bill and it is hoped that before the end of the year each county will have had a speaker on the subject of "Vivisection". With growth in numbers the Auxiliary is seeking growth in achievements.

Medical Relief of the Indigent

Continuous contacts and frequently daily meetings with relief officers have been maintained to the end of securing for the indigent of the State the best possible medical service under the joint Federal–County relief plans. Continuous headway has been made in ironing out difficulties that have arisen. In the late spring Dr. W. T. Clark of Janesville, long a member of a special committee on relief problems of the Rock County Medical Society, was appointed official Medical Adviser to the State Relief Administrator. Dr. Clark has had that background that makes him an exceedingly valuable man in his present capacity and your Secretary is keenly appreciative of the great time and effort devoted by Dr. Clark to this professional problem. To his fine efforts are due many of our outstanding accomplishments in this field of our endeavor.

In July all members were provided with a copy of a Supplementary Bulletin to Rules and Regulations No. 7, issued by the Wisconsin Emergency Relief Administration. To the best of our knowledge no other state has rules of this type that provide such a fine working agreement between the profession and the relief administration. In particular it is pointed out that through advisory committees of the County Medical Societies, medical problems are left with the local organized medical profession for consideration and decision.

Secondly, free choice of physician is made mandatory in every county accepting Federal relief funds. This means that in 61 of the 71 counties of the State, free choice of physician will exist in fact.

Third, considering the extent of the entire relief problem and the limited funds available, it appears that Wisconsin physicians are receiving in the main reasonable allowances to assist them in carrying, in home and office, a charitable burden that has increased tremendously during the past four years. These allowances are in no sense compensation or to be looked upon as "pay". They do, however, cover the outstanding items in the cost of rendering the service and this perfection of the plan is bringing to Wisconsin physicians thousands of dollars each month which alone makes it possible for some of our members to serve their communities.

Fourth, through a State Advisory Committee consisting of members of the Executive Committee of the Council, and the fine cooperation of officers and committeemen of the County Medical Societies, the ground-work has been laid for a continued close and friendly cooperation that promises to bring about such future modifications as may seem necessary and essential to the profession in its public work. Your Secretary cannot stress too strongly the necessity for such cooperative relations. The relief problem is no longer to be regarded as a temporary one and only close cooperation will make possible that continuous adjustment that is so essential in the field that is presumed to cover the rendition of home and office medical emergency service for approximately a sixth of our population.

Civil Works Administration

The accomplishments of the organized medical profession under the Civil Works Service projects in this State are well known to members of the House of Delegates. Your attention is directed to this work only because it constituted an emergency program during the past year that made extraordinary demands upon the personnel of both the profession and its central office. A survey of work accomplished in other states under health projects leads us to the conclusion that in but two other states was any degree of the direction of the project under the active medical profession. Your Secretary is distinctly proud of the high type of service given by organized medicine to this Government project in the late spring and points to it as an exemplification of the fact that the profession in Wisconsin is so organized as to make possible a tremendous accomplishment within a period of but a few days.

It is also to be noted that through the efforts of Dr. J. Newton Sisk as Adviser to the State Administrator, free choice of physician to all injured on Civil Works Projects was secured in the first week of this great effort and maintained throughout the program in Wisconsin.

Wisconsin General Hospital

Since the first of the year a revised edition of Rules and Regulations covering the admittance of patients to the Wisconsin General Hospital has been mailed to the entire membership. Your special Committee on the Coordination of Medical Services has had three meetings in the last nine months and your Secretary expresses his confidence that a continuation of this effort will bring to the administration of the Hospital the approval of every member of the profession who has been concerned by some of the public aspects of the problem as it existed prior to January, 1934. Members may best assist the Committee by bringing their suggestions directly to the Committee's attention by the means of letters to the central office of the Society.

Scientific Work

While the past five years of necessity have centered the attention of all on economic problems, your Society has endeavored in all feasible ways to promote activities in the field of scientific work. The report of the Chairman of the Committee on Scientific Work will be found elsewhere in this issue and discusses briefly its efforts to bring additional program material from within our membership to the attention of officers of the component societies. Our annual meeting programs are giving a steadily increasing percentage of the time to Wisconsin members. The Medical Library Service, instituted jointly by your Society and the Medical School of the University of Wisconsin, has proved itself to have been of unusual merit.

The Medical Library Service places at the disposal of every doctor in the state the facilities of the Medical School Library and the Medical Library Service. Books from either library will be loaned for a period of two weeks. Any books which are reviewed in the Wisconsin Medical Journal are available for loan purposes. During the past year 158 books with a list value of $670.80 were presented from this source.

The Medical Library Service has access to 350 medical journals, 250 of which represent complete sets. Of the 134 journals currently received by the Service, 54 are given by our Society. Current issues, and successive issues of the same journal, are sent upon request. References on any subject, including books, periodicals, and reprints, will be loaned for two weeks.

No charges are made except to cover cost of mailing. Borrowers are asked to pay the postage and a small wrapping fee (5c for journal packages and 10c for book packages). Material from libraries has a special rate of 3c for the first pound and 1c for each additional pound. Postage is a small item.

With no increase in staff, no appropriation for books, and only a five hundred dollar fund provided by the Medical School for journals, the Medical Library Service has nevertheless during the past two years increased its number of loans to physicians of the state by 40 per cent. For the fiscal year 1931–32, the total number of loans amounted to 6,348. For the year 1932–33 the total number of loans amounted to 8,812. For the year 1933–34, the total number of loans reached 10,767.

Your Secretary, in behalf of the Society, expresses to Dean Bardeen sincere appreciation for the constant development of this high type of postgraduate service to the profession of the state. Its continuous growth in usage represents a very great demand upon the limited library staff and its prompt services has brought commendation from physicians in all portions of the state.

Sickness Insurance

Increasingly during the past four years your Society officers have given of their time and most serious consideration to the entire subject of sickness insurance. Detailed studies have been entered into in an effort to ascertain whether or not any real advance in the public health could be attained by the adoption of any new plan or the modification of any existing insurance system.

Your attention is called to the principles on this subject as adopted by the American Medical Association at its Cleveland meeting in June. The adoption of this set of principles does not mean, however, that we may now dismiss the subject from our minds. There is on the Secretary's desk a published statement of an official of one large Foundation in this country, committed to the program of securing legislation for compulsory health insurance, which statement indicates that:

1. A combined effort is to be made under the direction of this Foundation before the Legislature of 1935, and

2. The plan to be suggested will not be announced until just prior to the opening of the session as a matter of "practical politics".

Your Secretary will have a supplementary report on this subject to be presented on the floor of the House of Delegates.

Public Education

Attention is called to the fact that since August, 1933, all press releases have been prepared and distributed through the central office of your State Medical Society in addition to the three weekly programs on the air. That our radio addresses are in fact of an educational character is indicated by two requests of the group of 30 educational radio stations in the United States for 26 broadcasts in all upon health subjects. Your central office is also furnishing suitable broadcast material to several of the County Medical Societies within the State who have made arrangements for its use over local stations. This service might well be extended and the offices of the Society in preparing material are available to any interested component body.

Constitutional Amendment

In this issue of the Journal there appears an article on the work to be undertaken by the 1934 House of Delegates. In that article will be found in full a constitutional amendment offered by Dr. H. P. Bowen, of Watertown, a delegate of Jefferson County. This is an official publication of this proposed amendment and will also appear in the September issue of the Journal in accordance with the provisions of the Constitution and By-Laws.

Investigative Work

Throughout the year the central office of your Society has made repeated investigations of agencies who solicit physicians for contracts of various types. This service includes investigations of collection agencies, insurance companies, and like concerns. Repeated warnings have been issued from the central office to advise the members against signing contracts with commercial agencies that are unknown to them. The Society is prepared to give information of both a factual and legal nature within a matter of but hours from the time the request is received. Increasingly the membership is taking advantage of this service to the known saving of literally thousands of dollars to the membership.

Legal Service

Your Society continues through its central office and legal counsel, to advise the membership without charge on any legal question which is concerned with, or which arises in connection with the active practice of medicine. While this service is frequently highly personal in its nature, fully half of the questions that come across the Secretary's desk indicate the necessity for some service which will not only be helpful to the applicant member, but to the entire membership as well. During the past year legal studies have been made in the utmost detail on such subjects as how to prevent the illegal use of the title "Doctor"; income tax deductions permissible under State and Federal laws and peculiar to the medical profession; the various Codes and their operation; legal status of component Societies in expelling or suspending members; medical panels under the Workmen's Compensation Act; treating the indigent sick; ownership of x-ray films, and the annual revision of laws governing medical services under poor relief in the State. Thousands of this latter pamphlet, revised annually, have been distributed in this State and in a recent letter from a poor relief officer in central Wisconsin, your Society was advised that poor relief officers generally have named this publication "the Relief Officer's Bible".

Wisconsin Hospital Association

As is known to the membership, your Secretary also serves as Secretary for the Wisconsin Hospital Association. His honorarium for this work amounting to $150.00 a year is turned over to the treasury of the State Society. The work of the two organizations handled through the central office of your Society, has gone hand in hand and with outstanding benefits to both groups. Your Secretary is convinced that the time given to this work has been wholly beneficial to our membership.

Conclusion

More and more are your officers impressed that upon the strength of the component County Medical Societies rests the future of medical practice. We are distinctly proud of the efficient organization that maintains in the great majority of our component Societies. In some instances a small membership residing rather distant from medical centers has given component Societies the appearance of paper organizations. The test of their strength was made, however, during the Civil Works Health Project and in no instance did any Society that undertook the program fail to carry it forward in the most capable manner. It is most important that all members give of their time towards the continued building of the County Medical Society. It is the front line of organized medicine.

Your attention is directed to the fact that throughout the year all officers of your State Medical Society in every discharge of their duties attempted to carry out in the utmost detail the general policies and instructions as laid down by each successive meeting of the House of Delegates. Occasionally, by reason of this emergency, it becomes necessary to assume responsibility for decision before the House can meet. Your officers, while not wishing this responsibility, accepts it in full and will appreciate the criticism of the membership and delegates to the end that the work may go forward in a manner best calculated to promote that joint and invisible interest of the great group of our membership and the public.

More demands upon officers and committee members, as well as the membership as a whole, have been made during the past twelve months than during the Secretary's previous twelve years with the Society. It is a source of very real pleasure to your Secretary to report to this House of Delegates that regardless of the time set for committee meetings, and regardless of the distance involved and of the financial sacrifices which members had to make in order to attend meetings, there has been a hundred per cent response to every call from the central office. Literally hundreds of hours have been given by members without compensation that the interests of the membership of the whole might go forward. To this very great sacrifice can be attributed the success of your Society's program. Your Secretary is most deeply appreciative of the opportunity to serve in an organization where the membership responds so universally and generously to his every call.

J. G. Crownhart,
Secretary-Managing Editor.

REPORT OF TREASURER

To the 1934 House of Delegates:

Pursuant to custom the report of the Treasurer as of September first will be presented at the first session of the House. The report will be accompanied by the formal audits of the accounts of the Treasurer, Secretary and Managing Editor for inspection by the proper reference committee of the House.

ROCK SLEYSTER,
Treasurer.

COMMITTEE ON PUBLIC POLICY

To the 1934 House of Delegates:

During the last twelve months the Wisconsin Legislature met in special session to consider the subject of liquor and alcohol licensing and taxation. Your Committee was apprehensive that the Legislature might reestablish a permit and permit fee basis for physicians who used alcohol either for the purpose of sterilizing instruments or in some form as a stimulant in emergency cases. As a matter of fact, all of the many bills that were introduced into the Legislature failed to carry an exemption from a permit and tax system. The Committee finally resorted to a personal letter addressed to each member of the Legislature and as result an exemption was granted to physicians. Physicians were not exempted, however, from the ordinary State tax upon alcohol in any form, such as paid by any consumer, with the exception of hospitals. While Senator Mehigan of Milwaukee proposed such a measure, it did not receive favorable consideration in the Senate. The Committee is of the opinion, however, that the tax involved is exceedingly small for the average physician and while exemption will be asked in a subsequent session as a matter of principle, in practice the amount is insignificant compared to the victory secured by reason of an exemption from the permit system.

In January next the Wisconsin Legislature again convenes for its biennial session. With this in mind your Committee held a long meeting recently to discuss legislative subjects. It will be recalled that at the last session of the Legislature Senator Polakowski, of Milwaukee, introduced a bill calling for the establishment of a system of State medicine which was based on a combination of all the bad features of the French, German, and English methods. It is altogether probable that similarly ill-advised legislation will again be presented at the coming session. Unless the Committee receives instructions to the contrary from your House, it will adopt the ten points announced by the House of Delegates of the American Medical Association at the Cleveland session as its measuring stick in determining its position upon all legislation in this field.

Having in mind the unsettled conditions of the times, however, your Committee is of the opinion that there will be many measures introduced from various sources that will be of vital concern to the joint interest of the profession and public health. While we are fully conscious that there are many subjects upon which we might propose legislation that would be wholly in the public interest, we are also of the opinion that our program at this particular session should be as concise as possible. Your Committee has considered such subjects as: The illegal use of the title "Doctor"; certain abuses under the Workmen's Compensation Act; Pre-payment plans for hospital insurance; a lien law for automobile accident cases; preferences in settling estates; State aid for local hospitals; the composition of the State Board of Medical Examiners; tax on alcohol; and several like subjects. It is of the opinion that most of these subjects may best be handled outside of recourse to legislative halls. Its program for suggested legislation in the name of the Society is therefore confined to the following proposals:

1. Re-establishment of the full appropriation of $5,000 a year for the investigator under the State Board of Health, whose work it is to weed out the major forms of quackery in Wisconsin. His present economy budget appropriation of $2,000 annually has been found insufficient for efficient work, and assuming the approval of the House of Delegates, your Committee shall recommend an increase to $4,000 a year.

2. Your Committee called attention to the fact that under the present system for the employment of county nurses, the work of such nurses is wholly under the guidance of local non-medical committees. Your Committee is of the conviction that such a system, by experience, has been shown to be fallacious and not in the interest of the public health or of promoting that relationship so essential to efficient effort on the part of the county nurse. Assuming approval by the House of Delegates, your Committee recommends that the work of the County nurse be supervised by a committee of physicians selected from a list submitted by the County Medical Society for such purpose.

3. Cognizant of the fact that the Legislature has twice refused to enact a measure sponsored by this Society calling for the establishment of a Medical Grievance Committee, your Committee is of the opinion that this measure nevertheless should be re-introduced. Such a Committee would consist of the Attorney General or his deputy, the Secretary of the State Board of Health, and the Secretary of the State Board of Medical Examiners. Its purpose would be to counsel and warn members of the profession who adopted courses of action that failed to comply with the high ideals of medicine and served as a positive menace to the public. We are firmly of the opinion that some such official body should exist to the end that dangerous methods might be corrected before tragedy ensues, and assuming approval of the House, we shall re-introduce this measure.

4. It has been brought to the attention of your Committee that when one is arraigned on the charge of practicing a healing art without a proper license, proof of the fact that the individual is not licensed rests with the State. This involves bringing to each individual trial the Secretary of the proper examining board with his records. This seems to your Committee to be a wholly unnecessary expense to the State and involves much travel on the part of parties who are already giving liberally of their time in the State service. Assuming approval of the House, it is our intent to introduce a measure that will place upon the individual the burden of proof to show that he holds a license. This he may do readily and easily if he does in fact hold a license, so that no real burden is placed upon the individual and the cause of justice will be expedited thereby.

5. It has been brought to the attention of your Committee that under present statutes the salary of deputy State health officers is limited by law to $3,000. Recognizing the high service of men already employed, your Committee is distinctly of the opinion that such a limitation, having in mind the extensive travel which is required and for which the State has distinct limits of reimbursement, is not a limit that will be conducive to securing proper public service in the future. Assuming permission of this House, your Committee actively will promote any measure introduced by the State Board of Health looking towards a correction of this situation.

Your Committee recognizes that this report is of necessity a brief one but assures members of the House that the Secretary will answer in detail any questions that they may raise as to other subjects. This appears to your Committee as being a more feasible manner of handling the large field of studies than to discuss in any detail each such study.

Ralph M. Carter,
Chairman.
Reginald H. Jackson,
Stephen E. Gavin,
J. G. Crownhart,
Secretary.

THE EDITORIAL BOARD

To the 1934 House of Delegates:

The Editorial Board has made some changes in the appearance of the Journal which we think have added to its value. No adverse comments have come in but many favorable ones. It is not necessary to detail these changes, they are evident and he who runs may read. The amount of space devoted to scientific material is being increased yearly as the finances will permit. In order to do this some curtailment of other sections has been necessary. The scientific material will in the future be handled more promptly, articles submitted for publication being printed as rapidly as possible after acceptance. There is less unpublished material on hand now than for some months past. This will add to the value of the Journal and be much more acceptable to contributors.

Papers which were in the hands of the Medical Editor of the Journal have been prepared and scheduled for publication.

The business manager has obtained more and better advertising in a difficult period, and is conforming to the best standards of the profession, accepting only material passed by the A. M. A. Council.

There has been an attempt to enlarge the number of contributors to the editorial columns which has met with some success and which has added to the value of the editorials. It is the desire of the Board to continue this policy. The editorials are initialed but not signed. The Board feels this is wise.

It is the earnest endeavor of the Board to make the Journal better and make it rank with any state Journal in the country.

H. P. Greeley,
Chairman.
George H. Ewell,
Oscar Lotz.

COMMITTEE ON HEALTH AND PUBLIC INSTRUCTION

To the 1934 House of Delegates:

The work of health education on the budget that is available to the Committee is divided into three fields—Radio, Press, and Hygeia. Your Committee makes a brief report on its activities in each of these fields herewith.

Radio

During a three year period your Society has broadcasted approximately 500 health talks. The broadcasts can be heard over three stations three times each week. Ever since January, 1933, the radio talks have been presented regularly on Tuesday, Wednesday and Thursday mornings. They are heard over WHA, the Wisconsin State Broadcasting Station, and rebroadcast by Station WLBL of Stevens Point. That station too is state-owned and operated by the Department of Agriculture and Markets. By special authority of the Regents of the University of Wisconsin, WIBU of Poynette has a hook-up with the state stations. Your Society attempts to present authentic health talks of a timely character. The health talks are carefully prepared and devoted to the promulgation of sound information in the field of health and hygiene. Upon request copies of the prepared health talks are sent to County Medical Societies for use over their local radio stations.

Press Service

The Press Service of your Society has continued during the past year with a budget only to cover the cost of mailing. Releases are issued weekly to 256 newspapers in Wisconsin—216 weekly papers and 40 daily papers. Since August, 1933, the stories

have been prepared in the office of your Society, and every effort is made to give the readers interesting and valuable information in the field of health preservation. This effort has done more perhaps than the radio education work in bringing to thousands of people information in the field of truths which scientists have been ferreting out since the days of Hippocrates.

Hygeia

"As one interested in promoting the well-being of the people of this state, the members of this Society have entered in your name a year's subscription to 'Hygeia', the magazine of health published by the American Medical Association.

"That disease can be prevented through the application of scientific measures is strikingly shown in our own state when we recall that 429 lost their lives from diphtheria in 1910 and but 54 in 1931. Had the 1910 rate continued 492 lives would have been lost each year and 3,129 would have been seriously ill from this one disease. The State Board of Health says that the annual saving resulting from the fight of the medical profession against diphtheria in Wisconsin is $2,616,450.

"Accept our cordial Christmas greetings and the sincere wish that Hygeia may bring health and happiness to you and yours throughout the coming year."

At Christmas time the above letter went forward to the 181 recipients of the health magazine sent to them for the year of 1934. For several years your Society has addressed a personal letter with each subscription to Hygeia. Carrying on a long established policy, the publication is sent to those having to do with questions involving health and the medical profession. This service is worthy of continuation.

The Auxiliary reports a splendid accomplishment in obtaining 300 yearly subscriptions during the period of one year. Following the resolution passed by the Council at its January meeting, the Auxiliary renewed its efforts in promoting the authentic health publication which distinguishes between the true and false in medicine. Wisconsin Auxiliary has attained second place among the 48 state auxiliaries in promoting the distribution of Hygeia.

R. W. Blumenthal,
Chairman.
H. M. Stang,
W. G. Sexton.

COMMITTEE ON MEDICAL DEFENSE

To the 1934 House of Delegates:

The report of your Committee's work covers the two year period of July, 1932 to July, 1934, no report having been submitted to your body last year.

A noteworthy change in the clerical management of our department is the new official form that has been devised and which gives to our documents not only a more business-like air and legal appearance, but safeguards both the donor and recipient of benefits (in this case, the Society and the litigant respectively) in that all necessary minutiae of a complicated case and essentially vital transaction are put to paper.

During the 1932–33 period but five cases came to our attention; during 1933–34 there were thirteen. It may interest you to note these very briefly:

(1) Impacted fracture of the neck of left femur. Upon motion a non-suit was granted.
(2) Burns received through electrical application. Action pending in Circuit Court.
(3) Transmission of lues through donor in a blood transfusion. Case in hands of another insurance carrier.
(4) Fracture deformity. In another carrier's hands.
(5) Fracture deformity. Case was settled after jury disagreement; action dismissed.
(6) Packing left in vagina after confinement. In another carrier's hands but assistance given in preparation of case.
(7) Fracture deformity. Two actions were started—one by minor claimant and another by his father. A small settlement was made whereupon both actions were dismissed.
(8) Broken needle in pleural cavity following exploratory puncture. Suit threatened but no action taken.
(9) Suit by physician for his fee. This is not in our jurisdiction because no malpractice is claimed.
(10) A large verdict was rendered in a suit for an unfortunate result of a mastoid operation. Physician had no State Society insurance and case was handled by another carrier. Our aid was not solicited but the case is noted here merely because of certain correspondence that ensued after the trial.
(11) Advice asked by physician, but no service rendered.
(12) Claim for damages for treatment of a pelvic disorder. Case went to trial, but was settled out of court on a favorable basis.
(13) Burn of face following use of an escharotic for cancer of the nose. Case resting for the present.
(14) Fracture of vertebrae. Case is apparently in hands of another carrier.
(15) Miscarriage claimed to have been caused by physician's treatment. No action has been commenced.

Thus, gentlemen, you see how varied the claims, and—perhaps I may say—how ingenious claimants are in finding bases for establishing claims of alleged malpractice. This entire group has the distinction of having very few that are the outgrowth of demands for payment of fees—that is—counterclaims solely, as has so often been recorded. That

the litigant is entitled to his day in court, we are willing to admit; and we cannot be so bigoted as to be unwilling to concede the justice of demands for redress—in so far as money can offer solace—for unskillful or careless work, or inexcusable negligence, where such is proven. It goes without saying that undoubtedly there are meritorious cases; but it is our obligation to give these the same protection as is accorded those that are obviously without merit. Our record of support given the physicians of the State who have availed themselves of our service, has been of the highest order, and we point with pride at the results of this 25 year period of Medical Defense.

None regret, more than do we, your Committee, our being compelled to refuse protection to those of our Society who are confronted with the necessity of defending themselves in an expensive litigation, because they were unwilling to pay the paltry sum asked for. Two such instances have come to us quite recently: in the defense of both the entire organization would have concurred, but we were obviously powerless to render assistance.

In conclusion, let me quote a paragraph taken from my report to this body in 1932:

"It is of course regrettable that so large a number of the Society membership remains outside the fold of Society protection. Our treasury is not overflowing, but we are self-supporting, and do not ask for larger support for income's sake. In an altruistic sense only—knowing that we can be a real force behind litigation—are we appealing for more members to avail themselves of the benefits the State Society's Medical Defense offers."

ARTHUR J. PATEK,
Chairman.
ARTHUR G. SULLIVAN,
E. G. OVITZ.

COMMITTEE ON NECROLOGY

To the 1934 House of Delegates:

The Council, as the Committee on Necrology, has the sad duty of reporting the deaths of the following physicians since the last Annual Meeting (members of the Society are indicated by bold face type):

Dr. E. G. Aston—Port Washington
Dr. E. G. Appleton—Beaver Dam
Dr. Isaac G. Babcock—Cumberland
Dr. Edwin F. Bickel—Oshkosh
Dr. F. J. Broghammer—Superior
Dr. Damon A. Brown—Madison
Dr. Burton N. Clark, Sr.—Oshkosh
Dr. Fred C. Dana—Fond du Lac
Dr. Clark O. Decker—Crandon
Dr. J. L. De Cock—Green Bay
Dr. Richard S. Dewey—Pasadena, Cal.
Dr. G. H. Dickinson—Milwaukee
Dr. John M. Dodson—Chicago
Dr. R. E. Doern—Stockbridge
Dr. J. C. Doolittle—Lancaster
Dr. Henry Driessel—Kewaskum
Dr. A. Edwards—Reedsburg
Dr. Eugene P. Ellenson—Chippewa Falls
Dr. John T. Elliott—Rhinelander
Dr. A. M. Farrell—Two Rivers
Dr. George W. Harrison—Ashland
Dr. T. R. Hawkins—Cameron
Dr. Louis R. Head—Madison
Dr. Herbert H. Hurd—Chippewa Falls
Dr. H. F. Jermain—Milwaukee
Dr. Winifred M. Johnston—Johnson Creek
Dr. Richard W. Jones—Wausau
Dr. A. M. Kersten—California
Dr. Gustav A. Kletzsch—Milwaukee
Dr. William E. Kramer—Milwaukee
Dr. Harry C. McCarthy—Richland Center
Dr. Bernard F. McGrath—New York
Dr. Harry B. Moe—Deerfield
Dr. James C. Reynolds—Lake Geneva
Dr. S. F. Rudolf—Green Bay
Dr. Royal C. Rodecker—Mercer
Dr. E. A. Ruka—Muscoda
Dr. Joseph Sanders—Portage
Dr. Herman Schaper—Alberta, Canada
Dr. Henry A. Schmidt—Milwaukee
Dr. Emil S. Schoene—Milwaukee
Dr. John T. Scollard—Milwaukee
Dr. F. E. Shaykett—Brandon
Dr. Edward L. Shepard—Brandon
Dr. E. J. Stone—Chicago
Dr. Frank C. Studley—Milwaukee
Dr. F. C. Suiter—La Crosse
Dr. Anthony J. Taugher—Milwaukee
Dr. George E. Towle—Wisconsin Rapids
Dr. O. P. Voight—Gillett
Dr. F. A. Walters—Stevens Point
Dr. F. E. Webster—Amherst
Dr. F. R. Wright—West Allis
Dr. J. P. Zohlen—Sheboygan

THE COUNCIL,
J. G. CROWNHART,
Secretary.

THE CANCER COMMITTEE

To the 1934 House of Delegates:

Your Cancer Committee has been active during the past year laying plans for the united participation of every County Medical Society in a program which includes a postgraduate medical course dealing with recent advances in the early diagnosis and adequate treatment of cancer, and lay education on the importance of early diagnosis in the control and cure of cancer.

The last legislature enacted a law making cancer a reportable disease. This was done upon the recommendation of your Committee to the State Board of Health. The Committee was requested to formulate the report card and after consulting various people throughout the country, whose opinion could be considered worthy, the card was formulated and accepted by the State Board of

Health. At first the reaction of some of the profession has been that too much information is requested. This they feel will interfere with the response of the profession in reporting their cases. The Committee feels that the best advice available has been obtained and it is agreed by all that to gather less information would annul much of the effectiveness of the purpose.

We have also made arrangements to place in the hands of each member of the Society a reprint of the results of the California Society's investigation into what can be considered at the time approved methods for the treatment of cancer in various organs and tissues.

Some of our plans are still not in operation because of lack of money. The Committee is strongly of the opinion that the establishment of the tumor registry recommended two years ago and, through it, the securing of the active interest of the hospitals and hospital staffs throughout the State, is one of the most effective means to focus the attention of all physicians not on the hopelessness of cancer but upon the brighter possibilities of control and cure. The Committee hopes that the Society may be able to secure funds for the establishment of a tumor registry and to carry on an active campaign among the hospitals for their participation in this program.

It is always easy to formulate plans. In organizations such as ours it is easy to formulate a Committee report and then allow it to become ineffective because of insufficient financing. If the Society believes, as does your Committee, that the early recognition and treatment of cancer for its control and prevention is rapidly creating a problem of public health importance, it seems urgently necessary that the machinery be set up now, properly financed, to actually bring about the effective operation of that cooperation between the profession and the public which we know will result in the cure of many early cancer cases and control in the more advanced cases. It will be realized after a moment's reflection that all of the members of the Cancer Committee are men busy with work which requires their full time. The time they put on this committee work is a labor of love but can not be more than the laying of plans and advancing of ideas. To materialize such plans and ideas it is necessary to organize them into a method of operation which can be administered. This requires administrative machinery, and that in turn necessitates proper financing. We must not allow a well organized paper plan and some oratory on the subject to lull us into a happy state of consciousness, in which state we dream of the great and effective cancer preventive program which we are effecting. Individual members respond unselfishly in rendering spasmodic services to any request your Committee makes; but you must know that such services are, because of the very nature of things, spasmodic. Spasmodic activity of volunteer groups without a permanently organized administrative force to supply the unremitting effort necessary to keep up a continuing campaign never exerts a significant influence of a material nature.

W. D. Stovall,
Chairman, for the Committee.

COMMITTEE ON MEDICAL EDUCATION AND HOSPITALS

To the 1934 House of Delegates:

Last year there were 280 Wisconsin applicants for admission to medical schools. There were 115 graduates from schools in 17 different states licensed to practice in Wisconsin through examination and 69 admitted to practice through reciprocity, a total of 184. Our two Wisconsin medical schools graduated 110 students. Of the graduates of these two schools, 104 applied for license to practice in 17 different states.

The present ratio of physicians to population in this state is about 1:1000. On the basis of an average of 30 years in active practice it would require about 100 graduates a year to maintain this ratio with a stationary population. Many of the graduates of our two schools go to other states to practice. Graduates of schools in other states, however, as indicated by the figures given above, come into this state to practice in relatively much larger numbers. The conditions of practice which have hitherto existed in Wisconsin are evidently attractive to many seeking a place to locate and to stimulate large numbers of our own youth to desire a medical career. The changed conditions produced by the depression have thus far not materially affected this situation. The admitting officers of our two medical schools are called upon to select from a multitude of candidates those who give the greatest promise of being real additions to the profession. The State Board of Medical Examiners is called upon to protect the public interests through rejection of ill-prepared candidates for licensure.

The problem of recruiting of the profession through selection and adequate training of the fittest is one of the most important which confronts the profession. Closely associated with this problem are those of standards of specialization and graduate and post-graduate study. It is more important for the profession to devote its efforts to maintaining high standards of medical practice and to educating people to the need of adequate support of medical practice in order that these standards be maintained than it is to attempt anything that might appear as a monopolistic limitation of numbers and which might defeat its own ends through the indirect promotion of quackery.

In the hospital field the most serious problems today are relatively low occupancy of beds for private patients, poor collections, and indebtedness largely due to building preceding the depression. These topics have been discussed in an economic survey of Wisconsin hospitals recently published in the Journal. Most of our Wisconsin hospitals de-

pend chiefly on the fees received from private patients for support. Since they not only lack the large endowments which characterize so many of the hospitals in the eastern states but to a considerable extent are burdened with mortgages, reduction of income from private patients makes more essential than hitherto that they be paid by the public for the charity work they are called upon to do. Community hospitals are among the most beneficent of institutions. The public needs constant education concerning the essential importance of giving them adequate support.

Government officials should be made to realize that an essential part of local relief work is local hospital care and that such work duly authorized should be promptly paid for. Undue delay in payment in many instances is placing hospital service and credit in jeopardy.

C. R. Bardeen,
Chairman.
F. D. Murphy,
J. W. Lambert.

VETERANS' RELATIONS COMMITTEE

To the 1934 House of Delegates:

This Committee on Veterans' Relations met in Milwaukee at the call of President Seeger. Otho Fiedler, E. J. Barrett, C. A. Dawson, members of the committee, President Seeger, and Secretary George Crownhart were present. The duties of the committee were outlined by the president as follows: to acquaint the medical society with the rights of veterans under Federal laws, to outline to the medical profession the course of procedure which should be employed to assist the veterans in obtaining those rights and benefits under the laws, and to work out some method whereby indigent veterans could be cared for in emergency at their home stations with benefit both to the veterans and local hospitals and medical attendants.

Two subsequent meetings of the committee were held at Madison which were attended by all of the members of the committee and our secretary. A later conference was held with the Adjutant General who cooperated finely with the committee and made possible the results which will be of far reaching benefits to not only the veterans but physicians and hospitals as well.

Letters have been sent to every member of the society requesting their cooperation with the veterans and service officers of veterans organizations in their efforts to service-connect those cases of disability which should by right be so connected. This letter also requested physicians to exercise great care in making out death certificates of veterans, so that the rights of the widow would not be prejudiced because of the wording.

At a later date a circular letter was sent to all physicians, containing instructions necessary to the obtaining of pay for professional services and hospitalization of emergency cases of veterans who are financially unable to pay for these services.

Your committee feels that the hearty cooperation of medical men in these matters will earn and gain the heartfelt appreciation of veteran organizations throughout the state.

C. A. Dawson,
Chairman.
Otho Fiedler,
E. J. Barrett.

COMMITTEE ON SCIENTIFIC WORK

To the 1934 House of Delegates:

The Committee on Scientific Work of the State Medical Society has largely concentrated its efforts toward the building of a successful program for the annual meeting. A questionnaire was sent to twenty-five physicians embracing all the various branches of medicine. It was the concensus of opinion of those in the smaller as well as those in the large communities that the annual program should be presented by those who had achieved an acknowledged success in their subject. With a year's start it was possible to carry out this request and to obtain an unusual number of men of national reputation. At the same time it was possible to place 94 Wisconsin members on the program. A new idea of having a formal ten minute discussion of the papers in order to double the value of the program has been tried.

The general plan that has been used is to arrange an entirely different type of program for each day so as to offer an appeal to every member of the society. Dry clinics have been inaugurated with an idea of adding more color and interest. Sections on urology, obstetrics, radiology, nervous and mental diseases have been added to the usual ones on medicine and surgery. This plan has been tried with the hope of interesting those specializing in these fields to attend the meeting by concentrating their subjects rather than scattering one or two papers throughout the meeting. One morning has been devoted to dry clinics dealing especially with the problems of the general practitioner. Symposiums have been arranged on subjects of general interest. The programs of the general assemblies have been arranged to provide subjects of common interest no matter in what field or specialty the listener might be engaged. It has been our thought that the majority of members of the society come to this meeting with an idea of taking home something of practical clinical value. It is felt that those members who are interested in highly scientific papers should depend upon societies especially devoted to these fields for further mental stimulation.

The work begun last year on the speaker's bureau has continued and its scope broadened. A supplementary list of speakers has been added to the original list of seventy, making approximately one hundred speakers available for the county medical

society meetings throughout the state. The committee is gratified to know that its work in this field has met with some success and that more and more of the county society secretaries are availing themselves of the opportunity of using members of their own society on the programs. It is planned to revise the list of speakers and subjects and further develop this work during the coming year.

ARNOLD S. JACKSON,
Chairman.
WENZEL WOCHOS,
T. L. SQUIER.

Constitution and By-Laws of the State Medical Society of Wisconsin

(Continued from July)

CHAPTER VII

COMMITTEES

SEC. 2. The Committee on Scientific Work shall consist of three members, and the Medical Editor and the Secretary ex-officio, and shall study and recommend the character and scope of the scientific proceedings of the Society and its constituent societies. Thirty days previous to each Annual Session it shall prepare and issue a program announcing the order in which papers and discussions shall be presented.

SEC. 3. The Committee on Public Policy shall consist of three members, and the President, the President-Elect and Secretary. The Committee shall present to those public officers charged with the duty of enacting or enforcing measures in the interest of public health, all available information that may in any way assist such officers honorably to discharge their responsibilities.

SEC. 4. The Editorial Board shall consist of three members and shall be in charge of the affairs of the Journal. Its Chairman shall render an annual report to the House of Delegates and to the Council at its January meeting. Important questions of editorial policy shall be submitted to the Council.

SEC. 5. The Committee on Medical Defense shall prepare plans and establish rules for the defense of members of this Society against whom suits for alleged malpractice have been brought. It may assist in the defense of any member sued for alleged malpractice if the member was in good standing and had complied with the rules of the committee when the service on account of which suit was brought was rendered.

SEC. 6. The Committee on Medical Education and Hospitals shall serve in this State for the Council on Medical Education and Hospitals of the American Medical Association, and shall have referred to it all questions pertaining to hospitals and medical education.

SEC. 7. The Committee on Medical Economics shall investigate matters affecting the economic status of physicians as a profession, and shall report annually to the House of Delegates such recommendations as may, in its judgment, seem proper.

SEC. 8. The Committee on Necrology shall consist of all members of the Council and the Editor of the Journal and shall prepare for each session suitable notice of deceased members.

SEC. 9. The Committee on Health and Public Instruction shall consist of three members. It shall carry on such activities in the field of health and the dissemination of information in relation thereto as the House of Delegates and Council may direct.

SEC. 10. Reports of the standing and special committees shall be published in the official Journal preceding the date of the Annual Session of this Society, and these reports must be in the hands of the Secretary sixty days in advance of the Annual Session.

CHAPTER VIII

DUES AND ASSESSMENTS

SECTION 1. The annual dues and assessments shall be determined by the House of Delegates, and shall be levied per capita on the members of the Society. They shall be payable on or before January 1st, of the year for which they are levied. The Secretary of each component Society shall cause to be collected and shall forward to the offices of the Society the dues and assessments for its members, together with such data as shall be required for a record of its officers and membership. Any member whose name has not been reported for enrollment and whose dues for the current year have not been remitted to the Secretary of this Society on or before March 31st shall stand suspended until his name is properly reported and his dues for the current year properly remitted.

SEC. 2. The record of payment of dues and assessments on file in the offices of the Society shall be final as to the fact of payment by a member and as to his right to participate in the business and proceedings of the Society and of the House of Delegates.

SEC. 3. For the purpose of medical defense a member shall be deemed in arrears from and during the period extending from March 31st of the current year until his dues and assessments shall have been received at the offices of the Society, having been remitted by the Secretary of the component society of which he is a member.

SEC. 4. Any county society which fails to make the reports required, at least thirty days before the Annual Session of the State Society, shall be held suspended, and none of its members or delegates shall be permitted to participate in any of the proceedings of the Society or of the House of Delegates.

CHAPTER IX

The ethical principles governing the members of the American Medical Association shall govern members of this Society. No member shall profess adherence or give support to any exclusive dogma, sect or school.

CHAPTER X

The deliberations of this Society, except as may be provided otherwise in the Constitution and By-Laws, shall be conducted in accordance with parliamentary usage as defined in Robert's Rules of Order.

CHAPTER XI

SECTION 1. All county societies now in affiliation with the State Society or those that may hereafter

ELI LILLY AND COMPANY

FOUNDED 1876

Makers of Medicinal Products

EPHEDRINE INHALANTS

Lilly

Ephedrine shrinks the nasal mucous membrane and stimulates ciliary action. It reduces congestion, improves nasal respiration, and helps to maintain the sinus openings and promote drainage. The action of ephedrine is prompt and well sustained. Daily use over a prolonged period does not usually alter the rapidity or duration of action.

Inhalant Ephedrine Compound, Lilly, contains ephedrine 1 percent, with menthol, camphor, and oil of thyme, in a neutral paraffin oil.

Inhalant Ephedrine (Plain), Lilly, contains ephedrine (in the form of ephedrine cinnamic aldehyde and ephedrine benzaldehyde) 1 percent, in an aromatized paraffin oil.

Prompt Attention Given to Professional Inquiries

PRINCIPAL OFFICES AND LABORATORIES, INDIANAPOLIS, INDIANA, U. S. A.

be organized in this State, which have adopted principles of organization not in conflict with this Constitution and By-Laws shall, upon application to the Council, receive charters from this Society, provided that their Constitutions and By-Laws shall have been submitted to the Council and received its approval.

SEC. 2. Only one component medical society shall be chartered in each county.

SEC. 3. Each county society shall judge of the qualifications of its members, subject to review and final decisions by the Council of the State Society. Every reputable and legally qualified physician who does not practice, nor profess to practice sectarian medicine or whose practice is not shown to be in conflict with the principles of ethics of the American Medical Association, and who is a bona fide resident of the same county, shall be eligible for election to membership.

A member of a component society whose license has been revoked shall be dropped from membership automatically as of the date of revocation. The Council of the State Society shall have final authority to expel a member should a component county society fail to do so after being so requested by the Council.

A physician living near a county line may hold his membership in that county most convenient for him to attend, on permission of the component society in whose jurisdiction he resides.

SEC. 4. Any physician who may feel aggrieved by the action of the society of his county in suspending or expelling him, shall have the right to appeal to the Council, whose decision shall be final. A county society shall at all times be permitted to appeal or refer questions involving membership to the Council of the State Society for final determination.

SEC. 5. In hearing appeals the Council may admit oral or written evidence as in its judgment will most fairly present the facts, but in the case of every appeal both as a board and as individuals, the Councilors shall, preceding all such hearings, make efforts at conciliation and compromise.

SEC. 6. When a member in good standing in a component county society moves to another county in this State, he shall be given a written certificate of these facts by the Secretary of his society, without cost, for transmission to the Secretary of the society in the county to which he moves. Pending his acceptance or rejection by the society in the county to which he removes, such member shall be considered to be in good standing in the county society from which he was certified and in the State Society to the end of the period (respectively) for which his dues have been paid.

SEC. 7. Each county society shall have general direction of the affairs of the profession in the county, and its influence shall be constantly exerted for bettering the scientific, moral and material condition of every physician in the county. Systematic efforts shall be made by each member, and by the society as a whole, to increase the membership until it includes every eligible physician in the county.

SEC. 8. At some meeting in advance of the Annual Session of this Society, each component county society shall elect one or more delegates and an equal number of individual alternates therefor to represent it in the House of Delegates of this Society, in accordance with Chapter III, Section 2, of these By-Laws. The Secretary of each county society shall send a list of such delegates and alternates to the Secretary of this Society at least thirty days before the Annual Session. Representation in the House of Delegates shall be contingent on compliance with the foregoing provisions.

SEC. 9. The Secretary of each county society shall keep a roster of its members, and, if practicable, a list of non-affiliated physicians, in which shall be shown the full name, address, college and date of graduation, date of license to practice in this State, and such other information as may be deemed necessary by Council. He shall send a copy of the program of each county meeting to his district Councilor and to the Secretary.

SEC. 10. Each county society shall appoint or elect one or more of its members as a member of an auxiliary Committee on Public Policy, and the county society Secretary shall send his name and address at once to the Secretary of this Society. The Committee on Public Policy of this Society shall formulate the duties of this auxiliary committee and supply each member with a copy. The auxiliary committee-men shall be accountable to their county societies and to the Council for prompt response to and continued cooperation with the Committee on Public Policy of this Society.

CHAPTER XII

SECTION 1. These By-Laws may be amended at any Annual Session by a majority vote of the delegates present at that session, if the proposed amendment has been properly submitted to the House of Delegates and has laid on the table for one day.

SEC. 2. Upon the adoption of this Constitution and these By-Laws, all previous Constitutions and By-Laws are thereby repealed.

Principles of Medical Ethics of the American Medical Association

CHAPTER I

IN GENERAL

THE PHYSICIAN'S RESPONSIBILITY

SECTION 1.—A profession has for its prime object the service it can render to humanity; reward or financial gain should be a subordinate consideration. The practice of medicine is a profession. In choosing this profession an individual assumes an obligation to conduct himself in accord with its ideals.

GROUPS AND CLINICS

SEC. 2.—The ethical principles actuating and governing a group or clinic are exactly the same as those applicable to the individual. As a group or clinic is composed of individual doctors each of whom whether employer, employee or partner, is subject to the principles of ethics herein elaborated, the uniting into a business or professional organization does not relieve them either individually or as a

For Obstinate Cases of Constipation Prescribe

SQUIBB MINERAL OIL

AGAR AND PHENOLPHTHALEIN

THIS Squibb Product is valuable when increased peristalic movement is required. Its action is positive, yet safe, and you know your patient will receive the *correct* amount of Phenolphthalein in each dose (Squibb Mineral Oil, Agar and Phenolphthalein contains 1½ grains of Phenolphthalein per ounce — approximating the U. S. P. dose).

Following the use of this product, Squibb Liquid Petrolatum (plain) should be prescribed to establish regularity. This change can be made gradually by suggesting a mixture of the two products with diminishing amounts of the emulsion and increasing quantities of the plain oil. Thus the aversion which some patients have toward plain oil is overcome and they are brought about to the routine use of a thoroughly safe and effective mineral oil which softens the intestinal contents and results in normal, healthy evacuation.

SQUIBB LIQUID PETROLATUM PRODUCTS

Squibb Liquid Petrolatum—A heavy Californian mineral oil with natural high viscosity. Water-white, odorless, tasteless. It is not absorbed and therefore does not increase weight.

Squibb Mineral Oil with Agar—A palatable emulsion for those having an aversion to the plain oil.

Squibb Mineral Oil, Agar and Phenolphthalein—A pleasant-tasting product fortified to give quicker action.

E·R·SQUIBB & SONS, NEW YORK
MANUFACTURING CHEMISTS TO THE MEDICAL PROFESSION SINCE 1858.

group from the obligation they assume when entering the profession.

CHAPTER II

THE DUTIES OF PHYSICIANS TO THEIR PATIENTS

PATIENCE, DELICACY AND SECRECY

SECTION 1.—Patience and delicacy should characterize all the acts of a physician. The confidences concerning individual or domestic life entrusted by a patient to a physician and the defects of disposition or flaws of character observed in patients during medical attendance should be held as a trust and should never be revealed except when imperatively required by the laws of the state. There are occasions, however, when a physician must determine whether or not his duty to society requires him to take definite action to protect a healthy individual from becoming infected, because the physician has knowledge, obtained through the confidences entrusted to him as a physician, of a communicable disease to which the healthy individual is about to be exposed. In such a case, the physician should act as he would desire another to act toward one of his own family under like circumstances. Before he determines his course, the physician should know the civil law of his commonwealth concerning privileged communications.

PROGNOSIS

SEC. 2.—A physician should give timely notice of dangerous manifestations of the disease to the friends of the patient. He should neither exaggerate nor minimize the gravity of the patient's condition. He should assure himself that the patient or his friends have such knowledge of the patient's condition as will serve the best interests of the patient and the family.

PATIENTS MUST NOT BE NEGLECTED

SEC. 3.—A physician is free to choose whom he will serve. He should, however, always respond to any request for his assistance in an emergency or whenever temperate public opinion expects the service. Once having undertaken a case, a physician should not abandon or neglect the patient because the disease is deemed incurable; nor should he withdraw from the case for any reason until a sufficient notice of a desire to be released has been given the patient or his friends to make it possible for them to secure another medical attendant.

CHAPTER III

THE DUTIES OF PHYSICIANS TO EACH OTHER AND TO THE PROFESSION AT LARGE

ARTICLE I.—DUTIES TO THE PROFESSION

UPHOLD HONOR OF PROFESSION

SECTION 1.—The obligation assumed on entering the profession requires the physician to comport himself as a gentleman and demands that he use every honorable means to uphold the dignity and honor of his vocation, to exalt its standards and to extend its sphere of usefulness. A physician should not base his practice on an exclusive dogma or sectarian system, for "sects are implacable despots; to accept their thraldom is to take away all liberty from one's action and thought." (Nicon, father of Galen.)

MEDICAL SOCIETIES

SEC. 2.—In order that the dignity and honor of the medical profession may be upheld, its standards exalted, its sphere of usefulness extended, and the advancement of medical science promoted, a physician should associate himself with medical societies and contribute his time, energy and means in order that these societies may represent the ideals of the profession.

DEPORTMENT

SEC. 3.—A physician should be "an upright man, instructed in the art of healing." Consequently, he must keep himself pure in character and conform to a high standard of morals, and must be diligent and conscientious in his studies. "He should also be modest, sober, patient, prompt to do his whole duty without anxiety; pious without going so far as superstition, conducting himself with propriety in his profession and in all the actions of his life." (Hippocrates.)

ADVERTISING

SEC. 4.—Solicitation of patients by physicians as individuals, or collectively in groups by whatsoever name these be called, or by institutions or organizations, whether by circulars or advertisements, or by personal communications, is unprofessional. This does not prohibit ethical institutions from a legitimate advertisement of location, physical surroundings and special class—if any—of patients accommodated. It is equally unprofessional to procure patients by indirection through solicitors or agents of any kind, or by indirect advertisement, or by furnishing or inspiring newspaper or magazine comments concerning cases in which the physician has been or is concerned. All other like self-laudations defy the traditions and lower the tone of any profession and so are intolerable. The most worthy and effective advertisement possible, even for a young physician, and especially with his brother physicians, is the establishment of a well-merited reputation for professional ability and fidelity. This cannot be forced, but must be the outcome of character and conduct. The publication or circulation of ordinary simple business cards, being a matter of personal taste or local custom, and sometimes of convenience, is not *per se* improper. As implied, it is unprofessional to disregard local customs and offend recognized ideals in publishing or circulating such cards.

It is unprofessional to promise radical cures; to boast of cures and secret methods of treatment or

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remedies; to exhibit certificates of skill or of success in the treatment of diseases; or to employ any methods to gain the attention of the public for the purpose of obtaining patients.

PATENTS AND PERQUISITES

SEC. 5.—It is unprofessional to receive remuneration from patents for surgical instruments or medicines; to accept rebates on prescription or surgical appliances, or perquisites from attendants who aid in the care of patients.

MEDICAL LAWS—SECRET REMEDIES

SEC. 6.—It is unprofessional for a physician to assist unqualified persons to evade legal restrictions governing the practice of medicine; it is equally unethical to prescribe or dispense secret medicines or other secret remedial agents, or manufacture or promote their use in any way.

SAFEGUARDING THE PROFESSION

SEC. 7.—Physicians should expose without fear or favor, before the proper medical or legal tribunals, corrupt or dishonest conduct of members of the profession. All questions affecting the professional reputation or standing of a member or members of the medical profession should be considered only before proper medical tribunals in executive sessions or by special or duly appointed committees on ethical relations. Every physician should aid in safeguarding the profession against the admission to its ranks of those who are unfit or unqualified because deficient either in moral character or education.

ARTICLE II.—PROFESSIONAL SERVICES OF PHYSICIANS TO EACH OTHER

PHYSICIANS DEPENDENT ON EACH OTHER

SECTION 1.—Experience teaches that it is unwise for a physician to treat members of his own family or himself. Consequently, a physician should always cheerfully and gratuitously respond with his professional services te the call of any physician practicing in his vicinity, or of the immediate family dependents of physicians.

COMPENSATION FOR EXPENSES

SEC. 2.—When a physician from a distance is called on to advise another physician or one of his family dependents, and the physician to whom the service is rendered is in easy financial circumstances, a compensation that will at least meet the traveling expenses of the visiting physician should be proffered. When such a service requires an absence from the accustomed field of professional work of the visitor that might reasonably be expected to entail a pecuniary loss, such loss should, in part at least, be provided for in the compensation offered.

ONE PHYSICIAN TO TAKE CHARGE

SEC. 3.—When a physician or a member of his dependent family is seriously ill, he or his family should select a physician from among his neighboring colleagues to take charge of the case. Other physicians may be associated in the care of the patient as consultants.

ARTICLE III.—DUTIES OF PHYSICIAN IN CONSULTATIONS

CONSULTATIONS SHOULD BE ENCOURAGED

SECTION 1.—In serious illness, especially in doubtful or difficult conditions, the physician should request consultations.

CONSULTATION FOR PATIENT'S BENEFIT

SEC. 2.—In every consultation, the benefit to be derived by the patient is of first importance. All the physicians interested in the case should be frank and candid with the patient and his family. There never is occasion for insincerity, rivalry or envy and these should never be permitted between consultants.

PUNCTUALITY

SEC. 3.—It is the duty of a physician, particularly in the instance of a consultation, to be punctual in attendance. When, however, the consultant or the physician in charge is unavoidably delayed, the one who first arrives should wait for the other for a reasonable time, after which the consultation should be considered postponed. When the consultant has come from a distance, or when for any reason it will be difficult to meet the physician in charge at another time, or if the case is urgent, or if it be the desire of the patient, he may examine the patient and mail his written opinion, or see that it is delivered under seal, to the physician in charge. Under these conditions, the consultant's conduct must be especially tactful; he must remember that he is framing an opinion without the aid of the physician who has observed the course of the disease.

PATIENT REFERRED TO SPECIALIST

SEC. 4.—When a patient is sent to one specially skilled in the care of the condition from which he is thought to be suffering, and for any reason it is impracticable for the physician in charge of the case to accompany the patient, the physician in charge should send to the consultant by mail, or in the care of the patient under seal, a history of the case, together with the physician's opinion and an outline of the treatment, or so much of this as may possibly be of service to the consultant; and as soon as possible after the case has been seen and studied, the consultant should address the physician in charge and advise him of the results of the consultant's investigation of the case. Both these opinions are confidential and must be so regarded by the consultant and by the physician in charge.

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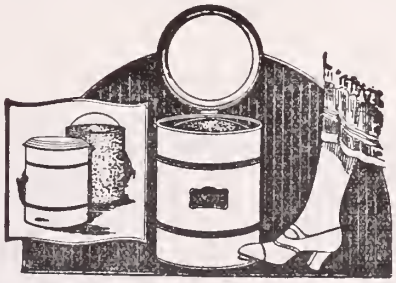

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DISCUSSIONS IN CONSULTATION

SEC. 5.—After the physicians called in consultation have completed their investigations of the case, they should meet by themselves to discuss conditions and determine the course to be followed in the treatment of the patient. No statement or discussion of the case should take place before the patient or friends, except in the presence of all the physicians attending or by their common consent; and no opinions or prognostications should be delivered as a result of the deliberations of the consultants, which have not been concurred in by the consultants at their conference.

ATTENDING PHYSICIAN RESPONSIBLE

SEC. 6.—The physician in attendance is in charge of the case and is responsible for the treatment of the patient. Consequently, he may prescribe for the patient at any time and is privileged to vary the mode of treatment outlined and agreed on at a consultation whenever, in his opinion, such a change is warranted. However, at the next consultation, he should state his reasons for departing from the course decided on at the previous conference. When an emergency occurs during the absence of the attending physician, a consultant may provide for the emergency and the subsequent care of the patient until the arrival of the physician in charge, but should do no more than this without the consent of the physician in charge.

CONFLICT OF OPINION

SEC. 7.—Should the attending physician and the consultant find it impossible to agree in their view of a case another consultant should be called to the conference or the first consultant should withdraw. However, since the consultant was employed by the patient in order that his opinion might be obtained, he should be permitted to state the result of his study of the case to the patient, or his next friend in the presence of the physician in charge.

CONSULTANT AND ATTENDANT

SEC. 8.—When a physician has attended a case as a consultant, he should not become the attendant of the patient during that illness except with the consent of the physician who was in charge at the time of the consultation.

ARTICLE IV.—DUTIES OF PHYSICIANS IN CASES OF INTERFERENCE

CRITICISM TO BE AVOIDED

SECTION 1.—The physician, in his intercourse with a patient under the care of another physician, should observe the strictest caution and reserve; should give no disingenuous hints relative to the nature and treatment of the patient's disorder; nor should the course of conduct of the physician, directly or indirectly, tend to diminish the trust reposed in the attending physician. In embarrassing situations, or wherever there may seem to be a possibility of misunderstanding with a colleague, the physician should always seek a personal interview with his fellow.

SOCIAL CALLS ON PATIENT OF ANOTHER PHYSICIAN

SEC. 2.—A physician should avoid making social calls on those who are under the professional care of other physicians without the knowledge and consent of the attendant. Should such a friendly visit be made, there should be no inquiry relative to the nature of the disease or comment upon the treatment of the case, but the conversation should be on subjects other than the physical condition of the patient.

SERVICES TO PATIENT OF ANOTHER PHYSICIAN

SEC. 3.—A physician should never take charge of or prescribe for a patient who is under the care of another physician, except in an emergency, until after the other physician has relinquished the case or has been properly dismissed.

CRITICISM TO BE AVOIDED

SEC. 4.—When a physician does succeed another physician in the charge of a case, he should not make comments on or insinuations regarding the practice of the one who preceded him. Such comments or insinuations tend to lower the esteem of the patient for the medical profession and so react against the critic.

EMERGENCY CASES

SEC. 5.—When a physician is called in an emergency and finds that he has been sent for because the family attendant is not at hand, or when a physician is asked to see another physician's patient because of an aggravation of the disease, he should provide only for the patient's immediate need and should withdraw from the case on the arrival of the family physician after he has reported the condition found and the treatment administered.

WHEN SEVERAL PHYSICIANS ARE SUMMONED

SEC. 6.—When several physicians have been summoned in a case of sudden illness or of accident the first to arrive should be considered the physician in charge. However, as soon as the exigencies of the case permit, or on the arrival of the acknowledged family attendant or the physician the patient desires to serve him, the first physician should withdraw in favor of the chosen attendant; should the patient or his family wish some one other than the physician known to be the family physician to take charge of the case the patient should advise the family physician of his desire. When, because of sudden illness or accident, a patient is taken to a

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hospital, the patient should be returned to the care of his known family physician as soon as the condition of the patient and the circumstances of the case warrant this transfer.

A COLLEAGUE'S PATIENT

SEC. 7.—When a physician is requested by a colleague to care for a patient during his temporary absence, or when, because of an emergency, he is asked to see a patient of a colleague, the physician should treat the patient in the same manner and with the same delicacy as he would have one of his own patients cared for under similar circumstances. The patient should be returned to the care of the attending physician as soon as possible.

RELINQUISHING PATIENT TO REGULAR ATTENDANT

SEC. 8.—When a physician is called to the patient of another physician during the enforced absence of that physician, the patient should be relinquished on the return of the latter.

SUBSTITUTING IN OBSTETRIC WORK

SEC. 9.—When a physician attends a woman in labor in the absence of another who has been engaged to attend, such physician should resign the patient to the one first engaged, upon his arrival; the physician is entitled to compensation for the professional services he may have rendered.

ARTICLE V.—DIFFERENCES BETWEEN PHYSICIANS

ARBITRATION

SECTION 1.—Whenever there arises between physicians a grave difference of opinion which cannot be promptly adjusted, the dispute should be referred for arbitration to a committee of impartial physicians, preferably the Board of Censors of a component county society of the American Medical Association.

ARTICLE VI.—COMPENSATION

LIMITS OF GRATUITOUS SERVICE

SECTION 1.—The poverty of a patient and the mutual professional obligation of physicians should command the gratuitous services of a physician. But endowed institutions and organizations for mutual benefit, or for accident, sickness and life insurance, or for analogous purposes, have no claim upon physicians for unremunerated services.

CONTRACT PRACTICE

SEC. 2.—It is unprofessional for a physician to dispose of his services under conditions that make it impossible to render adequate service to his patient or which interfere with reasonable competition among the physicians of a community. To do this is detrimental to the public and to the individual physician, and lowers the dignity of the profession.

By the term "contract practice" as applied to medicine is meant the carrying out of an agreement between a physician or a group of physicians, as principals or agents, and a corporation, organization or individual, to furnish partial or full medical services to a group or class of individuals for a definite sum or a fixed rate per capita.

Contract practice per se is not unethical. However, certain features or conditions if present make a contract unethical, among which are: (1) When there is solicitation of patients, directly or indirectly. (2) When there is underbidding to secure the contract. (3) When the compensation is inadequate to assure good medical service. (4) When there is interference with reasonable competition in a community. (5) When free choice of a physician is prevented. (6) When the conditions of employment make it impossible to render adequate service to the patients. (7) When the contract because of any of its provisions or practical results is contrary to sound public policy.

Each contract should be considered on its own merits and in the light of surrounding conditions. Judgment should not be obscured by immediate, temporary or local results. The decision as to its ethical or unethical nature must be based on the ultimate effect for good or ill on the people as a whole.

COMMISSIONS

SEC. 3.—When a patient is referred by one physician to another for consultation or for treatment, whether the physician in charge accompanies the patient or not, it is unethical to give or to receive a commission by whatever term it may be called or under any guise or pretext whatsoever.

SEC. 4.—It is unprofessional for a physician to dispose of his professional attainments or services to any lay body, organization, group or individual, by whatever name called, or however organized, under terms or conditions which permit a direct profit from the fees, salary, or compensation received to accrue to the lay body or individual employing him. Such a procedure is beneath the dignity of professional practice, is unfair competition with the profession at large, is harmful alike to the profession of medicine and the welfare of the people, and is against sound public policy.

CHAPTER IV

THE DUTIES OF THE PROFESSION TO THE PUBLIC

PHYSICIANS AS CITIZENS

SECTION 1.—Physicians, as good citizens and because their professional training specially qualifies them to render this service, should give advice concerning the public health of the community. They should bear their full part in enforcing its laws and sustaining the institutions that advance the interests

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of humanity. They should cooperate especially with the proper authorities in the administration of sanitary laws and regulations. They should be ready to counsel the public on subjects relating to sanitary police, public hygiene and legal medicine.

PUBLIC HEALTH

SEC. 2.—Physicians, especially those engaged in public health work, should enlighten the public regarding quarantine regulations; on the location, arrangement and dietaries of hospitals, asylums, schools, prisons and similar institutions; and concerning measures for the prevention of epidemic and contagious diseases. When an epidemic prevails, a physician must continue his labors for the alleviation of suffering people, without regard to the risk to his own health or life or to financial return. At all times, it is the duty of the physician to notify the properly constituted public health authorities of every case of communicable disease under his care, in accordance with the laws, rules and regulations of the health authorities of the locality in which the patient is.

PUBLIC WARNED

SEC. 3—Physicians should warn the public against the devices practiced and the false pretentions made by charlatans which may cause injury to health and loss of life.

PHARMACISTS

SEC. 4—By legitimate patronage, physicians should recognize and promote the profession of pharmacy; but any pharmacist, unless he be qualified as a physician, who assumes to prescribe for the sick, should be denied such countenance and support. Moreover, whenever a druggist or pharmacist dispenses deteriorated or adulterated drugs, or substitutes one remedy for another designated in a prescription, he thereby forfeits all claims to the favorable consideration of the public and physicians.

CONCLUSION

While the foregoing statements express in a general way the duty of the physician to his patients, to other members of the profession and to the profession at large, as well as of the profession to the public, it is not to be supposed that they cover the whole field of medical ethics, or that the physician is not under many duties and obligations besides these herein set forth. In a word, it is incumbent on the physician that under all conditions, his bearing toward patients, the public and fellow practitioners should be characterized by a gentlemanly deportment and that he constantly should behave toward others as he desires them to deal with him. Finally, these principles are primarily for the good of the public, and their enforcement should be conducted in such a manner as shall deserve and receive the endorsement of the community.

THE JOURNAL BOOK SHELF

BOOKS RECEIVED FOR REVIEW

Diseases Peculiar to Civilized Man. By George Crile, M.D. Price $5.00. The Macmillan Company, 60 Fifth Ave., New York, N. Y.

Allergy in General Practice. By Samuel M. Feinberg, M.D., F.A.C.P., assistant professor of medicine and attending physician in asthma and hay fever clinic, Northwestern University Medical School; professor of medicine in the Cook County Graduate School of Medicine. Price $7.50. Lea & Febiger, Philadelphia.

The Essentials of Physical Diagnosis. By Robert W. Buck, M.D., assistant professor of preventive medicine and instructor in physical diagnosis, Tufts College Medical School; physician to Boston Dispensary. Price $3.00 net. W. B. Saunders Company, Philadelphia, 1934.

The Collected Papers of the Mayo Clinic and the Mayo Foundation. Volume XXV (Papers of 1933—Published 1934). Edited by Mrs. Maud H. Mellish-Wilson and Richard M. Hewitt, B.A., M.A., M.D. Cloth $11.50 net. W. B. Saunders Company, Philadelphia.

External Diseases of the Eye. By Donald T. Atkinson, M.D., consulting ophthalmologist to the Santa Rosa Infirmary and the Nix Hospital, San Antonio, Texas. Lea & Febiger Co., Philadelphia, 1934.

Modern Clinical Syphilology. By John H. Stokes, M.D. Duhring professor of dermatology and syphilology, University of Pennsylvania; Member, Commission on Syphilis and Cognate Diseases, League of Nations Health Organization. Second edition, revised and entirely reset. Cloth $12.00 net. W. B. Saunders Company, Philadelphia.

That Heart of Yours. By S. Calvin Smith, M. D., Sc.D. Illustrated. J. B. Lippincott Co., Philadelphia. Price $2.00.

The Pneumonokonioses (Silicosis), Bibliography and Laws. By George G. Davis, M. D., associate clinical professor of surgery, Rush Medical College, University of Chicago; attending surgeon, Cook County Hospital. Industrial Medicine, Inc., 844 Rush St., Chicago. Price $7.50.

Industrial Toxicology. By Alice Hamilton, M. D. Price $3.00. Harper & Brothers Publishers, New York.

PHYSICIANS' EXCHANGE

Advertisements for this column must be received by the 25th of the month preceding month of issue. A charge is made of $2.00 for the first appearance of copy occupying 1 inch or less of space and $1.00 for each succeeding insertion of the same copy. Kindly accompany copy with remittance to cover number of insertions desired. Advertisements from members of the State Medical Society will be accepted without charge. Such copy will be taken out after its second publication unless otherwise requested. Where numbers follow advertisements replies should be addressed care Wisconsin Medical Journal.

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Let's Talk About Your Baby. By H. Kent Tenney, Jr., M. D., F. A. A. P., assistant professor of pediatrics, U. of W. Medical School; associate pediatrician to the State of Wisconsin General Hospital. Price $1.50. May be ordered direct from the author at 1 South Pinckney St., Madison, Wis.

Let's Talk About Your Baby. By H. Kent Tenney, Jr., M. D., F. A. A. P., Assistant Professor of Pediatrics, University of Wisconsin. 85 pages. Kilgore Printing Company, Madison, Wisconsin. Price $1.50.

This little book differs from most of the host of books written for mothers in that it aims to help mothers as mothers rather than to make mothers "half-baked" physicians, psychologists, or psychiatrists and aims to make life joyous rather than too damned serious. It may be recommended by the family physician or pediatrician to mothers as a trustworthy and cheerful aid in giving the baby a good start in life. The delightful humor of the book is backed throughout by sound common sense. C. R. B.

Diseases Peculiar to Civilized Man. By George Crile, M. D., Price $5.00. The Macmillan Company, 60 Fifth Ave., New York, N. Y.

This volume of 417 pages is concerned with the chemical and nervous mechanisms which perform the body's coordinations. The field is of large importance and has attracted much attention in the past two decades. In this book the author has the assistance of several of his clinic staff members. Some chapters are excellent summaries of factual material. There is much clinical history included for illustration. But the chapters often contain so much fine-spun hypothesis, at times speciously concealed, that the book as a whole may be very misleading. The volume has its great interest from the insight it gives into the mental processes which have led Dr. Crile to his current approach to thyrotoxicosis, neurocirculatory asthenia, peptic ulcer, and diabetes. Here is given in expanded form his rationalization of the adrenal denervation operation. E. L. S.

BOOK REVIEWS

Any scientific publication reviewed in this column may be obtained for inspection. Orders for such inspection should be directed to the Medical Library Service, 424 N. Charter Street, Madison, Wis.

TUBERCULOSIS

(Continued from page 599)

tient must be kept under close observation on strict bed rest. The removal of the air is not necessary in such cases. Complete spontaneous absorption of the air may be expected in cases in which the pleural tear closes shortly after it had occurred and obstructs the further entrance of air.

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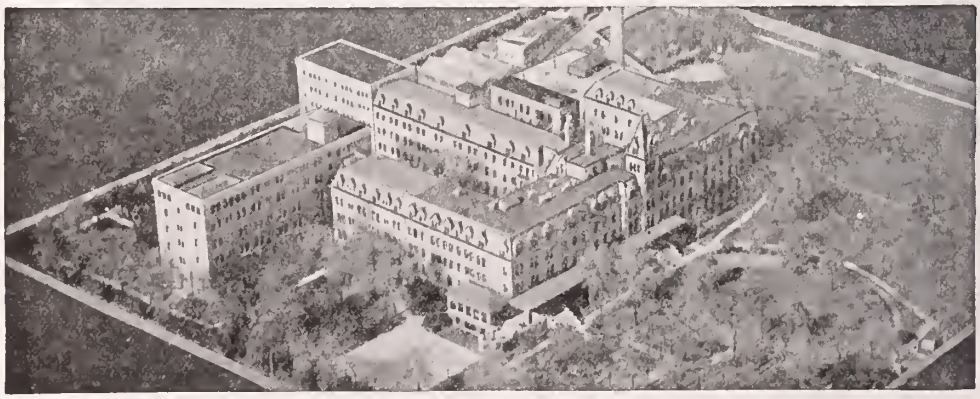

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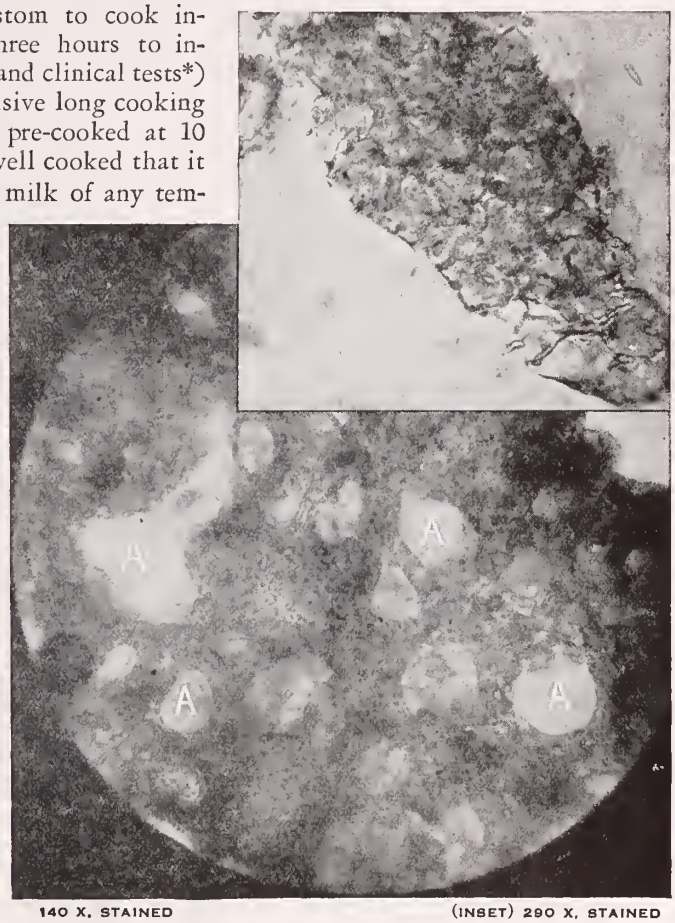
Fifteen cereals (both cooked and uncooked) studied microscopically were revealed as containing many starch granules, most of them massed into dense clumps. *Such unruptured clumps were never observed in hundreds of examinations of Pablum.* The latter consists, rather, of porous flakes which, like sponges, drink up liquids. Hence Pablum can be entirely saturated by the digestive secretions. This is borne out by studies of Ross and Burrill who found that the starch of Pablum is more rapidly digested than that of ordinary cereals cooked 4 hours.



140 X. STAINED (INSET) 290 X. STAINED

Large photomicrograph: Pablum mixed with cold water—portion of large flake. Pablum flakes are honeycombed with "pores" or air-spaces (note light areas A). This porosity permits ready absorption of digestive fluids by the entire flake. No starch granules are visible—they have been completely ruptured.

Inset: Farina cooked ½ hour—clump of cereal composed of unruptured starch granules. Note density of clump and lack of porosity. Many starch granules, such as are present in raw cereal, remain unchanged in form.

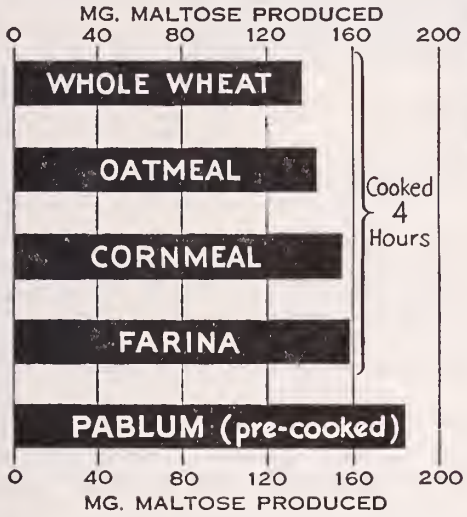


*Chart shows that maltose production is much greater for Pablum prepared with cold water than for other cereals cooked 4 hours. Ross and Burrill (Journal of Pediatrics, May 1934) conclude from this and from the total soluble carbohydrate formed that starch digestion of Pablum is more rapid than that of 6 other cereals.

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Surgeons would agree that the opening up of lymph and blood channels by any of these procedures would in all probability cause rapid dissemination of the growth.

Yet all these measures are being used at the present time prior to or during the application of radium to the cancerous cervix.

The barn door is being locked after the horse has been stolen.

In other words, *traumatism*—physical, chemical, thermal or electrical—to the cancerous cervix militates tremendously against the patient's permanent recovery by facilitating metastasis.

FRANK E. SIMPSON, M. D.
J. ERNEST BREED, M. D.

JAMES S. THOMPSON, Ph.D., Physicist
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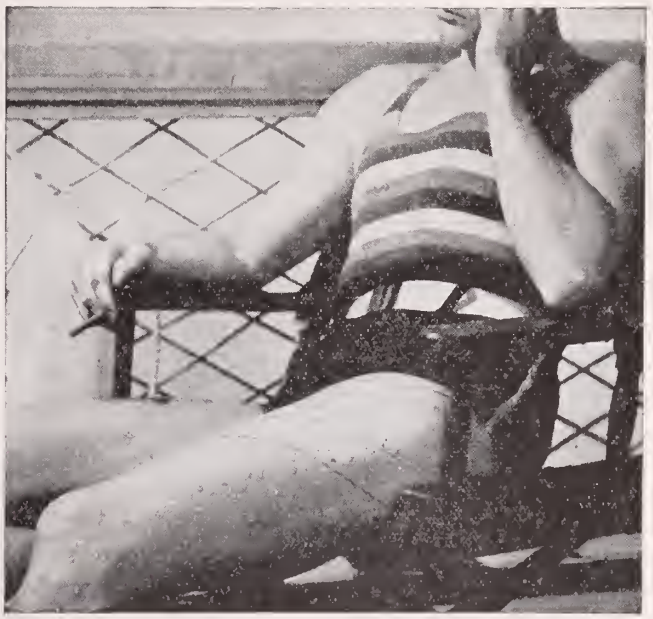

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THE WISCONSIN MEDICAL JOURNAL

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Injuries of the Nerves and Tendons of the Hand*

By SUMNER L. KOCH, M. D.
Chicago, Ill.

THE principles of the immediate treatment of injuries of the hand are not different from those of other injuries, but injuries of the hand seem to us particularly important because they are so common and because the function of the hand looms so large in the lives of every one of us.

In the treatment of an injured hand it is of first importance to have a definite and accurate knowledge as to the extent of injury. Too often one finds only after the most opportune moment for treatment has passed that important nerves, tendons or bones have been injured as a result of what was apparently a simple and uncomplicated traumatism. In few parts of the body, moreover, it is possible to determine so accurately by examination of the part, not of the wound, the exact nature and extent of the injury.

We are inclined to think of the hand as a complicated mechanism and to consider an exact diagnosis as difficult of accomplishment. It should not be so. In injuries of the volar surface of the forearm and hand the structures likely to be involved are median and ulnar nerves and long flexor tendons. The symptoms of median nerve injury are definite and easy to elicit—anesthesia in the area of median nerve distribution, roughly three and one-half fingers, and loss of ability to rotate the thumb so that it faces the fingers. The symptoms of ulnar nerve injury are equally definite—anesthesia in the area of ulnar nerve distribution, the volar and dorsal surfaces of one and one-half fingers, and loss of the ability to abduct the fingers from and adduct them toward the midline of the hand. Because of the close proximity of the ulnar artery and veins there is invariably associated with ulnar nerve injury the severe hemorrhage that results from injury of ulnar artery or veins or both. There are, of course, other symptoms of median and ulnar nerve injury, but those mentioned are unequivocal and diagnostic.

The symptoms of division of the long flexor of the thumb and of the flexor digitorium profundus are equally definite—loss of power of flexion at the interphalangeal joint of the thumb, and at the distal interphalangeal joint of the four fingers. Division of the flexor digitorium sublimis and of the flexors of the wrist is more difficult to recognize by examination of the hand itself, but a glance at the wound is usually sufficient to tell the surgeon that some of these tendons, at least, have been injured.

With injuries involving the dorsal surface of the hand and forearm the diagnosis is equally simple. Below the middle of the forearm the radial nerve is purely a sensory nerve; its division results in anesthesia of the dorsal surface of three and one-half fingers. Division of long or short extensor of the thumb, of the extensors of the wrist, of the common extensor of the four fingers, or any one of its constituent tendons is not likely to be overlooked if the surgeon simply tests the patient for ability to extend the thumb, the fingers and the wrist.

The second step in the immediate treatment of a hand injury is to determine exactly what treatment should be carried out when the patient is first seen. In reaching this decision one question is of paramount importance and deserves a consideration that it does not always receive. It is this—is the wound clean, is it contaminated, or is it already infected? To answer these questions is often difficult, but our experience has im-

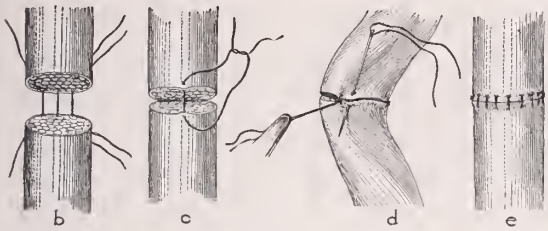
* From the Department of Surgery, Northwestern University Medical School. Presented before the Racine County Medical Society, April 20, 1933.

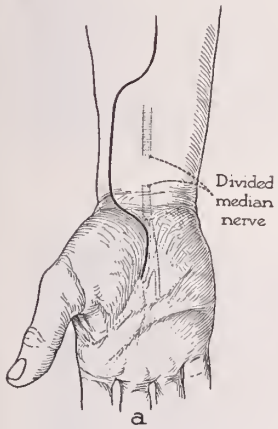
pressed several facts upon us. First, that so far as the patient is concerned the danger from infection far outweighs the possible harmful effects that may follow an injury of the soft tissues or bone, with the exception of course of a severe and life threatening hemorrhage. Secondly, that if there is a question as to the possibility of converting a contaminated wound into a clean wound, or as to whether infection has already developed it is far better to leave the wound alone, as far as any operative repair of injured tissues is concerned, than to run the risk of disseminating virulent organisms throughout the tissues. Thirdly, that in the cleansing of a contaminated wound or in the preparation of a clean wound for operation nothing is quite so valuable as soap and water. I hesitate to dwell on something so simple and commonplace, and yet each of us is responsible to a certain extent for the teaching of medical students and internes, and this phase of surgical teaching is often neglected as scarcely worthy of our time and attention. We live in an "antiseptic age". We are constantly bombarded with arguments and literature extolling this and that antiseptic and we are prone to forget the important lesson, demonstrated so forcibly during the World War, that if wounds are carefully cleansed before sufficient time has elapsed for bacteria to invade the tissues, and if this is done without injuring the living tissue no antiseptics are necessary. For a long time in our own work and in our ward at the Cook County Hospital we have prepared compound injuries for operation by laying sterile gauze over the wound, carefully cleansing a wide area about the wound with soap and water and finally cleansing the wound itself as gently and as thoroughly as possible with soap and water. The results obtained have convinced us that if one cleanses contaminated tissues with the most efficient cleansing agent we know which does not injure delicate living tissues cells—in other words with soap and water, and does it so gently that his manipulations do not injure these delicate cells, healing with a minimum of wound reaction is more certain to result than if he floods the wound with chemical solutions which coagulate and destroy tissue and so help to form excellent culture media and favorable conditions for bacterial growth. Finally, in the repair of injured tendons and nerves no factor is so important in securing a successful result as healing of the operative wound without infection and by primary union, and in order to secure such a result it is wiser in doubtful cases to suture the carefully cleansed wound loosely, or to leave it unsutured and postpone further operative repair until it can be performed as a perfectly clean operation, than to run the risk of having infection develop after an immediate operation and nullify completely the results of operation and, in some cases, make practically impossible any subsequent operative repair.

To be more specific, the criteria we have come to depend upon in deciding the question of immediate operation are these: the cause of the wound, the condition of the hand, the site of injury, the conditions under which the injury was sustained, the first-aid treatment rendered, the time that has elapsed, and the facilities available for repair. If the wound is due to a clean and cutting instrument, if the wounded part was clean, if the wound was sustained indoors and not on the street or open road, if the first-aid dressing was surgically clean, if the patient is seen within three hours after injury and if hospital facilities are available for operation, we believe one is justified in carrying out an immediate repair. If these conditions are not all fulfilled we believe it is wiser to postpone the repair of nerve and tendon injuries until the wound is soundly healed and until the operation can be performed under ideal conditions.

2. REPAIR OF NERVES AND TENDONS

In the surgical treatment of injured nerves and tendons a number of technical details are of great importance. First of these is care to eliminate the possibility of infection, for we believe no single factor is so important in securing a successful result as healing by primary union. The injured hand is carefully cleansed with warm soapy water the evening before operation. It is then covered with a sterile dressing which is not taken off until the patient reaches the





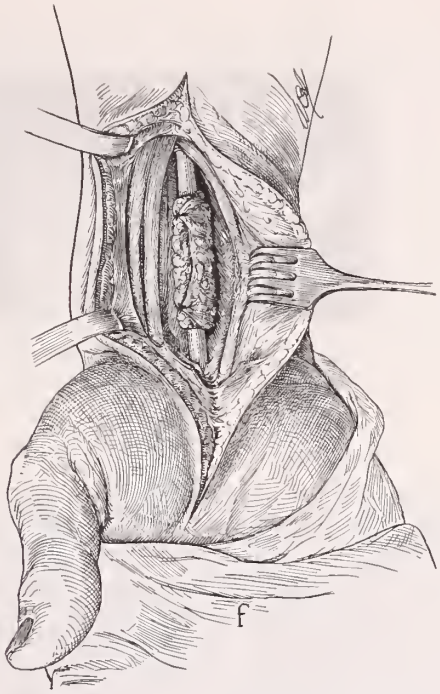


Fig. 1. Technique of nerve suture. a, Incision of choice for exposing divided median nerve just above wrist. If necessary incision may be continued proximalward and distalward in vertical direction. b, First suture is inserted at exact midpoint of dorsal surface of nerve. A second and third supporting suture is inserted close to it before the first is tied, to prevent first suture tearing through delicate epineurim as nerve ends are drawn together. c, After three sutures are tied a fourth is inserted at exact mid point of volar surface of nerve. d, Traction on suture helps to rotate nerve and facilitate introduction of next suture. e, Suture completed. f, Protection of line of suture with thin fat transplant.

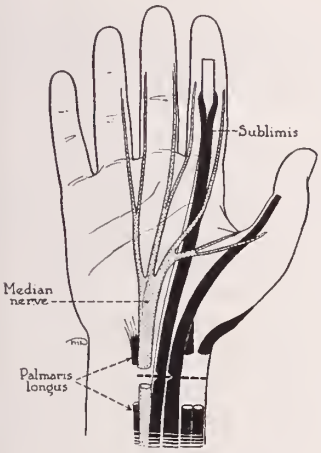


Fig. 2a

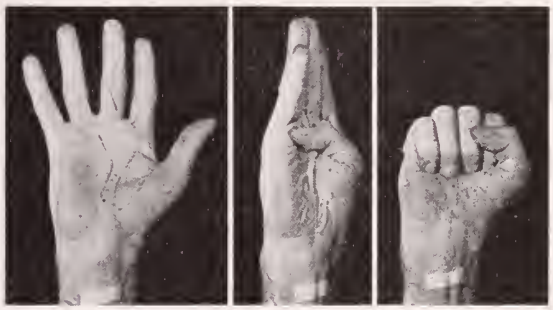


Fig. 2b

Fig. 2c

Fig. 2d

Fig. 2. Division of median nerve, of flexor carpi radialis, abductor pollicis longus, palmaris longus, and partial division of flexor pollicis longus and flexor sublimis of index finger from a fall on a broken water bottle. Soap and water cleansing; primary nerve and tendon suture under ethylene anaesthesia 1½ hours after injury; primary union. a. Findings at operation. Solid blank lines indicate injured tendons. b. Result 4½ months after operation. c, d. Sensory findings 4½ months after operation. Dotted area indicates loss of response to light touch; oblique lines loss of response to pin prick.

Fig. 3a

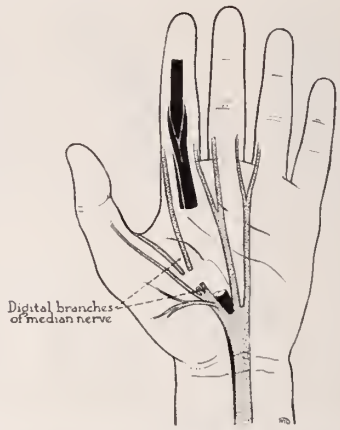


Fig. 3b

Fig. 3c

Fig. 3. Division of flexor tendons of left index and of overlying digital nerves from a porcelain faucet injury; immediate operation elswhere with primary union but without restoration of power of flexion. Secondary nerve and tendon suture 3 months after injury; both superficial and deep tendons united end-to-end; remains of lumbrical muscle laid between the two tendons to prevent adherence to one another. a. Before operation. b. Findings at secondary operation. Solid blank lines indicate divided tendons. c. Result 2 months after operation.

operating room. In the operating room a blood pressure cuff is applied to the arm and the hand and forearm are painted with 5 per cent picric acid in 50 per cent alcohol just before the sterile linen is applied.

The nose as well as the mouth of everyone who enters the operating room is masked for we are convinced by Meleney's studies and by our own clinical observations that wound infection can result from virulent bacteria entering the wound from the uncovered nose of surgeon, nurse or assistant.

When possible we prefer to use a general anesthetic—nitrous oxide, ethylene or ether —in the treatment of a severely injured hand, so as to avoid injecting fluid into tissues which have already been injured, and so as not to make the blood pressure band a source of discomfort to the patient.

Just before the incision is made the arm is held elevated for a few minutes, and the field of operation made bloodless by inflating the blood pressure band to 240 mm. One cannot perform accurate and satisfactory nerve and tendon suture unless the field is free from blood, nor can one avoid traumatizing delicate tissues when constant and repeated sponging is necessary.

If possible the incision is made in such a way as to avoid cutting across flexion creases and so as to permit one to lay a flap of skin and subcutaneous tissue across the line of nerve and tendon suture. In other words in cases of median and ulnar nerve injury one tries to avoid a vertical incision along the middle of the volar surface of the forearm, an incision which is difficult to suture when it is necessary to flex the hand at the wrist to avoid tension and which makes it necessary to suture skin and subcutaneous tissue directly over the line of nerve and tendon suture.

Fig. 4a

Fig. 4. Printing press injury just below middle of left forearm with division of median and ulnar nerves and all flexor tendons except flexor pollicis longus. Immediate nerve and tendon suture elsewhere with persistent drainage for 2 months; no functional improvement. Secondary nerve and tendon suture 5½ months after injury; primary union. a. Condition before operation. b. Result 1 year, 8 months after operation; although proximal segments of deep tendons were sutured *en masse* to distal segments, and superficial tendons united in same way, patient has individual action of the index and middle fingers, but ring and little fingers are flexed and extended as one. c, d. Objective sensory findings 1 year, 8 months after operation; *patient says* sensation in the hand is normal.

Fig. 4b

Fig. 4c

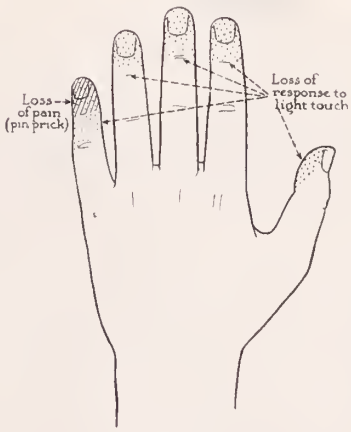


Fig. 4d

In dissecting free the injured nerves and tendons it is wise to work toward the site of injury from normal tissue above and below the wound, for one soon becomes hopelessly lost if he tries by direct attack to identify important anatomical structures which are bound together in a mass of fibrous tissue. When the injured nerves have been identified and freed the tendons are taken in turn. Every effort is made to perform a sharp, clean cut dissection, to avoid tearing of tissues and traumatism with forceps and blunt instruments. If traction on them is necessary, nerves and tendons are held with moist gauze sponges rather than with sharply pointed tissue forceps; when they are freed and identified they are protected with gauze or cotton soaked in warm salt solution until the dissection is completed.

If there is a question as to injury of

Fig. 5a

Fig. 5c

Fig. 5b

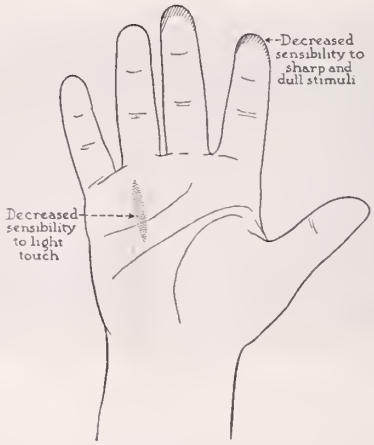


Fig. 5d

Fig. 5e

Fig. 5. Division of all flexor tendons, median, and ulnar nerves just above right wrist; immediate surgical repair elsewhere; healing by primary union, but without restoration of function. Secondary nerve and tendon suture 2 months after injury; healing not complete until 2 small sutures were extruded 3 weeks after operation. a. Before operation. b. Findings at secondary operation. Solid black lines indicate divided tendons. c. Result 2 years after operation. d. Sensory return is almost complete 2 years after operation. e. Tracing of hand showing degree of abduction of fingers possible 2 years after operation; the most definite evidence of return of motor function of the sutured ulnar nerve.

small blood vessels during the operation it is wise when dissection of the nerves and tendons is completed to release the constriction and catch and ligate any vessels that may be bleeding. The arm is then elevated again and the constriction reapplied to check the persistent oozing that can be stopped only by constriction or by pressure.

Tendons are sutured first, and if possible end-to-end. Nerves are then sutured end-to-end with the very finest of silk suture material, that includes only the epineurium (Fig. 1). Finally the subcutaneous tissues are united with fine black silk and the skin with fine needles and fine suture material, that do not leave holes in the skin through which bacteria can enter the deeper tissues.

The sutured wound is covered with a large dressing of sterile gauze and bandaged under moderate pressure; only when the bandage has been applied is the constriction released and the blood allowed to flow back into forearm and hand.

A light aluminum splint is applied to hold the hand and forearm in the desired position. For example, with injuries involving the volar surface of the hand and forearm it is usually necessary to apply a splint which maintains volar flexion at the wrist, so as to eliminate any tension on sutured nerves and tendons. The splint is gradually

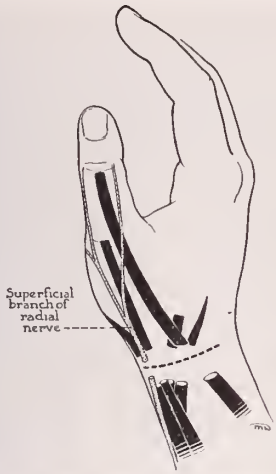


Fig. 6a

Fig. 6. Division of extensors of radius, both extensors and long abductor of thumb, and of superficial branch of radial nerve as result of razor cut. Immediate closure of wound with clips. Tendon suture elsewhere 6 days later; primary union without functional result. Secondary nerve and tendon suture 3½ months after injury; primary union. a. Findings at operation. Solid black lines indicate divided tendons. b. Result 21 months after operation.

Fig. 6b

straightened and usually dispensed with at the end of three weeks.

Two or three days after operation gentle movement of the fingers is begun, and increased as rapidly as it is possible to do so without endangering the healing wound or causing undue pain. Skillful physical therapy and well directed exercises, carried out for a number of weeks after operation, are of very great value in bringing about restoration of function.

Figures 2 to 6 illustrate the results that have been obtained in five cases by surgical repair of divided nerves and tendons. It is our belief that by careful attention to details of technique equally good or better results can be secured in every case of nerve and tendon injury.

Note. A somewhat more extended discussion of the subject with a list of important references on the treatment of nerve and tendon injuries can be found in Surgery, Gynecology and Obstetrics, January, 1933, volume lvi, pages 1 to 39.

The Double Figure of Eight Bandage for the Elbow*

By LEMUEL DAVID SMITH, M. D.
Milwaukee

In addition to other conditions the double figure of eight bandage for the elbow has been found especially useful in supracondylar fractures of the humerus in children. It maintains the elbow at the desired angle. It can not slide off. A child can not get out of it if it is properly applied. It allows mobility of shoulder and wrist.

Roentgenograms of the elbow in any plane may be taken without disturbing the bandage.

* Presented to staff of Misericordia Hospital, Milwaukee, November 6, 1933. From the Department of Orthopedic Surgery of Marquette University Medical School.

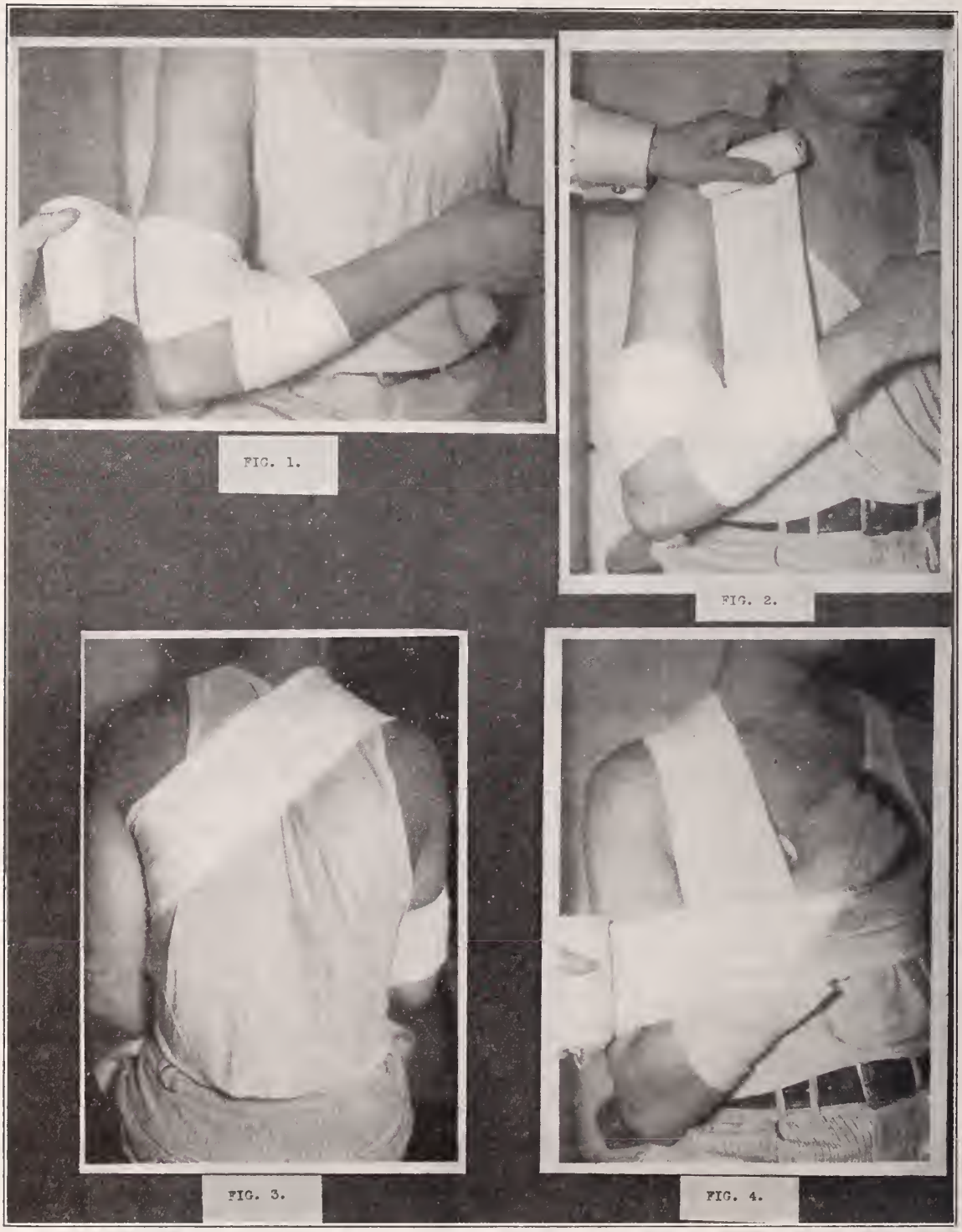


Fig. 1. Three turns of a figure of eight bandage are made about the elbow flexed to the determined angle.

Fig. 2. After the figure of eight about the elbow is completed the bandage is continued up over the ventral aspect of the shoulder of the same side.

Fig. 3. The band is carried diagonally across the back and under the opposite axilla.

Fig. 4. The band is carried across the wrist and arm around the lateral leg of the figure of eight bandage of the elbow.

FIG. 5.

FIG. 6.

FIG. 7.

Fig. 5. The band is continued under the elbow covering the inferior leg of the figure of eight bandage of the elbow and carried up over the shoulder covering the first band.

Fig. 6. Four to six turns of the bandage are repeated over the same course. This constitutes a large figure of eight including the flexed elbow and the shoulder. The safety pins include all layers, thus anchoring the bandage to the original figure of eight bandage about the elbow.

Fig. 7. The bandage holds the flexed elbow securely. It permits mobility of the shoulder and wrist. Roentgenograms of the elbow may be taken without disturbing the bandage.

Congenital Absence of One Kidney with Associated Acute Post-Infectious Hemorrhagic Nephritis, Anuria and Concomitant Uremia

By S. M. WELSH, M. D., and W. E. BANNEN, M. D.
LaCrosse

THE following case is of sufficient interest because of its comparative rarity and the unusual co-incidental complications of nephritis, anuria and uremia to warrant reporting it briefly. A hasty review of the literature provides no strictly comparable case and only one other case was encountered during our practice in which congenital absence of one kidney was found. That happened to be a boy of fourteen years of age who came to postmortem at which time an intraventricular septal defect was found and also congenital absence of the left kidney with double ureters to the bladder, hypospadias and undescended testicles.

In the case reported here we feel that the acute hemorrhagic nephritis, the anuria and uremia were entirely coincidental conditions and that the congenital absence of one kidney was found only because of the type of treatment which was used in bringing about the recovery of the child from the complications which developed following the acute post-infectious hemorrhagic nephritis.

CASE REPORT

History: Agnes E., aged two and one-half years, was admitted to St. Francis Hospital January 9, 1933, in a semi-comatose condition. The mother gave a history that two weeks previously the child developed an acute upper respiratory infection with high temperature, loss of appetite, occasional vomiting and diarrheal stools. She had practically recovered from this condition when she began complaining of painful urination and the mother noticed that the urine was rather bloody. A physician was consulted and on urinary examination numerous red blood cells, white blood cells and coarse and fine granular casts were found and the test for albumin was strongly positive. A diagnosis of post-infectious hemorrhagic nephritis was made and the child was treated symptomatically for a period of three or four days. There was no evidence of oedema and the child appeared to be in fair condition except for the pain and discomfort in passing the urine. Two days prior to the time of entrance to the hospital the mother stated that the amount of urine passed was much less than previously during the illness and for twenty-four hours previous to the time of entrance no urine had been passed. Just before entrance into the hospital the home physician catheterized the patient but it was impossible for him to obtain any urine. A few hours before entrance the child became rather stuporous and finally went into coma.

The family history was unimportant the child having been born at full term and was a forceps delivery. The birth weight was seven pounds two ounces and the weight on entrance was twenty-nine and one-half pounds. There was no history of previous infectious diseases, diarrhea or convulsions. The general health of the child prior to this illness had been very good. Development: The child could hold its head up at three months, sat up at five months, stood alone at ten months, walked alone at fourteen months and had its first tooth at five and one-half months of age. Both parents were apparently healthy. The child was breast fed for the first three months of life, gained well and developed normally after which time an artificial formula of milk and water dilution sweetened with dextri maltose was used. Cereal and vegetables were started at the fourth month. There was no history of tuberculosis, syphilis or chronic illness in the immediate family.

January 9, 1933. At the time of entrance into the hospital physical examination revealed a child of two and one-half years of age weighing twenty-nine and one-half pounds. Temperature 100°. Pulse 90. Respirations 22. The child was lying in bed in a semi-comatose condition with eyes closed. The lips were rather dry and parched. The color was pale and pasty, the skin turgor was poor but dehydration was not markedly evident. The child was somewhat restless and fretful and tossed about when being turned from side to side on examination. Both fontanels were closed. The head was well shaped and the scalp was clean. Upon lifting the upper eyelids the eyes moved irregularly in an oscillating manner. The pupils reacted well to light but were dilated to about eight millimeters. Ears, nose and throat were negative. Teeth and gums were normal. Tongue was coated, dry and parched. Upon examining the throat the patient co-operated poorly and a good view of the posterior pharynx could not be obtained. A few scattered rales were heard over both lung bases but there were no changes in the breath sounds or in the percussion note. The heart was rapid but otherwise normal.

The abdomen was greatly distended and tympanitic. Patient was catheterized on entrance into the hospital but no urine was obtained. In considering the history and physical findings a tentative diagnosis of acute post infectious hemorrhagic nephritis, anuria and uremia was made.

January 10, 1933: A small amount of urine was obtained on catheterization and on examination this showed * * * * albumin, many red blood cells, many white blood cells in clumps, a few hyaline casts and many coarse granular casts. The specific gravity was 1.020. The non-protein nitrogen taken on this date showed 120 milligrams per 100 cubic centimeters of blood. The child still remained in a comatose condition. Fluids were forced through a nasal tube and by means of the intravenous and subcutaneous routes. Three ounces of saturated magnesium sulphate solution was given through a nasal tube twice daily with resulting improvement in the uremia as far as the comatose condition was concerned. The child had from three to five watery, diarrheal bowel movements during the following day. Hemoglobin was 75%, red blood count 4,290,000 and white blood count 30,000.

January 12, 1933: The child's condition became more severe, she was more restless and the coma was more marked. There was slight general spasticity of both extremities. Pupils reacted to light. The lungs were clear, and the heart was rapid, regular and sounds were of good quality. The abdomen was more distended than previously and more tympanitic. The non-protein nitrogen on this date was 155.4 milligrams per 100 cubic centimeters of blood and the creatinine was 16.5 milligrams per 100 cubic centimeters of blood. The child's condition became critical and the prognosis appeared very poor. 300 cubic centimeters of two per cent magnesium sulphate solution was given very slowly through the vein and the child became more restful following this treatment. A rather copious bowel movement of watery character was passed. Two ounces of magnesium sulphate was also given by means of an intra-nasal tube. The temperature remained around 100° while the pulse had climbed rapidly to 130 and the respirations to 28.

January 13, 1933: About two drams of urine had been passed since the child's entrance into the hospital, the child apparently having complete urinary suppression resulting in marked uremia. The non-protein nitrogen continued to climb gradually with the creatinine remaining at 16.5 milligrams. The oedema was progressively getting more severe and the stupor was becoming more marked. There apparently had been no improvement following the intravenous injection of magnesium sulphate and glucose solution. The abdomen became more distended and very little if any relief was obtained following enemas and pituitrin.

A flat x-ray picture was taken of the abdomen to reveal kidney shadows but was unsuccessful because of the excessive amount of gas in the large and small bowels. The child's critical condition demanded heroic measures and we decided on decapsulation of the kidneys.

Under gas anesthesia with the child lying on the right side an incision was made over the left kidney area and after exploring this region we were unable to locate the kidney in the area for its normal location. A tentative diagnosis of congenital absence of the left kidney was made and the wound was closed immediately. A similar incision was then made over the right kidney area and a large, distended right kidney was found. The capsule was split and stripped back over the kidney with an elevator. Two small wick drains were inserted between the capsule and cortex to allow drainage of urinary seepage if such should occur. The wound was quickly closed, the wounds were dressed and the child immediately returned to its room. An indwelling catheter was placed in the urethra and from three to five ounces of bloody urine were obtained. Immediately following operation an ampule of coramine was given intramuscularly and one grain of theocinsodiumacetate. Within the next two hours 600 cubic centimeters of bloody urine escaped through the indwelling catheter and the child was slowly but gradually coming out of her stupor.

January 14, 1933: The child's condition improved considerably following the operation. The coma had disappeared. The child was less stuporous and the general condition was considerably improved. 1800 cubic centimeters of bloody urine was passed during the first twenty-four hours postoperatively. The child took nourishment by mouth and was able to recognize things that were going on about the room. The indwelling catheter was still in place and was allowed to remain for another two days. The temperature had risen following the operation to 102°. Pulse was 110 and respirations 24. The non-protein nitrogen on this date was 56 milligrams and the creatinine was 3.1 milligrams.

January 16, 1933: Blood creatinine on this date was 2.2 milligrams and non-protein nitrogen 40 milligrams per 100 cubic centimeters of blood. This drop in the creatinine and non-protein nitrogen gave a very favorable outlook and the child's recovery from the acute post-infectious hemorrhagic nephritis and complicating anuria and uremia made a favorable prognosis more certain. Decapsulation of the kidney apparently relieved the anuria which had existed for a period of five days thus relieving the symptoms of uremia. The blood creatinine and non-protein nitrogen began to fall very rapidly following this operative procedure until the above results of blood chemistry were found. At that time we felt that the child was going to recover and that such a prognosis could not have been offered if decapsulation of the kidney had not been performed.

January 20, 1933: The retention catheter had been removed and the child was passing urine voluntarily there being from 800 cubic centimeters to 1000 cubic centimeters daily. It was still of a bloody nature and showed considerable albumin, some hyaline casts and a few coarse granular casts. The

Fig. I. Roentgenogram taken three minutes after injection of 12 cc. of neo iopax into the right jugular vein shows the beginning accumulation of the dye in the calyces and pelvis of the right kidney. No evidence of any dye on the left.

Fig. II. Roentgenogram taken ten minutes after injection of 12 cc. of neo iopax into the right jugular vein shows the calyces, pelvis and double ureter well outlined by the dye and a small accumulation of dye in the bladder. There is no evidence of any similar shadow on the left indicating a congenital absence of the left kidney.

temperature now remained below 101°, respirations had dropped to 20 and pulse to 100. The child's general condition was very good.

January 26, 1933: The child's general condition improving daily. Wounds over each loin healed by primary intention. No further dressings needed as all urinary and serum drainage has subsided. Urine still of a bloody character with normal amounts being passed daily. The oedema has entirely subsided. Non-protein nitrogen 42.2 milligrams per 100 cubic centimeters of blood and creatinine 2.2 per 100 cubic centimeters of blood. Temperature, pulse and respirations normal.

January 31, 1933: Child has been up and about for the past three days apparently in good condition. Appetite is very good. Urinary function is normal. Urine is slowly clearing up as to amount and number of red blood cells present. Albumin is decreasing in amount but there are still a few hyaline and granular casts present. Child was discharged home apparently improving and recovering well from her complications.

On the date before discharge intravenous neo-iopax injection was given which was followed by a flat x-ray picture of the kidneys, bladder and ureters and we found that our tentative diagnosis of a congenital absence of the left kidney was confirmed by this picture which showed only the right kidney present with a double ureter leading from the pelvis of the right kidney to the bladder.

March 3, 1933: The child was seen at our clinic on this date which was about one month after discharge from the hospital and was apparently in good health. Weight was thirty-one and one-half pounds. Urine was clear, microscopic examination showing only an occasional red blood cell, a few hyaline casts and a few fine granular casts. Albumin ++.

April 22, 1933: Patient's condition still improving slowly. Weight today thirty-two and one-fourth pounds. Urinary examination showed no red blood cells, only an occasional hyaline cast and a trace of albumin.

July 15, 1933: Patient again visited the clinic on this date for a check-up examination. Weight thirty-three and one-half pounds. She is apparently a healthy and normal child. There is no history of urinary disturbance. The urine is clear and free from albumin. Non-protein nitrogen 37 milligrams per 100 cubic centimeters of blood and creatinine 2 milligrams per 100 cubic centimeters of blood. On this date the mother was advised to bring the child back to our clinic every six months for urinary check-up. We feel that these future visits will be beneficial to the child as it is not uncommon to get an exacerbation of an acute post-infectious hemorrhagic nephritis or to have it go over into a chronic non-specific type.

COMMENT

We feel that this has been a case of acute post-infectious hemorrhagic nephritis following an upper respiratory infection with

complications of acute urinary suppression and uremia. There was a complete anuria for five days before decapsulation of the right kidney was performed. Uremic symptoms accompanied the anuria and following decapsulation of the right kidney both the anuria and uremia disappeared rather suddenly. Before decapsulation of the kidney the non-protein nitrogen had risen to 127 milligrams per 100 cubic centimeters of blood and blood creatinine had gone up to 16.2 milligrams. The patient at this time was markedly edematous, very stuporous and was apparently in the last stages of uremia. Intravenous medication with ten and twenty-five per cent glucose solution had failed as likewise did the saturated solution of magnesium sulphate by mouth and the two per cent magnesium sulphate intravenously. Decapsulation of the right kidney was performed with immediate termination of the anuria and subsidence of the uremic symptoms.

The case has been presented because it is believed to be the first reported instance of congenital absence of the kidney associated with acute post-infectious hemorrhagic nephritis, anuria and concomitant uremia, and we believe is worthy of comment especially as far as development of the renal anomaly is concerned. A review of the embryologic development of the structures involved in the anomalies just presented is of some value in interpreting their development. The urogenital apparatus in man is derived from three fetal structures, the pronephros, mesonephros and metanephros. The pronephros gives rise to the Wolffian ducts, which descend to form the urogenital sinus in conjunction with the allantois. The latter in turn fuses with the lateral wings of the cloaca by the sixth week of embryonic life. Normally, a raphé is developed which tends to divide the allantois from the intestinal canal. This becomes subsequently the pouch of Douglas. The allantois in turn develops into the bladder, and the cloaca into the excretory organ of the intestinal canal connecting with the external body by a thin diaphragm. The metanephros arises from a group of mesothelian cells to form the renal blastema and in turn fuses with the ureter which develops as an out-budding of the urogenital sinus or lower portion of the Wolffian duct. It is thus comparatively simple to see how such an anomaly as the congenital absence of the kidney can occur with a failure of the ureteral bud or renal blastema to develop or fuse, and with the failure of the cloacal septum to separate the urogenital sinus and cloaca completely.

Kaufmann, in his "System of Pathology" reported that unilateral absence of the kidney is a comparatively rare condition, there being on the average only a single case in every 2,500 autopsies. More than one-third of the cases occurring in the female, however, are associated with malformations in the genitalia. This was not true in the case we have presented. The remaining kidney is usually hyperplastic and may be double its normal weight. In the case which we have presented the right kidney was larger than normal and was associated with two ureters leading from the kidney pelvis to the bladder. As to the relative frequency with which the right or left kidney is absent or rudimentary, Beumer's statistics show that among forty-eight cases, the right kidney was absent twenty-two times, the left twenty-one times, while one or the other was rudimentary in four cases and one was not stated.

In the case of congenital absence of one kidney the ureter also is almost invariably absent and shows no orifice in the trigone of the bladder. The case which we have just reported was not cystoscoped to determine whether a ureteral orifice was present on the left side or not. Rarely the ureter may persist as a blind pouch ending in a cul-de-sac. Reimann reported such a case occurring in a body of thirteen in whom a blind ureter was found on the left side. Braasch was unable to find any cases. Goldstein, in 1925, reported that he has been able to collect from the literature a total of 353 cases of congenital absence of the kidney. Lowsley found only two in 4,215 cases; Anders found a single case in every 1,817 autopsies.

The relationship of the acute post-infectious hemorrhagic nephritis, anuria and concomitant uremia to this case is of more than passing interest as it might well be asked whether such conditions in a child with a congenital absence of one kidney might not

have contributed materially to the prognosis of the disease. We feel that the outcome would have been fatal due to the uremia and anuria if decapsulation of the right kidney had not been performed as the suppression of urine subsided immediately following the decapsulation and the child's condition improved gradually until the time of her discharge eighteen days postoperatively.

It is, however, extremely difficult to evaluate the various factors in the treatment of a condition of this kind and should another similar case arise we would hesitate preoperatively to offer a prognosis just on the results which were obtained following decapsulation of the right kidney in the case presented.

SUMMARY

A case of congenital absence of one kidney with associated acute post-infectious hemorrhagic nephritis and concomitant anuria is presented with recovery following decapsulation of the single kidney. A brief review of the embryology is likewise presented in explanation of the development and cause of the congenital absence of one kidney. The incident of congenital absence of one kidney in the literature is reported and a brief mention is made of the relationship of nephritis and anuria as far as the prognosis is concerned in these types of cases.

Headaches of Infectious and Toxic Origin*

By SAMUEL E. KOHN, M. D.
Milwaukee

INFECTIOUS and toxic headaches are produced by changes in the intracerebral pressure, as well as by the direct action of the toxins on the meningeal nerves. Any cause of cerebral congestion likewise may cause headache. One may visualize the mechanism as follows: the toxic products of various diseases produce a dilatation of the blood vessels through their action on the vasomotor centers, and because of this increased size of the vessels, the whole brain is enlarged and exerts pressure on the meninges. Infectious diseases produce headaches so commonly and so typically, that the so-called "*symptom headache*" has considerable diagnostic value. Toxic headaches are commonly diffuse and are not confined to any single side or portion of the head. In general, at the onset of acute diseases the headache is usually frontal, lessening in the morning, and usually growing worse toward evening.

The presence of headaches in infants and children has been much underestimated, probably due to the fact that the child cannot give expression to pain except in an objective manner. He may put his hands to his head, scratch his face, pull his hair, wrinkle his brow, cry and roll his head from side to side in an effort to overcome this intense discomfort. In the new-born, however, scratching of the face, which is so common, is not due to headache but rather to incoordinated motion. The evidence of headache in the infant is often an early index of some cerebrospinal involvement, and may be accompanied by a tense or bulging fontanel. The persistent crying of a *syphilitic infant* during the first few months may probably be laid to meningocephalic involvement which is further manifested clinically by optic changes, tense fontanel and changes of the spinal fluid.

Obviously in the short space of time allotted to me, it will not be possible to mention all the diseases in which headache plays an important role. I will therefore consider the most common and emphasize the importance of headache from a diagnostic viewpoint.

Typhoid fever notoriously is associated with headache of the brow type. It usually diminishes toward the end of the second week. When however it persists or increases after this period, complications may be expected among which meningitis is chiefly to be feared. In typhoid the headache is not very severe but has a very de-

* Symposium, Mt. Sinai Hospital, Milwaukee.

pressing effect on the mentality. It does not respond readily to ordinary medication.

The headache of *influenza* comes on very suddenly and is very severe, most frequently of the orbital or frontal type. When it is suboccipital it is usually accompanied by pain in the back. There are two factors which are important, namely: (1) the toxemia, which produces a generalized pain usually about the eyeballs and (2) a sinus infection which is a frequent complication. The early headache appears to the patient as though it were all over the inside of the head, and he feels as if the head would burst. The French refer to this headache as "cruël pains," and the patient holds his head clasped in his hands similar to the manner observed at the onset of a meningitis. Even though the headache disappears after the illness it may re-occur for many years at irregular intervals. Such recurring headaches are often mistaken for one of the symptoms of brain tumor.

Headache is a common complaint in *simple coryza.* It may present itself in many forms, namely a face-ache, an eye-ache, or a generalized headache. It frequently precedes other symptoms of head cold by several hours. In an uncomplicated coryza it disappears under ordinary treatment such as nose sprays, antipyretics etc.

Headaches have been known to occur rather frequently in cases of *tonsilitis* especially where the lymph tissue on one side or the other is especially involved. It occurs also at the onset of pneumonia and is greatly aggravated by coughing. This headache of *pneumonia* is rarely a major symptom except in complicated cases.

It is however a major symptom in *malaria,* distributed uniformly throughout the head although occasionally only frontal. Another form of malaria headache is the brow type found commonly among old malarial subjects. This is a steady aggravating pain recurring at certain seasons of the year and is an aid in the diagnosis, in those patients who have come from malarial regions.

Everyone is familiar with the headache of *meningitis,* its onset early in the disease and its continuation with paroxysms of great severity as long as the meningitis is active. In tuberculous meningitis with its characteristic slow onset, headache is one of the earliest symptoms. In a series of cases at the Milwaukee Children's Hospital accumulated over a period of six years and reported in August, 1929, headache was an early symptom in nearly all of the patients. It is not possible, however, to differentiate the various types of meningitidies from the onset of the pain in the head, as sometimes the tuberculous form starts with acute pain while the other meningitides which usually begin in this fashion may come on very slowly. Patients who have recovered from meningitis frequently have recurring headaches later in life particularly after exertion or during illnesses. The differential diagnosis is made primarily by spinal puncture with an examination of the fluid. The treatment with the exception of the meningococcic type is unsatisfactory and the mortality is high.

Many infections in children particularly those associated with high fever may be accompanied by symptoms of irritation in the cerebrospinal system. These are headache, stiffness of the neck, vomiting, pain in the back, etc., and often simulate some form of meningitis. This so-called meningismus can only be differentiated from a true meningitis by an examination of the spinal fluid. Meningismus is found particularly in young infants and may often be associated with a spasmophilic diathesis. Convulsions are not uncommon. Differentiation from meningitis may be made by the clear colorless fluid, the low cell count mostly mononuclears, relatively low globulin, little or no change in the sugar content and the ultimate recovery with infrequent sequelae.

Everyone is familiar with the syndrome of *smallpox,* headache, back-ache and vomiting, all of which last for two or three days, the severity changing with the ensuing eruption. These symptoms then abate to be followed by the development of the characteristic skin lesions. This syndrome with its intense pain in the head is a very important consideration in the differential diagnosis between chickenpox and smallpox.

Headache has been described as also being associated with early *tuberculosis.* It has

been generally charged to the accompanying constipation and indigestion that is so common in the early stages of the disease. Late in the afternoon the temperature may account for the afternoon headache. It is often more a sense of oppression than of pain. Afternoon rise in fever, headache, with a positive tuberculin test should make one suspicious of an active process, even though it cannot be demonstrated in its early stages.

Headache is a common complaint at the beginning of sleeping sickness better known as *encephalitis lethargica*. Probably seventy per cent of the patients complain of it. It is mostly of a frontal or occipital type. After a few days it ceases to be a prominent feature of the disease. As a post-encephalitic phenomenon it is often in the foreground, the distribution depending largely on the portion of the brain which has been affected by the disease. It is more severe in damp weather or after exertion, and made worse after excitement or loss of sleep. In some instances the pain follows the distribution of a single nerve, of which the supra orbital is often affected. Treatment is entirely symptomatic.

Erythema nodosum is very often associated with severe morning headaches particularly of the temporoparietal type coming on most acutely during the height of the eruption and gradually subsiding as the eruption recedes.

The prolonged ingestion or intimate contact with many of the *metals*, particularly lead and iron may produce severe headaches, when the accumulated dose becomes sufficiently large to act as a toxic substance. The variety of ways in which lead can be acquired is very great. While it is usually absorbed through the skin, or by mouth, inhalation noted particularly in the last few years has become an important route of absorption. Recently two children at the Milwaukee Children's Hospital were examined in which the disease had been acquired by the inhalation of fumes from the burning of old battery boxes which contained small quantities of lead. Sufficient lead was inhaled from the fumes to produce a severe type of lead poisoning. The disease usually begins insidiously with vague constitutional symptoms of headache, pallor, listlessness, anorexia, constipation, vomiting and vague pains in the abdomen or back and extremities. These symptoms may not begin for weeks or even months. In children the central nervous system is particularly involved and headache becomes a prominent symptom. Encephalitis may occur very early with the usual headache, drowsiness, coma or delirium, often followed by convulsions. Diagnosis is made by history, demonstration of lead in the stool and urine, changes in the gums and the confirmatory evidence from the x-ray of the long bones with its zone of increased density lying beneath the epiphyseal line. This disease is important because in its late stages it may be confused with tuberculous meningitis.

CONCLUSION

I have taken the liberty throughout this paper to make frequent reference to headaches as they pertain to children. I did this advisedly as I feel certain that it is all too frequently over-looked as an important symptom. Most of the descriptions have been of a cursory nature and may even go so far in their brevity as to confuse the listener. I hope that such has not been the case.

OBSTETRICS VERSUS MIDWIFERY: CHAIRMAN'S REPORT

Joseph B. De Lee, Chicago (*Journal A. M. A.*, Aug. 4, 1934), points out in his address that the dictionaries give the terms obstetrics and midwifery as synonyms, but he believes that the term midwifery should apply to the practice of caring for women during childbirth by the old blind, empirical methods, while the term obstetrics should connote the fact that to the wisdom gained by experience has been added all the knowledge supplied by recent scientific investigation. Some of the old opprobrium still clings to the obstetrician and his work. The medical schools, in many universities, still rate obstetrics as a minor specialty, and even today students leave their campuses with a debased opinion of the science and art of obstetrics. Hospitals do not provide facilities for obstetrics that are the equal of those for surgery. The author has striven during all of his medical life to eradicate this low opinion of obstetrics and to place on equally high pedestals the three primary branches of medicine, obstetrics, medicine and surgery, all equally important, all equally dignified. It is therefore with great pain and some alarm that he noticed a trend in Britain and in spots of the Eastern seaboard, a reactionary trend, toward the state of midwifery. He discusses disturbances of pregnancy, labor, natural delivery and concludes by saying that there are not enough schools, teachers, materials or public and professional support to supply real obstetricians for 2,000,000 births each year. Let doctors be taught the beauties of normal obstetrics, the principles of asepsis and the principles of intelligent expectancy, trusting much to nature. There will soon be a reduction of the national maternal mortality and morbidity. In the meantime the medical profession can hold the vision of its ideals and struggle to attain them, and it will attain them only through education—education of the medical schools, of the universities, of the doctors and of the public.

Endocrine Headaches*

By J. H. SURE, M. D.
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CLINICAL experience and therapeutic results have convinced me that certain headache syndromes are clinical entities, produced by abnormal functions of some of the endocrine glands, notably the ovary, the pituitary, the thyroid and the adrenals.

The science of endocrinology is still in its infancy, and endocrinological diagnosis is difficult of proof. Such diagnoses can only be made by exclusion, facts and theories in endocrinology, and therapeutic results. While headache is frequently the outstanding symptom, there are many other manifestations of disturbed endocrine gland function.

The type of headache varies. It may be periodical, that is, pre- or post-menstrual, and is only occasionally continual. It may be hemicranial, temporal, parietal or occipital. It may be enough to incapacitate the patient, or it may be only annoying. The headache described by the patient may be compressing or expanding. As one patient put it—"My brain is too big for my head."

With this preamble, permit me to propose a working classification of endocrine dysfunction of the female only, as my experience in this connection is limited to obstetrics and gynecology:

1. *Hyper-gonadism*
   - (a) Hyper-estrinemia (an excessive amount of sex hormone in the blood stream)
   - (b) Hyper-prolanemia A (an excessive amount of anterior pituitary Prolan A which activates the Graafian follicle).
2. *Hypo-gonadism*
   - (a) Hypo-estrinemia (less than the normal amount of sex hormone in the blood stream)
   - (b) Hypo-prolanemia A (lessened amount of Graafian follicle activator)
3. *Hyper and hypo-lutemia* (an excessive or lessened amount of the products of the corpus luteum (progestin) in the blood stream)
4. *Hyper and hypo-prolanemia B* (an excessive or lessened amount of the activators of the corpus luteum)
5. *Hyper and hypo-thyroidism*
6. *Hyper and hypo-pituitarism* (anterior or posterior)
7. *Hyper and hypo-adrenalism.*

Let me illustrate some of the above headache syndromes with case histories from my own practice:

Case 1

Premenstrual Headache: (Hyper-estrinemia)

Mrs. E. T. B., age 29, complained of headache, backache, general nervous feeling and irritability occurring about one week prior to the onset of each menses. She stated that she felt well only two weeks out of the month, that she was uncomfortable and miserable the remainder of the time, feeling much worse the third week of the cycle. Her menstrual history was normal, with no pelvic pathology. After a period of treatment, I came to the conclusion that she was probably suffering from an excessive amount of sex hormone, and began to use aqueous corpus luteum extract hypodermically. This gave her complete relief, but from time to time supplemental treatment is found necessary. My final diagnosis was based on the work of Robert T. Frank who proved the presence of an excessive amount of estrin in the blood and the urine several days prior to the onset of the menses. This particular patient was suffering from an excessive formation or a lessened excretion of sex hormone, or both.

Case 2

Postmenstrual Headache: (Hyper-prolanemia A)

Mrs. J. G., age 40, complained of agonizing, blinding headache beginning about two days prior to the end of her menstrual period, such periods recurring every four weeks and lasting six days, the headache subsiding two or three days following the cessation of the menses. This patient also recovered on lutein treatment.

Robert T. Frank has also demonstrated the presence of large quantities of Prolan A in the blood of women from six to nine days following the onset of menses, which readily explains this type of postmenstrual headache.

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* Symposium, Mt. Sinai Hospital, Milwaukee.

Case 3

Menopausal Headache: (Hypo-estrinemia)

Mrs. J. R., age 49, complained of severe headache and dizziness every morning for three months. Menses normal, pelvic diagnosis fibrosed non-pregnant uterus, her symptoms due to lack of estrin. Theelin was administered for five days and gave complete relief. Later placed on tablets of ovarian substance. Full cessation of menses two years later. No complaints thereafter.

Case 4

Continual Headache: (Hyper-lutemia or Hyper-prolanemia B)

Mrs. E. H., age 22, complained of headache and absence of menses for three months prior to June, 1925. She thought herself pregnant. Menstrual history, began at 15, always irregular, periods four to six weeks apart lasting one week, napkins six, no dysmenorrhea. She stated that in the early part of May she had spotted for a short time. Three days after cessation she had again spotted for three days. Her normal weight was 143: she then weighed 125. General physical examination negative. Pelvic examination, patient not pregnant. Saw patient again in October, 1925. Amenorrhea still present. Her weight had risen to 161 pounds. Basal metabolism minus six. Thyroid extract produced no results. December, 1925, she still had not menstruated and weighed 160 pounds in spite of thyroid medication. In January, 1926, the husband was found fertile by cervical and vaginal smears from the patient. She still had not menstruated in May, 1926. At that time a tubal inflation opened both tubes at 80 mms. of mercury and the hypophysis exposed to x-ray. Three days later she menstruated, flowed five days, using ten napkins. Next menstruation in September, 1926, at which time her sella was x-rayed and found normal except the posterior clinoid processes slightly prominent. Found her pregnant shortly thereafter and confined her in August, 1927. Her menses reappeared in December, 1927. In November, 1928, her menses had not recurred but she complained bitterly of headache and excessive nervousness. Thyroid extract and a course of theelin produced a flow the following December. August, 1929, menses had not recurred, but she then complained of nausea and vomiting. Weight 142½ pounds and urine gave a positive sugar test for pregnancy. Delivery in April, 1930. During this pregnancy, patient presented a typical appearance of acromegaly. Her forehead and malar bones, as well as her hands and feet increased enormously in size. All of these symptoms disappeared subsequent to her delivery, but Mrs. E. H. still has headaches and menstruates only occasionally. When last seen, September, 1933, she had not menstruated for three months and complained of headache.

In diagnosing this particular case, one must come to the conclusion that she is not a case of hypo-estrinemia, because she presented no vasomotor disturbances and was able to bear two children during this stage of ovarian dysfunction. I am inclined to believe that Mrs. E. H. was and is suffering from an excessive amount of lutein or prolan B in her blood stream, interfering with the formation and maturation of Graafian follicles, thus preventing ovulation.

Case 5

Menopausal Headache: (Hypo-prolanemia B or Hypo-lutemia)

Miss S. M., age 46, complained of headache, meno- and metrorrhagia and leucorrhea. Her menses increased from the normal 28-4 day type, one dozen napkins, to the 23 to 27-8 day type, with two and one-half dozen napkins. Pelvic examination revealed no pathology. Diagnostic curettage showed the Swiss Cheese hyperplasia of the endometrium. Patient recovered from all her symptoms on 1200 rat units of antuitrin S.

Case 6

Intermittent Headache: (Hypo-thyroidism)

Mrs. L. A. J. came under my care when six months pregnant with a blood pressure of 106/60, weight 115½. Complained of headache, mostly parietal and occasionally post-occipital. She delivered normally, lying-in period normal, check-up normal except for a slightly retroverted uterus. Headaches continued. Basal metabolism minus 20. Improved on thyroid medication. Again pregnant two years later and felt well only when some form of iodine was administered. Second delivery and lying-in period were normal, but patient complained of periodical, post-occipital headache. Her basal metabolism at this time was minus 24. Headache again responded to thyroid treatment. She still has occasional post-occipital headache, which responds to the same medication.

Case 7

Headache of Early Pregnancy: (Hypo-adrenalism)

Mrs. N. T., age 29, para two, three months pregnant, complained of headache, dizziness, nervousness and general tired feeling. Blood pressure 96/45. General examination negative. General improvement with disappearance of headache on five (5) grains of suprarenal extract three times a day. Blood pressure increased to 108/55, and patient very comfortable.

Case 8

Headache of Artificial Menopause: (Hyper-adrenalism)

Mrs. R. K. presented a typical history of metrorrhagia on whom a diagnosis of hyperplastic endometritis was made. She was treated with 1200 Mg. hours of radium. At that time her blood pressure was 120/90. Patient discharged six weeks later with apparently normal pelvic organs. One month later she returned complaining of extreme

headache, dizziness and forgetfulness. Blood pressure had risen to 166/104. Urine normal. It was my opinion that the withdrawal of sex hormone from her circulation had permitted her adrenals to become over-active. I was still more convinced of the correctness of the diagnosis because when placed on theelin, patient's headaches disappeared and blood pressure returned to normal.

Case 9

Pre-Menstrual Headache: (Posterior Hypo-pituitarism)

Miss A. R. began to complain of headache one year after the onset of her menses at the age of seventeen. The headache was blinding and particularly aggravated prior to the beginning of her period. Weight 185, height 5′ 6″, very masculine in appearance. Basal metabolism minus 14. Her sella was normal. She did not improve on ordinary medication. At the age of 22, she weighed 204 pounds. Basal metabolism was minus 16. Still had pre-menstrual headache when her sella was again rayed, and revealed that the posterior clinoid processes approximated closer than normal. There was no erosion of the sella itself. Pituitrin twice a week gave complete relief. For the next six months pituitrin during the pre-menstrual week only was necessary. She is now able to get along on posterior pituitary extract per mouth to ward off an occasional pre-menstrual headache.

Case 10

Thyrotoxic Headache: (Hyper-thyroidism)

Miss W. G., age 40, complained of headache, insomnia, sweating and loss of weight following an automobile accident. Blood pressure 170/90, pulse 122, basal metabolism plus 51. Refused surgery. Improved on barbital and forced feeding. Sometime later the original headache and other symptoms recurred, but patient still refused surgery.

These instances illustrate the headache syndrome due to disturbances of endocrine function. They suggest the protean manifestations of these disturbances and the caution to be exercised on coming to any conclusion. The efficacy of treatment directed towards endocrine dysfunction will depend on the care with which the cases for treatment are selected.

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PREGNANCY AFTER PARALYSIS

H. Hudnall Ware Jr., Richmond, Va. (*Journal A. M. A.*, June 2, 1934), reports three cases of pregnancy after paralysis which reveal that: 1. Pregnancy can occur in paralytic women; 2. Labor is painless; 3. There is absence of any instinctive use of the accessory muscles during labor; 4. Uterine contractions are weak in the patient delivered from below; 5. Cesarean section and sterilization should be resorted to frequently in these patients; 6. Cesarean section may be performed in some cases without an anesthetic; 7. The uterine and abdominal incisions heal normally. The author's patients were unable to nurse their babies.

Headache In Cardiovascular Renal Diseases*

By BENJAMIN J. BIRK, M. D.
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HEADACHE or cephalalgia is a symptom. In the consideration of cardiovascular and renal disease, one may consider conditions affecting the brain and its coverings, and conditions which indirectly produce headache because of cardiovascular or renal lesion in other parts of the body.

The cranial cavity is enclosed by rigid walls of bone and contains the brain tissue, blood and cerebrospinal fluid; these materials being fluid and semi-fluid.

The anatomic position of nervous elements responsible for the sensation of pain in the cranial cavity apparently lie along the blood vessels and not in the brain or meninges. Operations done on the brain under local anesthesia cause no pain to be felt by the patient unless the blood vessels are cut or traumatized[1]. Thus alterations in either direction of any one or more of the materials, as above mentioned, within the cerebral cavity may produce tension on the connective tissue coverings and blood vessels within the cavity. Such tension may be sufficient to stimulate the sensory nerve endings (stimulation of the sensory fibers of the trigeminal) apparently lying along the blood vessels within the skull and thus cause a sensation of pain, interpreted in man, as headache. It has been shown in laboratory animals, anaesthetized, that faradic stimulation will cause a reflex augmentation of breathing when applied to the pial vessels, but not when applied to the meninges between the vessels or to the brain tissue.[2] "This would indicate the presence of apparent nerve fibers in association with the cerebral vessels."[3]

The balance of tension within the cranial cavity may be altered through tumor, changes in spinal fluid pressure, increase or decrease; changes in the brain substance itself, as in edema of the brain, variations in the blood volume and content within the skull; changes in pressure, or disease in the arteries and veins, and vasomotor abnormalities.

Until recent years it was not definitely known whether or not the cerebral blood vessels had vasomotor nerves. Florey, considers neither organic nor vasomotor influence, but stasis. His idea is that of the cerebrospinal vascular bed reacting by chemical and mechanical stimuli.[4]

Hiller and Grinker[5] report a case of cerebral complication in a case of whooping cough, explaining the pathology found on the theory of Florey. Forbes and Wolff[6] have demonstrated vasomotor fibers in the blood vessels of the pia mater. Sudden anaemia of the brain, being conditioned through vasomotor influence and not splanchnic or systemic control. Cutting of one cervical sympathetic nerve causes an increase in the capillary bed of the homolateral cerebral hemisphere.[7]

Meagher and Ingraham[8] have demonstrated the relation of the cervical sympathetic trunk to cerebral angiospasm. However Pal[9] brought forth the conception of cerebral vascular spasm many years before.

Hirschfelder[10] found that after use of such drugs as epinephrin, that there was cerebral and retinal vessel constriction; while amyl nitrite dilates; and the retinal changes indicate the cerebral. Headache produced after glyceryl trinitrate is due to cerebral vessel dilatation and is not relieved by epinephrin or ephedrin.[11]

Raphael and Stanton[12] demonstrated that amyl nitrite causes dilatation of the brain vessels; while epinephrin induces primary constriction of the brain vessels followed by marked dilatation. Headache in nicotinism is thought to be due to vasoconstriction.

Raynaud and many other authors described cases of Raynaud's disease with cerebral symptoms and the reader is referred to the literature for detailed references.[13]

Rodella[14] reports a case of migraine considered on the basis of cerebral angiospasm

* Symposium, Mt. Sinai Hospital, Milwaukee.

(Quoting Hahm, Med. Klinik, August, 1930) who considers migraine attacks as a form of angina cerebri with three phases.

1. A vascular spasm of the large and medium size arteries and veins, principally the vertebral.

2. An immediate vasodilatation conditioned through the liberation of the vasodilator substance in the ischaemic area.

3. Formation of an exudate or transudate in the pia on the walls of the cerebral ventricles and choroid plexus. This explains the increase in the cerebrospinal fluid pressure.

Individuals showing hyperactive vasomotor instability are subject to headache. Headache due to vasodilatation is on the vertex and its cause can be traced as a rule to some toxic substance as alcohol, amyl nitrite, etc.

Cerebral arteriosclerosis: This disease is common and is due to changes in the vessels. The headache appears in the morning on arising and disappears after activity or persists until late afternoon. It may be frontal and throbbing and of a migraine character, but no aura is present. In arteriosclerosis, any increase in pressure will cause headache.

In congestion of the vessels of the brain (hyperemia) there frequently results a throbbing headache (i. e., polycythemia vera). This commonly occurs in hypertension, uremic conditions, passive congestion secondary to heart disease or emphysema. In a circulatory disease a persistent headache may be a prodromal symptom of cerebral hemorrhage, thrombosis, or softening, and may be very intense just preceding cerebral apoplexy. Red vision has been described, but I have never elicited this symptom from any patient.

In endarteritis, the usual location is mid vertex or parietal and diagnosis is made by elimination of other causes; and one should keep in mind that syphilis early produces changes in the intima. Unilateral headache with throbbing may mean aneurysm of the cerebral artery, thus one would find increased intracranial pressure, choked disk, and vomiting.

Lateral sinus thrombosis, as a cause of headache, should cause little difficulty in diagnosis, because of the associated symptoms. Likewise jugular vein occlusion (thrombosis) will produce passive congestion of the brain and unilateral headache.

HYPOTENSIVE HEADACHE

Headache of low blood pressure is dull and may be intense and throbbing, vertigo and faintness may also be present, as in postural hypotension. In Addison's disease there may be an accompanying anaemia, which would also cause headache. In anaemia with feeble heart action the headache is similar to the hypotensive type. Whether there is an absolute reduction in blood volume (anaemia) or a relative condition due to lowering of blood pressure the conditions are the same within the skull, that is, a reduction in volume.

Headache of hypertensive encephalopathy:[15] This type of headache was first designated by Oppenheimer and Fishberg.[15a]

During acute glomerulonephritis, subacute, chronic glomerulonephritis, and essential hypertension, acute cerebral phenomena may occur, amongst which headache is common. These are not of uremic origin, but due to hypertension. The blood pressure is elevated and usually extremely so. To the already elevated blood pressure there is an additional rise, with cerebral spasm. Pal[9] believes that local vascoconstriction may result from distention of the vessels, due to general rise in blood pressure.

Headache is a symptom from which almost all patients with essential hypertension suffer at one time or another, and frequently is the initial complaint. The headache may be frontal, occipital or a migraine type (unilateral). Visual, auditory or other aura may precede the headache; nausea and vomiting may accompany the headache, thus increasing the resemblance to migraine. It may be dull and boring and a feeling of pressure or throbbing; or give the sensation of an iron cap, known as "Douleur en casque," or it may be intense radiating to the back of the neck accompanied by stiffness, so as to be confused with meningitis. The anatomic findings consist of an anaemia and a not constant edema of the brain.[15] When the headache is refractory, it may portend a cer-

ebral complication. Often the migraine headache may date back since childhood[16,17,18] in cases of essential hypertension.

O'Hare, Walker and Vickers[19] believe that "Nature very frequently sounds a warning as early as the second decade in life of the possible development of hypertensive disease in the fourth or fifth decade." These being migraine and vasomotor symptoms.

The Janeway, "Typical Headache"[16] is one which is present in the morning on awakening or awakens the patient early, reaches its maximum intensity before breakfast and disappears during the course of the morning. This may be daily for long periods.

The reason for the frequency of headache in essential hypertension is not clear. There is no parallelism between the height of the blood pressure and the liability to headache. In some cases there is other evidence of cerebral arteriosclerosis and is therefore to be considered as an arteriosclerotic headache.[20] Also, the fact of the sudden coming and going of the headache in some cases would suggest a possible vasoconstriction of the sclerotic vessels, this being further indicated by the fact that sudden rises in pressure are often accompanied by severe headache.

Renal insufficiency in essential hypertension may be accompanied by uremic headache, but one must not conclude that the presence of headache means uremia in patients with essential hypertension, for the majority of cases with headache in essential hypertension are not uremic because a normal blood chemistry is present.

Increased intracranial pressure is also not deciding, because some cases get relief by lumbar puncture. Frequently the headaches of essential hypertension have to do with intestinal stasis; marked relief following thorough catharsis.

UREMIA

In uremia, the headache is due to the increased blood pressure, cerebral vascular change, and the chemical change; these in varying amounts. Volhard, claims that headache is not a true uremic symptom.[21] However it often is the initial symptom, but not a constant one. The headache may be in any part of the head, frontal, occipital or hemi-cranial. As a rule the headache is dull in contrast to that of hypertensive encephalopathy, but may be very severe.

HEADACHE IN CARDIAC DISEASES

Headache due to cardiovascular lesions outside of the skull may be produced either by directly affecting the blood volume or through referred pain.[22] In cardiac failure there may be fullness or a tense feeling across the forehead, and is the usual symptom of advanced venous congestion and may be replaced by headache.[23] A hissing or rushing sound in the ears is also often complained of. The blood volume is affected through venous congestion; or an intrathoracic cause obstructing venous return, or cerebral anaemia due to faulty heart action.[24]

In aortic insufficiency, causing cerebral anaemia, the headache is severe and throbbing.

The heart and great vessels have areas of referred pain in the third and fourth cervical and in the second and seventh dorsal nerves inclusive, except the fourth dorsal which supplies the lung. The third and fourth cervical is referred to the frontonasal region, the second and third dorsal to the mid orbital area, the fifth, sixth and seventh dorsal to the temporal area. In disease of the aortic valve or aortic arch there may be frontal headache, because of the association of the areas of the third and fourth cervical and second and third dorsal areas; excessive use of the eyes may increase the pain and may cause a conclusion that the headache is due to the eyes. So may temporal headache be caused through auricular disease or stretching as in mitral stenosis.[22]

In conclusion, a summary of headache in cardiovascular disease is presented. In some instances, I have extended from necessity my discussion into other fields of medicine and urge the practitioner to be cautious as to the diagnosis of the cause of headache in cardiovascular renal disease, and not attribute the same to eye strain, nasal pathology, or the like unless definite proof is present.

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Calcium In the Treatment of Pulmonary Tuberculosis

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THE value of lime in the treatment of pulmonary tuberculosis is an old tradition in medicine. Sydenham mentioned it and Pepper, in his system of medicine, speaks about the value of lime in the treatment of phthisis. About 1895 Dr. Twitchell, one of the earliest practitioners of this state, who started his work here while Wisconsin was still a territory, told me that it had been known for generations that masons, plasterers, and lime-kiln workers were less liable to tuberculosis than other men and that he had given cod-liver oil, brandy, and lime water for consumption for many years.

In the light of what we know now about the calcium-phosphorus balance and the physiological chemical histology of tuberculosis, there may be much truth in this ancient belief.

I have nothing new to offer, but I am going to try to reconcile this old idea to what we now know about the calcium-phosphorus balance, the activity of the tubercle bacilli and the response of the body to its presence.

Calcium is absorbed mostly in the upper part of the small gut. As the calcium salts are for the most part insoluble in an alkaline medium, the amount absorbed is dependent upon the acidity of this part of the intestine. Phosphorus is secreted in this part of

the intestine where it combines with the calcium. The absorption of the calcium phosphate takes place so long as this gut remains acid, but as the fluids become alkaline, tertiary calcium phosphate is formed and the calcium is lost in the stools. However, if but little calcium is being excreted in the lower bowel, reabsorption of the calcium may take place there. About 1912 and 1913 much was said and a number of papers read on the value of large doses of dilute HCL in the treatment of pulmonary tuberculosis and in many sanatoria milk, acidified with HCL, was used exclusively. The treatment was endorsed by many good men, and did seem to give good results in such patients as would submit to it. There were few patients, however, who did not rebel against it and the treatment was dropped. It is possible that this treatment, by increasing the acidity of the upper bowel, gave results by increasing the calcium absorption at this part. Likewise, in ketogenic diets, by increasing the acidity or at least lowering the alkalinity of the bowel, greater amounts of calcium are absorbed into the body.

There is practically no calcium in the soft tissues of the body. Outside of what we know as the fixed calcium, it is only formed in the blood serum. Understanding, of course, that the term "fixed calcium" is merely an expression of convenience, as the bones store up calcium and give it out as the liver does the glycogen. Normally, there are about eleven (11) m.mg. of calcium per one hundred (100) cubic centimeters of the blood serum, but none whatever in the blood corpuscles. Of this, four and one-half to five and one-half milligrams are dializable, five and one-half to six and one-half milligrams being indiffusible. Sherman suggests that the indiffusible part may be a loosely bound calcium albuminate and not in the ion form. The calcium ion concentration decreases as the phosphorus increases, that is, it is in an inverse proportion to the phosphorus.

The action of the dializable calcium, the ionic calcium, is that of reducing allergic reactions. The blood serum calcium also neutralizes excess of phosphorus in the tissues.

There is no essential difference between primary tuberculosis and that form we find in adults except in the matter of severity. In the child with tuberculosis infection, the reaction is not great, and the symptoms are for the most part like mild typhoid or a chronic diffuse adenitis. He is easily fatigued, usually more or less indifferent, loses some weight, shows a mild afternoon temperature and looks a bit anemic, but eventually, in the vast majority of cases, all symptoms clear up, most frequently without a diagnosis.

In the secondary infection, however, which may be years later, the reaction is greatly enhanced. The symptoms are about the same, but tremendously exaggerated. It seems generally agreed that this is a true allergic reaction of the sensitized tissues. Long says, "this altered activity seems to be expressed solely in the increased speed and intensity of the inflammatory response, the most important being in the vascular endothelium." The chemotactic effect of the tuberculosis bacilli is much greater, the widening of the capillaries is much increased and there is a much greater outpouring of the plasma and the wandering cells. This is not an immunity reaction, for as it has been pointed out, the greater the reaction the less favorable the outcome is bound to be. The prognosis is inversely proportionate to the reaction. This is a true allergic reaction.

In this light it seems to me logical that as the serum calcium lowers the cellular sensitivity of the tissues of the body, we may, by increasing the calcium in the serum, lower the violence of the reaction and give the patient a better chance.

Aside from the tuberculin, the exciting toxin of the tubercle bacillus, which is a protein, Anderson prepared from the microorganism a group of lipoids, which alone were capable of producing a typical tubercle. These lipoids are freed in vivo as follows: at the site of the implanted tubercle bacilli, large numbers of polymorphonuclear leucocytes pack tightly about the organisms and engulf them. However, it is known that in the presence of the tuberculosis exotoxin, there is a degeneration and weakening of these leucocytes, so that the bacilli are not

destroyed. Following this action of the polymorphonuclears, however, the mass is invaded by the large mononuclear leucocytes, which ingest the polynuclear leucocytes with their contained bacilli and then and then only are these lipoids set free. These large mononuclear, which are derived from the Kupffer cells of the liver and the wandering cells of the pulmonary alveoli are epithelioid cells. They revert to their epithelial type on the destruction of the polymorphonuclears and form part of the wall of the tubercle. Of these lipoids, Sabin and her coworkers find the most active one to be a phosphatide. So active is this phosphatide that she regards the disease of tuberculosis to be a phosphatide disease. I imagine, in its destructive action, it resembles that of silicic acid in silicosis. Now, is it not reasonable to think that the blood serum calcium may take up this phosphorus, convert it into harmless calcium phosphate and thus hinder the progress of the disease? Certainly, in the healing tubercle we do find plenty of calcium phosphate.

It seems logical, that by striving to keep up a high calcium balance, we may first reduce the sensitivity of the body tissues, in that way lowering the reaction and second neutralize the harmful phosphatides.

The easiest way, or perhaps the only way, of increasing the calcium balance is to give irradiated ergosterol plus calcium in any of its familiar forms. The concentration balance of the calcium is inversely that of the phosphorus and the calcium loss from the body is about one gram daily; thirty per cent through the kidneys and seventy per cent through the bowels. However, overfeeding calcium defeats its own purpose, as doing so alkalinizes the upper bowel and stops absorption.

How vitamin D works does not seem to be very clearly understood. Sherman says that the vitamin increases the absorption of calcium, but the main effect is undoubtedly a metabolic one. May it not be one resembling that of a catalyst, this being an organic catalyst?

Collip's solution or parathormone might suggest itself, but Trumper and Canterow state that its action is entirely dependent upon the presence of sufficient vitamin D and in the shortage of that vitamin its action is negative. Someone has stated that Collip's solution may work by freeing the phosphates, thus indirectly increasing the demand for calcium. If this is true, its use would be contraindicated in tuberculosis.

I have not had great opportunity to watch many patients under this treatment, but I am positive that the two score and more patients I have treated in the last three years in my general practice, with this in mind, have been greatly benefited. This I know. I have been giving ten (10) to fifteen (15) drops of viosterol three (3) times daily with two (2) grams of calcium lactate. I have had no untoward results.

SUMMARY

1. Pulmonary tuberculosis, being a phosphatide disease, neutralizing this form of phosphoric acid by increasing the serum calcium by the administration of vitamin D, is a logical treatment.
2. If it is true that increasing the calcium of the blood reduces allergic reaction, secondary tuberculosis, being an allergic disease, finds in it a rational method of treatment.

COTTONSEED ALLERGY

The basis for Samuel J. Taub's, Chicago (*Journal A. M. A.*, Aug. 4, 1934), report comprises 246 allergic patients, who had complete skin tests with some 300 separate allergens. Thirteen reacted specifically to cottonseed. Of this group, six patients had asthma, two had urticaria, two had eczema and three had perennial hay fever. This series would indicate that 5.3 per cent of allergic patients are sensitive to the protein of cottonseed. In testing these patients, the author employed the scratch test, with dry cottonseed extract. Intradermal testing is extremely dangerous because of the violent constitutional reactions that may follow. There is considerable danger in attempting desensitization, since even the smallest doses and the slightest increase in dosage may produce systemic reactions. It is therefore far safer to avoid contact to cottonseed than for one inexperienced in allergy to attempt desensitization. Persons sensitive to cottonseed usually manifest an eosinophilia somewhat higher than the average allergic patient. There are numerous sources of contact to cottonseed, and in order to avoid all possible exposure as a contactant, inhalant and ingestant, one should be familiar with the various substances, foodstuffs and articles containing the oil. A common source as an inhalant is the mattress.

Pathological Findings In Three Hundred and Twenty-Five Roentgen Examinations of Kidney, Ureter and Bladder Regions

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IN COMING before this body of experienced radiologists with such a hackneyed subject, I feel somewhat apologetic, but in a recent review of three hundred and twenty-five kidney, ureter and bladder roentgenograms, I found many surprising facts, which to me justify and form the basis of this discussion.

Too often, backache, following injuries or coming on insidiously, is treated as myositis or muscle strain when a roentgenogram would show an unsuspected fracture or other organic lesion. One is often surprised to find a kidney stone on the roentgenogram which was silent except for backache, and not infrequently, a sciatica is found to be due to an unsuspected metastatic carcinoma.

This study represents an analysis of three hundred and twenty-five kidney, ureter and bladder roentgenographic examinations, and of these one hundred and seventeen showed pathological findings. These were done in the course of the examination of four thousand patients seen in private practice.

The chief indications for making kidney, ureter and bladder roentgenograms are: backache, back injury, suspected metatasis to the pelvis or lumbar vertebrae, sciatica, sacroiliac pain, hematuria and pyuria.

There is one point in technique I would like to emphasize and that is the value of having the patient thoroughly prepared. This preparation consists in giving two ounces of castor oil at seven P. M. on the evening preceding the examination, omitting supper and breakfast other than a cup of coffee. At seven A. M., soap suds enemas are given until the water returns clear. This preparation in the majority of cases gives satisfactory results, but there are certain patients who will still have much gas especially over the right kidney. I have been able to displace it here to some extent by the use of a small compression bladder. Lateral roentgenograms are made routinely in suspected fractures, tuberculosis or where it is felt, after reviewing the anterior-posterior roentgenograms, that added information will be obtained.

The following table shows lesions found:

1.	Hypertrophic arthritis	58 cases
2.	Congenital anomalies	17 cases
3.	Metastasis	4 cases
4.	Pott's Disease	6 cases
5.	Paget's Disease	2 cases
6.	Charcot spine	1 case
7.	Calcifications	8 cases
8.	Fractures	6 cases
9.	Destructive arthritis of the hips	2 cases
10.	Congenital dislocations	1 case
11.	Perthes' Disease	2 cases
12.	Enlarged kidneys	3 cases
13.	Prostatic stones	3 cases
14.	Calcified pelvic vessels	2 cases
15.	Vesical calculi	2 cases
16.	Renal calculi	8 cases
17.	Ureteral calculi	5 cases
18.	Nephropathies	7 cases

HYPERTROPHIC ARTHRITIS

In this group are included cases showing hypertrophic arthritis of the lower dorsal and lumbar vertebrae and of the sacroiliac joints. In the majority of these cases it is hard to ascribe the patient's symptoms to the small amount of hypertrophic changes present. Many in this group had infected teeth, tonsils, prostate and endocervicitis and following the removal of these foci their symptoms disappeared. However, there were four cases whose roentgenograms showed marked hypertrophic changes with bridging of the vertebrae. One of these cases had such changes but had no symptoms referable to the back. The only symptom this patient complained of was tenderness over the tenth dorsal vertebra. The second case showed marked hypertrophic changes. This patient had back pain for twenty years which was made worse af-

ter bending or stooping. The third case showed marked hypertrophic changes of the lower dorsal vertebrae with bridging of the tenth, eleventh and twelfth dorsal vertebrae. This patient had a scoliosis and kyphosis. His back pain had been present for two years and was made worse by bending or by driving a car. The fourth case showed very marked hypertrophic changes of the lower dorsal and lumbar vertebrae. This man was well until he was knocked from a wagon by a car. Following this he developed severe backache.

Hypertrophic arthritis was found in forty-eight cases between the ages of forty and seventy; only ten occurred under forty. The role this condition plays in backache is a controversial question, but when this condition is present, injury undoubtedly aggravates it.

CONGENITAL ANOMALIES

Number of cases	Spina bifida occulta	Six lumbar vertebrae	Bilateral sacralization	Sacralization on the left	Fifth lumbar vertebra	First sacral vertebra
1	*				*	
1	*		*		*	
11	*					*
1	*				*	*
3		*		*		

Only one patient in this group with sacralization of the sixth lumbar on the left presented symptoms. A male, aged eighteen, had pain in the left hip and thigh for seven months. Examination showed the patient to have a tender spot in the region of the left sacroiliac. An orthopedic surgeon advised athrodesis of the lumbosacral joint and of the left transverse process, sacrum and ilium contacting with this rather than removing the process.

METASTASIS

Metastatic lesions were found in four cases. The primary malignancy was in the breast in two cases, one of which had metastasized to the left ilium and femur and the other to the eleventh dorsal vertebra and to the ribs.

One case of carcinoma of the ovary had extensive metastasis to the right pubic bone, right and left ischii.

One case of hypernephroma of the left kidney had metastasized to the upper half of the left femur with a pathologic fracture and to the lateral border of the left ilium. The patient later developed metastasis to the proximal end of the right humerus. This patient lived forty-five months after the nephrectomy.

TUBERCULOSIS

This condition was found in six cases, three of which were active, giving each patient pain. One case occurred in a male at the age of three. At the time of his examination he had an extreme kyphosis with very little pain. Two cases occurred in males in one of which the intervertebral disc was involved between the third and fourth lumbar; the other case had involvement of the anterior-superior border of the fourth lumbar. Both of these cases had had Albee operations and were free from backache, but the first one had a beginning tuberculosis of the left hip.

The three active cases were found in girls aged 21, 25 and 26 respectively. The patient aged 21 had Pott's disease of the eleventh and twelfth dorsal and second lumbar. She also had tuberculosis of both kidneys, ureter and bladder, lung and sternum. In spite of this extreme involvement, she appeared healthy. The girl, aged 25, had pain in the right and left lumbar region. There was extreme involvement of the ninth and tenth dorsal with a paravertebral abscess from the seventh to the eleventh dorsal. The patient had to stay in bed because of the severe pain. The girl, aged 26, was seen because of a tumor in the left lower quadrant and left groin. Examination showed a fluctuating superficial mass. She had Pott's disease of the twelfth dorsal and first lumbar vertebrae.

OSTEITIS DEFORMANS

Paget's disease was seen in two cases. The first a female, aged 63. This patient was first aware of the trouble four months before coming to the clinic, with a pain in the

left groin and hip. She had a typical involvement of the skull and pelvis. The second case was found in an examination to rule out renal calculi. The upper two-thirds of the right femur was the only bone involved. This was a female aged forty.

CHARCOT SPINE

This case had classical findings of tabes with typical Charcot spine of the first, second and third lumbar vertebrae.

SCHEUERMANN'S DISEASE

This is a most interesting case of ephiphysitis of the lower dorsal spine. A girl, aged eighteen, had a weak back for three years. Examination showed crepitus over the lower dorsal spine on bending, otherwise the examination was negative. The roentgenogram showed epiphysitis of the ninth, tenth and eleventh dorsal vertebrae.

Scheuermann's disease is found most often in males between the ages of fifteen and seventeen, producing a dorsal kyphosis which heals with little or no deformity. The changes consists in a roughing and cupping of the epiphysial discs. The wedge-shaped deformities of the vertebral bodies may vary and in extreme cases may arouse a suspicion of a tuberculous lesion. This condition occurs most often in people subjected to heavy work. The disease is always limited to the lower dorsal vertebrae and by the twentieth year, the deformity as a rule disappears.

CALCIFICATIONS

Calcifications were found in glands in the iliac arteries, in one or both ilio lumbar ligaments and a calcified urachus cyst. The calcification in the urachus cyst was found in a female, aged forty-seven. A few days before her examination, she was seized with a pain in the left flank. This pain was dull and aching in character, radiating to the right flank. Pain was made worse by movement. If she lay quietly she was free from pain. Jarring, walking or riding accentuated the pain. She had no urinary distress. On examining the patient, she had pain II on pressure just below the umbilicus. The roentgenogram showed a shadow the size of a small egg just internal to the right ischial spine. The patient was operated and a calcified tumor one inch by one and one-half inches was found attached to the dome of the bladder by a fibrous pedicle.

DESTRUCTIVE ARTHRITIS OF THE HIPS

This condition was found in two cases, one a female aged sixty-four who had pain in her back and hips for the past two years. The roentgenogram showed a destructive arthritis of both hips with hypertrophic arthritis of the right sacroiliac joint with intrapelvic arching of the floor of the acetabular cavities. The other case was in a female, aged thirty-eight, whose chief complaint was pain in the right hip of one year's duration. Two weeks following the incision of a right breast abscess, the patient developed a pain in the right knee which soon shifted to the right hip. She had pain on walking which was worse in stormy weather. Roentgenograms showed destructive arthritis of the right hip.

FRACTURES

Fractures were found in six cases, four of which the bodies of the lumbar vertebrae were involved. There was a fracture of the transverse processes in one case and a fracture in the descending ramus of the left pubis in another. Vertebral body fractures were present in two cases that had not been previously recognized. One, a woman, aged forty-seven, who fell down a flight of stairs fracturing a rib. She had some low back pain at the time, but her case was diagnosed myositis. The pain continued for six months and was worse on getting into or up from a chair. The roentgenogram showed a compression fracture of the first lumbar vertebra. The second case was a male, aged forty-two, whose chief complaint was low back pain and pain in the legs of three years' duration. Three years prior to his examination, he was knocked down and buried under a ton of ore. He was in the hospital for twenty-six days following which his legs were so weak that he was unable to walk for three weeks. He had pain in the back ever since the accident. His back always was sore and stiff. The examination revealed his back to be rigid. He was unable

to bend or stoop without considerable effort. The roentgenogram showed a compression fracture in the body of the third lumbar vertebra with a fracture of the left transverse process.

CONGENITAL DISLOCATION OF THE RIGHT HIP

One case of congenital dislocation of the right hip was found in a woman, aged forty-six. At the time of the examination, the pain in the hip gave her much more trouble than formerly in that she was tired after walking more than a block or two.

PERTHES' DISEASE

Perthes' disease was seen in two cases, each of long duration. At the time of the examination, both cases complained of pain in the affected hip when up and around which disappeared at rest. Examination revealed a limitation of abduction and external rotation. Roentgenograms showed typical old Perthes' disease.

ENLARGED KIDNEYS

Enlarged kidneys were found in two cases, one of which proved to be tuberculosis of both kidneys. This patient had tuberculosis of the chest and bladder. The other case had polycystic kidneys. This patient had an acute gall bladder which required a cholecystectomy. At the time of operation, both kidneys were enlarged and filled with cysts. There were also many cysts in the liver.

PROSTATIC STONES

This condition was found in three cases, one in a patient aged thirty-three and the other two in patients beyond middle age.

CALCIFIED ILIAC ARTERIES

This condition was found in two cases and in each instance was a part of a generalized arteriosclerosis.

VESICAL CALCULI

These two cases both occurred in elderly men. One case showed a bladder stone to be just below the right sacroiliac joint. This patient had hypertrophy of the prostate with an enlarged bladder which accounts for the unusual position of the stone.

RENAL AND URETERAL CALCULI

Renal calculi were found in eight cases and ureteral calculi in five cases. The kidney and two ureteral stones were removed surgically. In the other three cases of ureteral stones, the stones passed after ureteral dilatation.

NEPHROPATHIES

Accurate diagnosis of this group was made by the use of retrograde and intravenous pyelography. The following conditions were found: Three cases of infected hydronephrosis and two cases of large hydronephrotic sacs and three cases of tuberculosis.

SUMMARY

This study represents the pathological findings in three hundred and twenty-five routine roentgenographic examinations of the kidney, ureter and bladder regions.

ADOPTION PRACTICES AND THE PHYSICIAN

R. L. Jenkins, Chicago (*J. A. M. A.* Aug. 11, 1934), believes that it is the duty of physicians to familiarize themselves with the factors determining good adoption practice and, whenever possible, to cooperate with careful child-placing agencies. Before placement of a child in adoption is decided on, a canvass should be made of all possible resources for aiding the parents to maintain the child. Adoption should be resorted to only if a satisfactory arrangement of maintaining the child with one or both parents is impossible. Placement for adoption should not be permitted unless the home, after careful investigation, appears to be suitable. An effort should be made to ascertain the motive prompting the prospective parents to adopt a child. The state of health of the prospective parents should be determined with especial attention to the detection of tuberculosis and venereal diseases. The personalities and personality defects of the prospective parents should be noted, and their ability to provide a child with the security and advantages usual to the community determined. No placement for adoption should be permitted unless the child after a careful study appears suitable. Such study should include exploration of the family history when this is possible, review of the developmental history of the child, physical examination, psychologic examination and observation of the child's behavior. Placement for adoption should be individualized. It is desirable that a child be placed in a home capable of meeting his needs, and of a level of standards suitable to his abilities. Legal responsibility for the child should be transferred to a suitable social agency before placement for adoption. No legal adoption should be permitted until a probationary period reveals that a reasonably satisfactory parent-child adjustment has been established and that the child is adjusting in the home, and until reexamination of the child establishes that he is suitable for adoption. The probationary period should ordinarily not be less than a year. In doubtful cases it should be extended. Children not suitable for adoption may be cared for in boarding homes, under the supervision of suitable child-placing agencies or in institutions.

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OFFICIAL PUBLICATION OF THE STATE MEDICAL SOCIETY OF WISCONSIN

« « « EDITORIALS » » »

The Vaso-Dilators in Coronary Disease

JUST six years ago, J. H. Musser, in a very encouraging article published in the J. A. M. A. described the beneficial results which might be obtained by the use of theophyllin ethylene diamine in angina pectoris. Although subsequent experience has more than proved his claims, the subject has received relatively little attention in the medical literature and this type of therapy has not been employed nearly as extensively as its importance would warrant. True, the cardiologists and a small group of internists have for some years made considerable use of the xanthine vaso-dilators, but there are still many physicians who are either unaware of the existence of these drugs or who have not yet come to a realization of their full worth. There is now sufficient experimental as well as clinical evidence to provide ample proof that they are capable of producing a definite and sustained vaso-dilating action on the coronary arteries, and, in the dosage required for such action, there are practically no undesirable side-effects even when administered daily over a period of years.

Theophyllin ethylene diamine, the most popular drug in the group, is composed of three parts of theophyllin to one part of ethylene diamine. The latter was added to counteract any depressant action which the theophyllin might exert on the myocardium. This preparation was first marketed under the name of euphyllin which was obtained from Germany. A little later the name was changed to metaphyllin. A few years ago an American firm began to import the active ingredients from Germany and manufactured the tablets in this country, marketing them under the name of thephyldine. More recently, the Council on Pharmacy of the American Medical Association adopted the term aminophyllin to cover all brands of theophyllin ethylene diamine. Aminophyllin is put up in tablets of one and one-half grains which is the accepted average dose. Several other preparations, chemically related, have been placed on the market. Theobromine, which is relatively inexpensive, is frequently substituted, the equivalent dose being five grains. Theocin in one and one-half grain doses, or "theocin soluble" (one grain of sodium acetate added to each one and one-half grains of theocin) in two and one-half grain doses has been recommended by some and is said to be cheaper. Rarely gastric intolerance may be encountered and to combat this, theocalcin and phyllicin have been advocated. Theocalcin is theobromine calcium salicylate which can be obtained in tablets containing seven and one-half grains.

To conform to the long-established empirical administration of potassium iodide in the treatment of arteriosclerotic conditions, theocalcin tablets containing in addition one and one-half grains of KI are available. Phyllicin is the calcium salicylate salt of theophyllin and is marketed in four grain tablets. All of these preparations are effective but the general concensus of opinion among those who have had the widest experience in this field favors theophyllin ethylene diamine (aminophyllin) as the most potent and dependable of the group.

This type of therapy is indicated in all cases of impaired coronary circulation, whether due to so-called coronary "spasm" or actual organic changes in the arteries themselves. The medication should be started with the first manifestations of coronary insufficiency, frequently characterized by such vague signs as a sensation of fulness and gas in the stomach on exertion, indefinite discomfort or pressure symptoms in the chest or attacks of paroxysmal dyspnea in persons of forty or over. Even in well marked angina pectoris with the characteristic precordial or substernal pain radiating to the left arm, striking results can be obtained in the large majority of cases. There is some evidence to indicate that the continued use of this type of therapy in cases of coronary sclerosis actually prolongs life by postponing the terminal attack of angina pectoris or coronary thrombosis. Many cardiologists make a practice of prescribing aminophyllin following coronary occlusion, starting as soon as the patient is able to take anything by mouth and continuing it indefinitely, preferably for the rest of the patient's life.

In the opinion of the writer the discovery of the value of theobromine, theophyllin and their derivatives in the treatment of coronary sclerosis is one of the outstanding advances of the past decade for it affords us a weapon with which we can strike at the underlying pathology of this dread disease and actually retard the progress, in many instances, of the degenerative changes in the coronary arteries which would otherwise lead the patient down a distressing and painful path to an early grave. C. M. K.

Promptness

PHYSICIANS who have attended even national meetings where speakers have been switched at the last minute and the program fails to follow the schedule with variations of as much as forty-five minutes, will be particularly pleased with the announcement carried in this issue of the Journal concerning our own state meeting at Green Bay on September 11th to 14th. The Committee on Scientific Work asserts that at no time will the program vary more than five minutes from the time schedule published in this issue. There will be no switching of speakers and sessions scheduled to start at 8:30 in the morning will be called to order at exactly 8:30.

A timed meeting may be an additional strain on the presiding officer but it is of great convenience to the membership and we are happy to observe that the precedent established in earlier years will continue to receive strict adherence at the 1934 session.

Splendid Cooperation

THAT the best results from the public viewpoint in all so-called public health efforts can be attained only through a closer cooperation with the family physician, has long been a contention of organized medicine. We, in Wisconsin, had a splendid demonstration of the truth of this statement in the planning and execution of the Civil Works Administration Health Project in this State.

We need not recount here the exact organization of this project except to say that organized medicine was called upon to administer and execute the program and that the work was done through and by the family physician. That the public profited over any other method has been clearly demonstrated in comparing the results attained in Wisconsin with those secured elsewhere. We wish to acknowledge publically the high services of Dr. W. C. Werrell, of Madison, then administrator of the project, who worked through the profession to attain the public end that was possible in no other way.

. . . . THE PRESIDENT'S PAGE . . . .

The Annual Meeting

ON SEPTEMBER 11, 12, 13 and 14 your State Society will hold its annual meeting at Green Bay. For some years these meetings have been held alternately at Milwaukee and Madison but because this is the tercentennial of the founding of Green Bay, and prompted by the success of the previous meeting held there, the council decided to deviate from the rule.

No one who has not been responsible for the scientific program for these annual meetings realizes the amount of thought and hard work which enters into their creation. There is a general tendency to take for granted a certain standard of excellence, and not many men give much consideration to the amount of labor represented by the accomplishment. Arnold Jackson and his committee have been working since June, 1933, on the program which is to be presented in Green Bay and a careful perusal of its arrangement should convince everyone of the benefits to be derived from attendance at the various sessions. There are several departures from the plan of previous meetings which should prove interesting and which probably will stimulate permanent changes in the form of future programs. This meeting is the first to be held in two years. Doctor Nadeau's chairmanship of the general committee and the excellent organization of the Brown–Kewaunee–Door County Medical Society assures us of an unusually successful session.

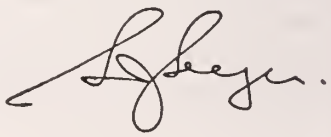
In a recent discussion of the value of the Medical Society to the practitioner of medicine, William Mayo said, "I have never quite understood why so many men do not belong to their county and state medical societies. I have questioned such men sometimes. They usually say that they do not find the societies of much value. But they could help to make them valuable. They say they can get the same information from books and journals. But individuals who seek isolation soon find that it is not necessary for them to take good journals and books. They begin to rely on cheap medical journals which advertise certain remedies which it is hoped will take the place of medical consultations. After a time you will find that the dust gathers even on these journals, unopened."

The annual meeting marks as well the time of change in the administration of the Society, and I will then turn over to another the office of president. While I feel that the occasion calls for no extended valedictory efforts, I cannot refrain from saying a few of the things which come to mind.

The first is the admonition which I voiced in my first editorial—to keep intact and constantly strengthen the organization of the County Society units and of the State Society. The attainment of this objective is worthy of constant effort and sacrifice on the part of all.

My second thought has to do with my experience in Medical Society work during the past twelve years. During that time, in various offices and on various committees, I have come to know many men in our profession, men with a great variety of interests and with a consequent variety of viewpoints. I am proud to say that in all that time I have never known a man, either in office or on a committee, whose decisions on matters affecting the welfare of medicine were based on selfish grounds. When, in addition, I consider the idealism and the devotion to Society affairs which have been displayed by so many men, I feel reassured of the future.

Finally, I ask you to give to my successor the loyal support which has been given your officers during the past year. It will be a year of difficulty, without doubt, one in which important decisions of policy will of necessity be made, but I am sure that with the leaders you have chosen it will be one of the brightest in the history of our Society.



Society Proceedings

COLUMBIA

Members of the Columbia County Medical Society met on August 13th at a six-thirty o'clock dinner at the Pines Hotel, Wisconsin Dells. Unique entertainment was afforded by Chief Silver Tongue, Indian singer of the Dells.

The guest speaker, Dr. G. H. Ewell of Madison, gave an interesting, illustrated talk on "Diagnosis and Treatment of Diseases of Rectum and Anus."

The business meeting consisted chiefly of discussions and motions regarding the federal aid system as it affects the Society. H. Y. F.

POLK

A meeting of the Polk County Medical Society was held on July 19th at the cottage of Dr. J. A. Riegel on Deer Lake near St. Croix Falls.

The program for the evening was as follows:

"Some Phases in the Diagnosis and Treatment of Malignancy" by Dr. W. T. Peyton, assistant professor of surgery, University of Minnesota.

"Relationship of Public Health and the Medical Profession" by Dr. W. A. O'Brien, pathologist, University of Minnesota Hospital.

SHAWANO

Dr. M. H. Fuller of Green Bay was the main speaker at a meeting of the Shawano County Medical Society on July 26th. The subject of his talk was "Industrial Eye Injuries" which was illustrated with motion pictures.

TREMPEALEAU-JACKSON-BUFFALO

On Friday, July 27th, the Society members and their guests greatly enjoyed a cruise on the Mississippi River aboard the "North Star". This is another of the many outings made possible through the kindness of Dr. and Mrs. W. J. Mayo. Dr. Spencer Beebe, Councilor of the 7th District, and Mrs. Beebe were special guests. There were sixty-three members included in the party, and with weather conditions ideal, every one agreed it was a day long to be remembered.

On June 7th, the T.-J.-B. County Medical Society met at Arcadia. Eighteen members were in attendance. The program consisted in discussion of medical economics. Dinner was served at the Hotel Arcadia, with the doctors of Arcadia as hosts. Previous to the meeting a golf match was held on the local course.

The Country Club at Black River Falls was the meeting place of the Society, June 21st, with Drs. Irwin and Robert Krohn as hosts. Golf and a chicken dinner preceded the regular meeting.—R. L. M.

NINTH COUNCILOR DISTRICT

The summer meeting of the Ninth Councilor District Medical Society was held at Marshfield on the afternoon and evening of August 16th. At 3:00 P. M., a demonstration of cases took place at St. Joseph's Hospital by the staff as follows:

"Agranulocytic Angina" by Dr. J. B. Vedder.

"Unusual Bone Lesions" by Dr. R. P. Potter.

"Perthes' Disease" by Dr. A. L. Millard.

"Postoperative Pulmonary Complications" by Dr. P. F. Doege.

"Some Aspects of Thyroid Disease" by Dr. K. H. Doege.

"Injuries to the Kidney" by Dr. W. G. Sexton.

"Spinal Cord Injuries" by Dr. R. S. Baldwin.

"Malignancies in Head and Neck" by Dr. Lyman A. Copps.

"Atypical Appendicitis" by Dr. H. A. Vedder.

Following this a six-thirty o'clock dinner was served at the Hotel Charles after which the following program was given:

"Treatment of Thrombophlebitis with Leeches" by Dr. H. E. Marsh, Madison.

"Toxemia of Pregnancy" by Dr. Carl S. Harper, Madison.

TENTH COUNCILOR DISTRICT

A meeting of the Tenth Councilor District was held at Pine Crest Lodge, Iron River, Wednesday, August 15th beginning at 1:30 P. M. Speakers on the afternoon program were:

Dr. James K. Anderson, Minneapolis, who spoke on "Ischial Rectal Fistula and Abscesses."

"Supracondylar Fractures of Humerus" was the subject of an address by Dr. Myron O. Henry, professor of orthopedic surgery, University of Minnesota.

"Advances in Diathermy in Relation with Treatment of Upper Respiratory Tract Infections" was the title of a talk delivered by Doctor Nelson of Duluth.

Addresses during the evening session were given by Mr. J. G. Crownhart, Secretary of the State Society; Dr. F. G. Johnson, Iron River, Councilor for the Tenth District, Dr. T. J. O'Leary, Superior, President-Elect of the State Society and Dr. S. E. Gavin, Fond du Lac, Councilor of the Sixth District.

THE WOMAN'S AUXILIARY

MRS. EBEN J. CAREY, Milwaukee, *President*
MRS. ROCK SLEYSTER, Wauwatosa, *President-elect*
MRS. GEORGE H. EWELL, Madison, *Secretary*
MRS. R. G. ARVESON, Frederic, *Treasurer*
MRS. WALTER A. FORD, Sheboygan, *Press and Publicity Chairman*
MRS. R. W. TOMLINSON, Wilmington, Del., *National President*

WOMEN'S AUXILIARY

To The

STATE MEDICAL SOCIETY OF WISCONSIN

Green Bay

Sept. 11–14, 1934

Headquarters: Hotel Northland, Green Bay

FINAL PROGRAM

TUESDAY, SEPT. 11, 1934

P. M.

5:30 Executive Board dinner — Colonial Room, Northland Hotel. Advisory Council of State Auxiliary to attend dinner.

Executive Board meeting following the dinner. Mrs. Eben J. Carey, presiding.

WEDNESDAY, SEPT. 12, 1934

A. M.

10:00 General Meeting—Crystal Ballroom, Northland Hotel. Mrs. Eben J. Carey, presiding.

Program of First Session

Invocation

Address of Welcome
Mrs. Donne F. Gosin, Green Bay, President, Woman's Auxiliary to the Brown–Kewanuee–Door County Medical Society.

Response
Mrs. Henry J. Gramling, Milwaukee, Past President, State Auxiliary, 1931–32.

In Memoriam
Names of our deceased members to be read by Mrs. Fred Nause, Sheboygan, Past President, State Auxiliary, 1932–33.

Announcements by Annual Meeting Chairman
Mrs. A. J. McCarey, Green Bay.

Roll Call of County Auxiliaries
Executive Secretary

Minutes of the Fifth Annual Meeting
Mrs. George Ewell, Madison, Secretary

President's Report
Mrs. Eben J. Carey, Milwaukee

President's Announcements: Nominating Committee

Reports:
Treasurer—Mrs. Raymond G. Arveson, Frederic.
Standing Committees (3 minutes each):
Organization—Mrs. T. Ochsner Nuzum, Janesville.
Program—Mrs. Oscar Friske, Beloit.
Public Relations—Mrs. James A. Sargent, Milwaukee.
Hygeia—Mrs. Fred Nause, Sheboygan.
Revisions—Mrs. Robert E. Fitzgerald, Milwaukee.
Press and Publicity—Mrs. Walter A. Ford, Sheboygan.
Historian—Mrs. Fred A. Leighton, Sheboygan.

New Business:
Report of Credentials and Registration
Mrs. Oscar Friske, Beloit, Chairman.

P. M.

1:00 Luncheon and orchestral program at Palm Garden. Tickets, 85 cents. Transportation provided.

3:00 Tour of city to points of historical interest. Tea at Fort Howard Hospital.

8:00 Bridge party—Crystal Ballroom, Northland Hotel. Both auction and contract bridge. Light refreshments.

THURSDAY, SEPT. 13, 1934

A. M.

10:00 General Meeting—Crystal Ballroom, Northland Hotel. Mrs. Eben J. Carey, presiding.

Program of Second Session

Reading of minutes of First Session.
Final Report of Committee on Credentials and Registration.
Report of Nominating Committee.
Election of Officers.

Introduction of New Officers and presentation of gavel.
Speaker—Dr. F. L. Rector of the American Society for the Control of Cancer.

P. M.

1:00 Luncheon at Oneida Golf Club followed by golf and bridge. Tickets, 65 cents.

or

Luncheon at Fannie Joannes Memorial Hall with a program consisting of children's dances, a reading and a musical selection. Tickets, 65 cents.

3:30 Post-Convention Board meeting — Italian Room, Northland Hotel. Mrs. Rock Sleyster, presiding.

6:45 Annual Dinner—Crystal Ballroom, Northland Hotel.

A WELCOME FROM ANNUAL MEETING CHAIRMAN

As Chairman of the 1934 Annual Meeting of the Woman's Auxiliary to the State Medical Society of Wisconsin, I wish to extend a hearty welcome to the wives of Wisconsin doctors and hope they will attend the annual meeting in large numbers.

For three hundred years visitors have journeyed to Green Bay to partake of its hospitality. This year it is our privilege to extend our welcome to the Wisconsin doctors and their families.

It is our earnest desire that all will come, and help celebrate Green Bay's three hundredth birthday.

ARLAN JOANNES MCCAREY (Mrs. A. J.)

THE PRESIDENT'S MESSAGE

Dear Friends:

Our annual meeting this year should be a real temptation to you, being held in Green Bay where the Historical Tercentennial is being celebrated. Our Convention Chairman, Mrs. A. J. McCarey, and her committee have planned a most interesting and entertaining program. They will take us to the historic spots in Green Bay among which is the Fort Howard Hospital where Dr. Beaumont, Wisconsin's outstanding Pioneer in Medicine, worked. We will have luncheon at the Back Bay Pavilion where President Franklin Roosevelt spoke during his recent visit to Wisconsin. Much time and effort has been given to plan for your entertainment and comfort.

It is important that each of you attend the business meetings to know what the Auxiliaries are doing and what they have accomplished so that you can answer questions pertaining to the Auxiliary in an enlightening manner.

The year just closing has been a joy. We have doubled our membership in the State and because of your real cooperation our subscriptions to "Hygeia" had a 200 per cent increase. More medical speakers were placed before lay organizations than ever before and each County Auxiliary took a real interest in some Public Relations work.

My thanks and expression of appreciation goes to each of you for your earnest assistance, interest and cooperation. To the members of the Advisory Council, I wish to express my feeling of sincere gratitude for their ever ready assistance and counsel.

To my successor, Mrs. Rock Sleyster and her Board, my heartiest wishes for a year full of joy and achievement.

Most sincerely,

HELENE M. CAREY, (Mrs. Eben J.)

AUXILIARY INFORMATION

Registration

Auxiliary members and guests should register at Auxiliary Headquarters as soon as possible after arrival so that they will be sure not to miss a single thing on the Auxiliary program. The registration desk will be on the mezzanine of the Northland Hotel. Every one is asked to register,—members of the Executive Board, delegates, alternates, members and guests. You will receive your program and badge when you register.

Registration hours are 9 A. M. to 5:30 P. M. Wednesday and Thursday. Badges must be secured before luncheon reservations are made.

Luncheon reservations should be made in advance at the registration desk.

To Delegates and Alternates

Credential cards have been forwarded to the president of each County Auxiliary and can be obtained from them. Be sure to bring your credential card with you when you register at the Northland Hotel in Green Bay.

Pre-Convention and Post-Convention Board Meetings

Members of the Executive Board are the state officers, state chairmen, directors of the State Auxiliary, and county presidents. An invitation is also extended to the presidents-elect of county auxiliaries.

The pre-convention meeting of the Executive Board will be held Tuesday, September eleventh, in the Colonial Room of the Northland Hotel following a 5:30 dinner.

The post-convention meeting will be held at 3:30 P. M. Thursday in the Italian Room of the Northland Hotel.

Hygeia Exhibit

The Bureau of Exhibits of the American Medical Association has reserved a HYGEIA display for the Woman's Auxiliary. This exhibit is to be installed at the Northland Hotel, headquarters of the Auxiliary.

News Items and Personals

The International Assembly of the Inter-State Postgraduate Medical Association of North America will be held in the Public Auditorium, Philadelphia, November 5–9, 1934. Many distinguished teachers and clinicians will appear on the program. A major list of the names of the contributors to the program, with other information, appears on page 711 of this Journal. All members of the State Medical Society of Wisconsin are cordially invited to attend. Registration fee of $5.00 admits all members of the profession in good standing.

—△—

Dr. Nelson A. Bonner, formerly of Beaver Dam, has become associated with Dr. F. E. Turgasen of Manitowoc.

—△—

A number of physicians have announced their candidacies for the office of coroner in the several counties. They are Drs. Mead Burke of Madison; A. J. Knauf of Sheboygan; John A. Schindler of Monroe, and A. L. Kyllo of Superior.

—△—

Dr. F. H. Ferguson, formerly of Manitowoc, has returned to Elroy, where he had been practicing before going to Manitowoc.

—△—

Dr. C. A. Dawson of River Falls was nominated as the Republican candidate for congressman from the Ninth Wisconsin District, at a meeting of Republicans held in Eau Claire in July.

—△—

Dr. J. W. Prentice of Ashland in July completed four months postgraduate work at the University of Minnesota Hospital, the Eitel Hospital and Glen Lake Sanatorium.

BIRTHS

A daughter to Dr. and Mrs. A. J. Baumann, Milwaukee, on July 20th.

ENGAGEMENT

The engagement of Dr. Johannes Jensen, Milwaukee, and Miss Anita Netzow, Milwaukee, was announced on July 22nd.

MARRIAGES

Dr. Paul T. O'Brien of Menasha to Miss Margaret M. Dohr, Appleton on July 31st at Appleton.

Dr. H. L. Greene, Madison, to Miss Isabelle Winterbotham, also of Madison on August 7th at Madison.

DEATHS

Dr. O. J. Gutsch, Sheboygan, died on August 11th at his home.

Dr. Gutsch was born in Sheboygan, March 2, 1865. He was a graduate of Columbia University College of Physicians and Surgeons in the year 1886. Following internship, Dr. Gutsch came to Sheboygan where he began his practice. At various times, he served as city physician and health officer.

He is survived by his widow.

Dr. Charles H. Jahn, North Milwaukee, died on July 25th in his office of heart disease.

He was born in Thiensville and was a graduate of the University of Wisconsin and of Rush Medical College in the year 1895. He had been practicing in North Milwaukee since graduation and served as health commissioner there for twenty years.

Dr. Eugene Krohn, Black River Falls, died July 11th of heart disease.

Dr. Krohn was born in Chicago, February 10, 1866. He attended the University of Minnesota and was a graduate of Rush Medical College in 1889. In 1892 he came to Black River Falls to establish his practice.

He is survived by his widow, three sons, Victor of Detroit, Michigan, Dr. Irwin and Dr. Robert of Black River Falls, and one daughter.

Dr. S. A. Krumme, Fond du Lac, died on July 17th at his home.

He was born April 10, 1865 in Freeport, Illinois. He was a graduate of Rush Medical College in 1886 which was followed by two years of study in Berlin and Vienna. In 1891 he came to Fond du Lac to establish his practice.

He is survived by his widow and two daughters.

SOCIETY RECORDS

New Members

E. M. Cleary, 830 E. Ogden St., Milwaukee.
Cyril F. Turney, 1409 N. 6th St., Milwaukee.
Royal V. Sherman, Knapp.
Eugene S. Busby, Laona.
Jacob I. Horwitz, 735 N. Water St., Milwaukee.
P. J. Majerus, Fort Atkinson.
O. H. Hanson, Fort Atkinson.
H. G. Hilliard, Minong.
W. W. Ford, Green Bay.
W. A. Sneeberger, Ephraim.
E. S. McNevins, Green Bay.
Elmore P. Huth, Belgium.
F. G. Jensen, 136 Main St., Menasha.
P. A. Quilling, Menomonie.
James J. Barrock, 2436 W. State St., Milwaukee.
James P. Conway, 2522 E. Capitol Drive, Milwaukee.
R. C. Warner, 208 E. Wisconsin Ave., Milwaukee.
William Houghton, 2917 N. Oakland Ave., Milwaukee.
E. F. Cummings, Oshkosh.

Change in Address

M. E. Rideout, Gordon to Glen Flora.
H. J. Schilling, Platteville to Denmark.

Program Completed for Green Bay Meeting September 11-14; Large Attendance Anticipated at Annual Sessions

EVERYTHING is in readiness for the 93rd Anniversary Meeting of the State Medical Society of Wisconsin at the Columbus Community Club, Green Bay, Tuesday, Wednesday, Thursday and Friday, September 11–14.

Prefaced by a golf tournament on Tuesday, Sept. 11th, and a meeting of the House of Delegates on Tuesday evening, the three-day scientific program will feature sixteen distinguished guests from other states. Section meetings and dry clinics will afford a diversity of program material that members may hear and see that which is most applicable to them in their own practice. Every effort has been made by the Committee on Scientific Work to provide subjects and presentations that will be of the greatest possible practical value. Upwards of ninety Wisconsin members will participate in this program in addition to the out-of-state guests.

Distinguished speakers from other states who will appear during the three-day meeting are:

1. Dr. Olin West, Secretary and General Manager, American Medical Association.
2. Dr. Herman Kretschmer, Clinical Prof. Surg., Rush Medical College.
3. Dr. Gilbert J. Thomas, Assoc. Prof. Urology, Univ. of Minnesota.
4. Dr. Dean Lewis, Past President, American Medical Association, Baltimore, Md.
5. Dr. Fred J. Hodges, Prof. Radiology, Univ. of Michigan.
6. Dr. Leo G. Rigler, Prof. Radiology, Univ. of Minnesota.
7. Dr. Harry Mock, Assoc. Prof. Surgery, Northwestern Univ.
8. Dr. Loyal Davis, Prof. Surgery, Northwestern Univ.
9. Dr. Herbert Z. Giffin, Mayo Clinic.
10. Dr. Ellis Fischel, Assoc. Prof. Surgery, St. Louis Univ. School of Medicine.
11. Dr. Robert Dinsmore, Cleveland Clinic.
12. Dr. George Eusterman, Mayo Clinic.
13. Dr. E. W. Ryerson, Prof. Orthopedic Surgery, Northwestern Univ.
14. Dr. W. R. MacAusland, Boston.
15. Dr. James Hayes, Minneapolis, Minn.
16. Dr. E. Starr Judd, Past President American Medical Association, Mayo Clinic.
17. Dr. O. H. Wangensteen, Assoc. Prof. Surgery, Univ. of Minnesota.

The address of the incoming President, Dr. T. J. O'Leary of Superior, will be presented at the Columbus Club on Wednesday evening. At this session members will also hear the report of action taken by the American Medical Association at its recent Cleveland sessions.

Thursday evening will be devoted to the Annual dinner which is by custom informal. Presentation of three Council Awards will be made at the conclusion of the dinner. Addresses will follow by Dr. Dean Lewis, Retiring President of the American Medical Association and Dr. Olin West, two years Field Secretary and ten years Secretary and General Manager of the American Medical Association. Dancing will conclude the evening.

Eleven scientific exhibits will be presented within the main auditorium of the Columbus Club. These will include:

1. Diseases of the Skin illustrated by color photography—Dr. R. L. McIntosh and M. E. Diemer, Madison.
2. Exhibit on Cancer—Wisconsin Committee, American Society for the Control of Cancer.
3. Treatment of Surgical Diabetes—Dr. E. L. Sevringhaus, University of Wisconsin.
4. Use of Sodium Amytal—Department of Neuropsychiatry, University of Wisconsin.
5. Exhibit of Positions of the Heart—Dr. W. E. Sullivan, University of Wisconsin.
6. Work of the American Medical Association.
7. Radium—Dr. A. O. Olmsted, Green Bay.
8. Radiological Section, State Medical Society of Wisconsin.
9. Infra-Red Photography in Clinical Medicine—Leo Massopust, Marquette University.
10. Injection of Blood Vessels and the Bundle of His in the Heart—Dr. P. F. Swindle, Marquette University.
11. Wisconsin Anti-Tuberculosis Ass'n.

In addition to the scientific exhibit, fourteen commercial-technical exhibits will be found in the lobby of the main floor and facing the Rathskellar on the basement floor. Registration for members will be found on the basement floor of the Columbus Club

The Northland Hotel

while registration for members of the Auxiliary and visiting ladies will be held on the Mezzanine Floor of the Northland Hotel.

The commercial-technical exhibits follow:

1. Kremers–Urban Co., Milwaukee.
2. Medical Protective Co., Wheaton, Ill.
3. Roemer Drug Company, Milwaukee.
4. Scanlan–Morris Company, Madison.
5. General Electric X-Ray Corp., Milwaukee.
6. Mellin's Food Company, Boston.
7. Sharp & Smith, Chicago.
8. Physicians and Hospitals Supply Co., Minneapolis.
9. H. G. Fischer and Company, Milwaukee.
10. E. H. Karrer Company, Milwaukee and Madison.
11. Horlick's Malted Milk Corp., Racine.
12. Hurley X-Ray Company, Milwaukee.
13. Mead Johnson and Company, Evansville, Ind.
14. Victor Mueller and Company, Chicago.

Upwards of seventy-five members will enter in the Annual Golf Tournament to be held on the course of the Oneida Golf Club on Tuesday, Sept. 11th. The course will be open for practice play in the morning and a buffet luncheon at noon will preface the opening of tournament play in the afternoon. Prizes including the President's and Secretary's Cups will be awarded at a golf dinner at the Club following the end of tournament play. Reservation blanks for entry were mailed to all members late in August. Members should return these blanks to Dr. W. P. Tippet, Green Bay, but late entries will be accepted and may qualify for all except the President's and Secretary's Cup for which entries must be received at least twenty-four hours prior to the opening of the tournament. Handicaps of winners and prizes will be published in the October issue of the Journal.

The Scientific Program

WEDNESDAY, SEPTEMBER 12

8:30–10:00 Dry Clinics

Case Presentations by Green Bay Physicians.

Extrophy of the Bladder.
Dr. L. D. Quigley.

Open Operation for a Foreign Body in the Lungs.
Dr. J. R. Minahan.

Demonstration of an Early Case of Complete Spondylolisthesis.
Dr. R. M. Carter.

Gas Gangrene Infection of Leg with Recovery.
Dr. Eugene S. Knox.

The Diabetic as a Surgical Risk.
Dr. E. M. Jordan.

Medical Discussion.
Dr. Harold E. Marsh, Madison.

Surgical Discussion.
Dr. F. Gregory Connell, Oshkosh.

10:00–12:00 Section Meetings

Section on Medicine. Dr. W. A. Killins, Green Bay, Presiding

10:00 Agranulocytosis.
Drs. T. L. Squier and F. W. Madison, Milwaukee.
Discussion. Dr. F. Eigenberger, Sheboygan.

10:30 Artificially Induced Fever in the Treatment of Disease. Lantern Slides.
Dr. J. E. Rueth, Milwaukee.
Discussion. Dr. Edward D. Schwade, Milwaukee.

City Hall

Columbus Community Club where all scientific sessions will be held

11:00 Scarlet Fever.
Dr. H. T. Barnes, Delafield.
Discussion. Dr. E. M. Jordon, Green Bay.

11:30 Complete Thyroidectomy as a Treatment for Certain Decompensated Heart Conditions.
Dr. Harold E. Marsh, Madison.
Open Discussion.

Section on Surgery. Dr. W. W. Kelly, Green Bay, Presiding

10:00 Pitfalls in Abdominal Surgery.
Dr. Victor F. Marshall, Appleton.
Discussion. Dr. Eugene S. Sullivan, Madison.

10:30 Treatment of Duodenal Ulcer.
Dr. F. Gregory Connell, Oshkosh.
Discussion. Dr. D. J. Twohig, Fond du Lac.

11:00 Carcinoma of the Large Bowel.
Dr. F. A. Stratton, Milwaukee.
Discussion. Dr. W. J. Tucker, Ashland.

11:30 The Prevention and Treatment of Complications Following Cholecystectomy.
Dr. James M. Hayes, Minneapolis.
Discussion. Dr. S. E. Gavin, Fond du Lac.

Section on Urology. Dr. Alf Gundersen, La Crosse, President, State Urological Society, Presiding

10:00 Tuberculous Disease of the Kidney.
Dr. Gilbert J. Thomas, Assoc. Prof. of Urology, University of Minnesota, and Dr. Thomas J. Kinsella, Oak Terrace, Minn.
Discussion. Dr. W. M. Kearns, Milwaukee.

10:30 Prostatic Resection.
Dr. Herman L. Kretschmer, Clin. Prof. of Surgery, Rush Medical College, Chicago.
Discussion. Dr. W. J. Carson, Milwaukee.

11:00 Common Infections of the Urinary Tract and their Treatment.
Dr. James C. Sargent, Milwaukee.
Discussion. Dr. H. M. Stang, Eau Claire.

11:30 Abnormal Positions of the Kidney. Lantern Slides.
Dr. W. G. Sexton, Marshfield.
Discussion. Dr. Alf Gundersen, La Crosse.

Section on Obstetrics and Gynecology. Dr. W. E. Leaper, Green Bay, Presiding

10:00 The Management of Abortion.
Drs. R. S. Cron and A. H. Lahmann, Milwaukee.
Discussion. Dr. Carl S. Harper, Madison.

10:30 The Early Diagnosis and Treatment of Pyelitis of Pregnancy.
Dr. John W. Harris, Madison.
Discussion. Dr. Ira R. Sisk, Madison.

11:00 Diagnosis and Treatment of Diseases of the Cervix Uteri. Lantern Slides.
Dr. Carl H. Davis, Milwaukee.
Discussion. Dr. E. F. Schneiders, Madison.

11:30 The Treatment of Placenta Praevia.
Dr. H. J. Olson, Milwaukee.
Discussion. Dr. R. E. McDonald, Milwaukee.

Section on Radiology. Dr. L. V. Littig, Madison, Chairman, Section on Radiology, Presiding

8:30–10:30 Round Table—Case Reports with Films.

8:30 Carcinoma of Testicle.
Dr. F. H. Kuegle, Janesville.

8:40 Traumatic Arthritis of Hip.
Dr. J. E. Habbe, Milwaukee.

8:50 Case Report with Films.
Dr. R. L. Troup, Green Bay.

9:00 Case Report with Films.
Dr. R. P. Potter, Marshfield.

9:10 Hip Case.
Dr. R. F. Wilson, Beloit.

9:20 Case Report with Films.
Dr. I. G. Ellis, Madison.

9:30 Regional Ileitis.
Dr. H. B. Podlasky, Milwaukee.

9:40 Diverticulitis of Colon Simulating Carcinoma.
Dr. H. W. Hefke, Milwaukee.

9:50 Thoracic Neoplasm.
Dr. Theodore Sokow, Kenosha.

10:00 Lymphoblastoma of the Thorax.
Dr. E. F. McGrath, Appleton.

10:10 Xanthomatosis in Adults.
Dr. L. W. Paul, Madison.

10:20 Case Report with Films.
Dr. J. Newton Sisk, Madison.

10:30 Diseases of the Colon.
Dr. F. J. Hodges, Prof. of Radiology, Univ. of Michigan.
Discussion. Dr. G. M. Schewalter, Green Bay.

PROGRAM SYNOPSIS

Tuesday, Sept. 10

A. M.

9:00 Practice play, Golf Tournament, Oneida Golf Club.

10:00 Council Meeting, Northland Hotel.

M.

12:00 Golf Luncheon, Oneida Golf Club.

P. M.

1:00 Golf Tournament, Oneida Golf Club.

7:15 House of Delegates, Northland Hotel.

Wednesday, Sept. 12

A. M.

8:00 Registration Opens, Columbus Club.

8:30 Dry Clinics, Columbus Club.

10:00 Sections on Surgery, Medicine, Urology, Obstetrics and Gynecology, and Radiology, Columbus Club.

M.

12:00 Council Luncheon Meeting, Northland Hotel.

P. M.

12:30 Radiological Luncheon, Northland Hotel

1:30 General Session, Columbus Club.

6:30 House of Delegates, Columbus Club.

8:30 Evening Session and Smoker, Columbus Club.

Thursday, Sept. 13

A. M.

8:00 Registration, Columbus Club.

8:30 House of Delegates, Northland Hotel.

8:30 Dry Clinics, Columbus Club.

10:00 Clinical Presentations, Columbus Club.

M.

12:00 Council Luncheon Meeting, Northland Hotel.

P. M.

1:30 General Session, Columbus Club.

6:30 Annual Dinner, Northland Hotel.

Friday, Sept. 14

A. M.

8:00 Registration, Columbus Club.

8:30 Sections on Fractures and Orthopedics, Cancer and Cardiovascular Disease, Columbus Club.

10:00 Sections on Nervous and Mental Diseases and Diseases of the Gastrointestinal Tract, Columbus Club.

P. M.

1:30 General Session, Columbus Club.

4:00 Adjournment.

Panorama From Ninth Green, Oneida Golf Club

11:00 Early Diagnosis of Carcinoma of Stomach.
Dr. Leo G. Rigler, Prof. of Radiology, Univ. of Minnesota, Minneapolis.
Discussion. Dr. J. E. Habbe, Milwaukee.

11:30 Carcinoma of the Breast.
Dr. A. W. Erskine, Cedar Rapids, Iowa.
Discussion. Dr. E. A. Pohle, Madison.

12:30 Radiological Section Luncheon

Speaker — Economic Position of Radiologist.
Dr. H. B. Podlasky, Milwaukee.
Discussion. Dr. R. T. Cooksey, Madison.

1:30–5:00 General Meeting

Dr. S. J. Seeger, President, Presiding

1:30 Skull Fractures.
Dr. Harry E. Mock, Assoc. Prof. of Surgery, Northwestern University, Chicago.
Discussion. Dr. W. J. Bleckwenn, Madison.

2:10 Neurological Surgery.
Dr. Loyal Davis, Prof. of Surgery, Northwestern University, Chicago.
Discussion. Dr. E. R. Schmidt, Madison.

BE PROMPT

At no time during the three-day session will the program vary more than five minutes from the hours that are indicated in this program. If the meeting you wish to attend is scheduled for 8:30, it will begin at 8:30 and not at 8:50. If the paper is scheduled for 2:10 that speaker will begin speaking at 2:10. Be prompt in your attendance at the sessions at which you desire to be present.

2:50 A Summary of the Causes of Anemia with Fundamentals Concerning Treatment.
Dr. Herbert Z. Giffin, The Mayo Clinic, Rochester.
Discussion. Dr. V. E. Eastman, Wausau.

3:30 Urological Problems in Children.
Dr. Herman L. Kretschmer, Clin. Prof. of Surgery, Rush Medical College, Chicago.
Discussion. Dr. G. H. Ewell, Madison.

4:10 Infectious Eczematoid Dermatitis—an important, common and often misinterpreted inflammation of the skin. (Lantern slides).
Drs. O. H. and H. R. Foerster, Milwaukee.

4:35 The Relationship Between Physician and Pharmacist.
Mr. Ralph W. Clark, Ph.D., Chairman, Interprofessional Relationship Committee of Wisconsin Pharmaceutical Association.

5:00 Adjournment.

8:30 Evening Session

Dr. E. G. Nadeau, Chairman of Local Arrangements, Presiding

The Presidential Address.
Dr. Thomas J. O'Leary, Superior.

The Development of Roentgen Visualization.
Dr. Leo G. Rigler, Prof. of Radiology, Univ. of Minnesota, Minneapolis.

Report of Delegates to American Medical Association.
Dr. W. E. Bannen, La Crosse.

Smoker

THURSDAY, SEPTEMBER 13

8:30–10:00 Dry Clinics. General Assembly

Case Presentations by Green Bay Physicians.

Extrophy of the Bladder.
Dr. A. J. McCarey.

Tumors of the Duodenum with a case history of Sarcoma of the Duodenum.
Dr. C. S. Williamson.

Demonstration of a simple method of treatment for a non-union of fractures.
Dr. R. M. Carter.

Carcinoma of the Rectum.
Dr. D. F. Gosin.

HOTEL RESERVATIONS

All reservations made to this date have been acknowledged by the hotels. Desirable rooms are available in number and reservations may be made if desired through Dr. A. J. McCarey, Northern Bldg., Green Bay, Chairman of the Committee on Housing.

"While we urge you to make reservations," declared Dr. McCarey, "we want to assure you that if you come on the spur of the moment there will be a comfortable room ready for you. A special room registration service will be found in the lobby of the Northland Hotel."

Repair of the Common Duct following the removal of the gall bladder.
Dr. J. R. Minahan.

Medical Discussion.

Surgical Discussion.
Dr. F. E. Butler, Menomonie.

10:00–12:00 Clinical Presentations

Dr. R. L. Cowles, Green Bay, Presiding

10:00 Encephalitis.
Dr. J. M. Freeman, Wausau.

10:15 Thyroid Disease in Children.
Dr. Karl Doege, Marshfield.

10:30 Summary of the Present Day Treatment of Arthritis.
Dr. A. A. Hoyer, Beaver Dam.

10:45 The Heart in Surgery.
Dr. A. J. Patek, Milwaukee.

11:00 Incipient Pulmonary Tuberculosis.
Dr. Oscar Lotz, Milwaukee.

11:15 Breast Tumors.
Dr. T. J. Snodgrass, Janesville.

Library

11:30 Treatment of Allergic Sensitivity by the Ionization Method. A Report of 150 Cases.
Dr. J. A. Hurlbut, Madison.

11:45 The Management of Hypertension.
Dr. R. M. Kurten, Racine.

1:30–5:00 General Meeting

Dr. S. J. Seeger, President, Presiding

1:30 The Diagnosis and Treatment of Acute Intestinal Obstruction.
Dr. O. H. Wangensteen, Asso. Prof. of Surgery, University of Minnesota.
Discussion. Dr. James Dean, Madison.

2:10 Some Everyday Problems in the Diagnosis and Treatment of Cancer.
Dr. Ellis Fischel, Assoc. Prof. of Surgery, St. Louis Univ. School of Medicine, St. Louis, Mo.
Discussion. Dr. F. A. Thayer, Beloit.

2:50 Marrow Insufficiency.
Drs. W. S. Middleton and O. O. Meyer, Madison.
Discussion. Dr. Vincent Koch, Janesville.

3:30 Report on Action of the House of Delegates.
Mr. J. G. Crownhart, Secretary.

3:40 Surgical Problems Associated with Cholelithiasis.
Dr. Robert S. Dinsmore, Cleveland Clinic, Cleveland, Ohio.
Discussion. Dr. Gunnar Gundersen, La Crosse.

4:20 The Management of Gastric Lesions. Lantern Slides.
Dr. George Eusterman, The Mayo Clinic, Rochester.
Discussion. Dr. James A. Evans, La Crosse.

WEAR YOUR BADGE

Members must register and wear their badges in order to enter the Green Bay sessions. Complaints in previous years demand that the meeting be restricted to members, students and guests. Attendants will ask to see your badge as you enter meetings—accommodate them by wearing it throughout the meeting.

6:30 Annual Dinner (Informal). Northland Hotel

8:10 Presentation of Council Awards.

8:20 Introduction of Guests. Dr. S. J. Seeger, President, Presiding.

8:30 Address.
Dr. Dean Lewis, Baltimore, Retiring President of the American Medical Association.

9:00 The Profession of Medicine.
Dr. Olin West, Chicago, Secretary and General Manager of the American Medical Association.

9:30 Dancing.

FRIDAY, SEPTEMBER 14

8:30–10:00 Section Meetings

Symposium on Fractures and Orthopedics. Dr. R. M. Carter, Green Bay, Presiding

8:30 Pott's Disease. Symptoms and Treatment.
Dr. Chester Schneider, Milwaukee.

9:00 Open Reduction of Fractures. Lantern Slides.
Dr. James Jackson, Madison.

9:30 Lesions of the Knee Joint.
Dr. E. W. Ryerson, Prof. of Orthopedic Surgery, Northwestern University.

Symposium on Cancer. Dr. W. D. Stovall, Madison, Presiding

8:30 The Diagnosis and Treatment of Pre-Cancerous Lesions of the Skin.
Dr. H. J. Farrell, Milwaukee.

9:00 Round Table Discussion of Cancer.
Opened by Dr. Ellis Fischel, Assoc. Prof. of Surgery, St. Louis Univ. School of Medicine, St. Louis.

9:30 The End Results of Cancer Surgery.
Dr. Joseph F. Smith, Wausau.

Symposium on Cardiovascular Disease. Dr. L. M. Warfield, Milwaukee, Presiding

8:30 Coronary Thrombosis and Its Sequelae.
Dr. W. M. Jermain, Milwaukee.

9:00 The Differentiation of Genuine Cardiac Pain from Conditions Simulating it.
Dr. F. D. Murphy. Milwaukee.

9:30 The Differential Diagnosis of Unusual Aneurysms.
Dr. John Huston, Milwaukee.

Symposium on Nervous and Mental Diseases. Dr. A. W. Rogers, Oconomowoc, Presiding

10:00 The Neuralgias of the Head and Neck.
Dr. A. W. Bryan, Madison.

10:30 Neuralgia of the Trunk and Extremities.
Dr. A. I. Rosenberger, Milwaukee.

11:00 General Consideration of the Neuralgias.
Dr. J. L. Garvey, Milwaukee.

11:30 The Treatment and Management of Neuralgias of the Extremities from Orthopedic Point of View.
Dr. H. C. Schumm, Milwaukee.

Symposium on Diseases of the Gastrointestinal Tract. Dr. J. R. Minahan, Green Bay, Presiding

10:00 Appendicitis.
Dr. A. R. Tormey, Madison.

10:30 Perforated Ulcer.
Dr. Joseph Dean, Madison.

11:00 The Diagnosis and Treatment of Internal Hemorrhage.
Dr. Dexter H. Witte, Milwaukee.

11:30 Round Table Discussion.
Opened by Dr. Carl Williamson, Green Bay.

1:30–4:00 General Meeting

1:25 Induction of the President-Elect.
Dr. T. J. O'Leary, Superior.

1:30 Some Difficulties in the Diagnosis of Tumors.
Dr. Dean Lewis, Baltimore, Prof. Surg., Johns Hopkins University School of Medicine.

2:00 Congenital Anomalies of the Gastrointestinal Tract.
Dr. Albert H. Montgomery, Assoc. Clin. Prof. of Surgery, Rush Medical College.

2:30 The Present Status of Arthroplasty in Ankylosed Joints.
Dr. W. R. MacAusland, Boston.

3:00 The Prevention of Surgical Complication.
Dr. E. Starr Judd, The Mayo Clinic, Rochester.

3:30 The Medical Management of the Surgical Diabetic.
Dr. E. L. Sevringhaus, Madison.

Delegates to Meet Tuesday, September Eleventh

MEETING in the Crystal Ball Room of the Northland Hotel at 7:15 Tuesday, September 11th, members of the House of Delegates of the State Medical Society will devote all of Tuesday evening to the first of three sessions on organization problems of the medical profession. Resolutions presented at the Tuesday evening session will be referred to the Reference Committee of the House appointed by Speaker Ralph M. Carter of Green Bay. These resolutions will be considered in open session of the House at the Wednesday evening session. The final meeting will be held at 8:30 Thursday morning, September 13th, at which time the House will proceed to the election of a President-Elect, Speaker of the House of Delegates, Vice-Speaker of the House of Delegates, Delegates and Alternates to the American Medical Association, and the selection of a place of meeting for 1935.

Election of four Councilors will be held during the first session Tuesday evening, September 11th. Councilors whose terms expire at the September meeting are Dr. C. A. Harper, Madison, third district; Dr. Wilson Cunningham, Platteville, fourth district; Dr. A. H. Heidner, West Bend, fifth district, and Dr. S. E. Gavin, Fond du Lac, representing the sixth district.

An important change in the constitution of the State Medical Society will be voted upon early during the Tuesday evening session. This amendment, presented by Dr. H.

P. Bowen of Watertown, would provide for the election of Councilors in local district meetings rather than nomination by delegates from the district and election in the House of Delegates at the time of the state meeting. The amendment as proposed follows:

Amend Article IX (Officers), Section 2, to read:

1. Repeal all of Section 2 as now constituted.

2. Enact Section 2 to read: "Section 2. The President, President-Elect, Speaker and Vice-Speaker shall be elected by the House of Delegates. The Secretary and Treasurer shall be elected by the Council.

"Councilors shall be elected at a meeting of their respective District Societies. Notice of election shall be incorporated in a mailed notice to members at least seven days before such meeting. Election, where more than one nomination is received, shall be by ballot and a majority of votes cast shall be necessary to elect. Each candidate for councilor must be a resident of the district which it is proposed that he represent, and no person known to have solicited votes for or sought the office of councilor shall be eligible for the current election. Other procedure essential to the election shall be governed by Roberts' Rules of Order.

"The officers, except the councilors, shall be elected annually. The terms of councilors shall be for three years and all officers shall serve until their successors are elected and installed. Terms of councilors shall expire in the following order: Seventh, Eighth, Ninth, Tenth and Thirteenth Districts in 1935; First, Second, Eleventh and Twelfth Districts in 1936; and Third, Fourth, Fifth and Sixth Districts in 1937, and thereafter shall be elected in this order."

This amendment offered in 1933 is to be acted upon in 1934 and shall, upon adoption, be effective on January 1, 1935.

All members of the Society are welcome to attend sessions of the House of Delegates and members, not delegates or alternates, may address the House by notifying the Speaker previous to, or during the session. Dr. R. M. Carter, Green Bay, will preside over sessions of the House as its Speaker while Dr. Gunnar Gundersen will occupy the chair of the Vice-Speaker. Delegates to the American Medical Association whose terms expire at this session are Dr. J. Gurney Taylor, Milwaukee and Dr. W. E. Bannen of La Crosse. Alternate Delegates to the American Medical Association whose terms expire at this time are Dr. F. Gregory Connell of Oshkosh and Dr. T. W. Nuzum of Janesville.

Members—1934 House of Delegates

County	*Delegate*	*Alternate*
Ashland–Bayfield–Iron	C. J. Smiles, Ashland	R. O. Grigsby, Ashland
Barron–Washburn–Sawyer–Burnett	H. H. Schlomovitz, Barron	R. W. Adams, Chetek
Brown–Kewaunee–Door	P. R. Minahan, Green Bay	W. Wochos, Kewaunee
Calumet	N. J. Knauf, Chilton	H. C. Krohn, New Holstein
Chippewa	W. C. Henske, Chippewa Falls	A. J. Somers, Chippewa Falls
Clark	H. H. Christopherson, Colby	A. L. Schemmer, Colby
Columbia	James W MacGregor, Portage	H. M. Caldwell, Columbus
Crawford	C. A. Armstrong, Prairie du Chien	J. J. Kane, Prairie du Chien
Dane	L. Peterson, Sun Prairie	Louis Fauerbach, Madison
	Joseph Dean, Madison	E. Schneiders, Madison
	H. Purcell, Madison	H. Keenan, Stoughton
Dodge	W. G. Riopelle, Beaver Dam	A. W. Hammond, Beaver Dam
Douglas	C. W. Giesen, Superior	C. H. Christiansen, Superior
EauClaire–Dunn–Pepin	R. E. Mitchell, Eau Claire	F. E. Butler, Menomonie
Fond du Lac	David Twohig, Fond du Lac	C. Leonard, Fond du Lac
Forest	E. G. Ovitz, Laona	O. S. Tenley, Wabeno
Grant	W. Cunningham, Platteville	J. E. Donnell, Cuba City
Green	J. F. Mauermann, Monroe	W. G. Bear, Monroe
Green Lake–Waushara–Adams	A. J. Wiesender, Berlin	George Baldwin, Green Lake
Iowa	H. D. Ludden, Mineral Point	T. A. Hagerup, Dodgeville
Jefferson	H. P. Bowen, Watertown	W. S. Waite, Watertown
Juneau	Brand Starnes, New Lisbon	W. T. O'Brien, Mauston
Kenosha	G. F. Adams, Kenosha	A. F. Ruffalo, Kenosha
La Crosse	G. Gundersen, La Crosse	R. L Eagan, La Crosse
Lafayette	R. B. Quinn, Darlington	M. F. Stuessy, Blanchardville
Langlade	J. C. Wright, Antigo	J. W. Lambert, Antigo
Lincoln	E. O. Ravn, Merrill	K. A. Morris, Merrill
Manitowoc	R. W. Hammond, Manitowoc	L. W. Gregory, Manitowoc

County	Delegate	Alternate
Marathon	S. M. B. Smith, Wausau	E. E. Flemming, Wausau
Marinette–Florence	T. J. Redelings, Marinette	J. V. May, Marinette
Milwaukee	E. W. Miller	R. E. Fitzgerald
	H. W. Powers	H. C. Schumm
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	J. C. Sargent	J. W. Smith
	Oscar Lotz	Edward Jackson
	G. W. Neilson	F. D. Murphy
	Millard Tufts	Wm. A. Ryan
	N. E. McBeath	S. M. Markson
	L. W. Hipke	T. S. O'Malley
	S. H. Lippitt	E. H. Gramling
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	Wm. M. Jermain	P. E. Oberbreckling
Monroe	G. C. Devine, Ontario	A. R. Bell, Tomah
Oconto	C. H. Kingsburg, Gillett	R. J. Rogers, Oconto
Oneida–Vilas	R. A. A. Oldfield, Eagle River	----------
Outagamie	A. E. Rector, Appleton	G. J. Flanagan, Kaukauna
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Richland	B. I. Pippin, Richland Center	G. H. Benson, Richland Center
Rock	P. A. Fox, Beloit	W. J. Allen, Beloit
Rusk	W. F. O'Connor, Ladysmith	J. C. Baker, Hawkins
Sauk	H. J. Irwin, Baraboo	E. McGrath, Baraboo
Shawano	G. R. Stauff, Birnamwood	A J. Gates, Tigerton
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Vernon	W. M. Trowbridge, Viroqua	R. H. Ludden, Viroqua
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Wood	F. X. Pomainville, Wisconsin Rapids	K. H. Doege, Marshfield

My Father, Crawford Long, Discoverer of Ether Anaesthesia, 1842*

By MRS. EUGENIA LONG HARPER
Atlanta, Georgia

PERMIT me to say no greater pleasure or privilege could have been accorded me than to be invited to appear before you and talk on a subject, naturally most dear to my heart, "My Father, Crawford W. Long, Discoverer of Ether Anaesthesia, March 30, 1842." The honor is greatly appreciated, I assure you, yet it is not without embarrassment I speak, for fear my hearers may construe the substance into braggadocio, but I promise you a biography, although not couched in rhetorical flights of eloquence, is a true and simple story of a modest physician from our own red hills of Georgia, in a small village far removed from clinics and hospitals, where he brought peace to a suffering world; who made possible the surcease of pain.

When examining the ancestry of great men, we seldom find greatness immediately or remotely preceding them. Did any of Shakespeare's forefathers write plays? No great statesman handed down their powers to Thomas Jefferson, Lincoln or Franklin Roosevelt. Edison is said to be the first inventor in his family. But it is probable the elements of character which led to the achievements of each of these men, may be

* Presented before The Circle, the honorary student society of the Marquette University School of Medicine, April 30, 1934.

found cropping out somewhere between them and their great grandfathers.

In the case of Crawford W. Long, three traits largely responsible for his success is exemplified in the records of his antecedents. The Longs of Ulster, Ireland, were all men of prominence. For political reasons, they were dispossessed of much of their property. It is well known that the Longs were at the defense of Londonderry, taking part in the seige. Henry Long was Mayor of Londonderry shortly after. As the years went by the family again became prosperous, and they were told their taxes would be increased. To this they replied: "No, we will go to America." And to America, the land of golden opportunities, they came on a slow-sailing vessel, and settled with other Scotch Presbyterians in Carlisle, Pennsylvania. Court records show that in 1762, the next year after these immigrants left the old country, they became land holders in Carlisle, proving conclusively that they were not debtors of prison, as our first American settlers were often said to have been. Here, Samuel Long, the grandfather of the subject of my sketch, became one of General LaFayette's officers at Yorktown and after the termination of the Revolution, hearing of the opportunities afforded in undeveloped Georgia, together with a colony of friends, came to Georgia to live. They proceeded as far as South Carolina, but finding that hostile Indians were making depredations in Georgia, rented land near Abbeville and made a crop. The next year, Indian hostilities having ceased, pushed on into Madison County, where Samuel Long settled about 1788, his final destination.

These pioneers suffered hardships until they could build permanent homes, but energy and perseverance conquered all obstacles, and in a few years the little colony had established good homes, schools and churches. Samuel Long was one of the founders of the 2nd Presbyterian church in Georgia, and was an elder at old New Hope, where he and his wife, Ann Williamson are buried in its churchyard. Captain Samuel Long's two little sons, James and Thomas, were born in Carlisle, Pennsylvania. James, the eldest son, father of Dr. Crawford W. Long, was only a small boy of about nine years of age when he began that eventful trip to Georgia. He was of an unusual mind, developing at an early age a deep interest in education, studious and fond of reading, he received the best advantages the new country then afforded. He inherited some money and slaves from his father, and while yet a young man, by industry and energy, accumulated a fortune and became a leading man of our commonwealth. At the age of 33, married Elizabeth, the accomplished daughter of Edward Ware of Amherst, Virginia, who brought with her the breedings and customs of the Old Dominion.

Edward Ware, her father, an aristocrat of Virginia, espoused the cause of the colonists and fought in the Revolutionary War. Sometime after its close he immigrated to Georgia with his family and slaves, purchasing a large plantation in Madison County, Georgia, near that of Samuel Long. So James Long and Elizabeth Ware grew up together, son and daughter of neighboring families. She is said to have been possessed of great dignity of bearing and executive ability. She was warm-hearted and full of sympathy for others. In 1813 she married James Long, in the home of her father, Edward Ware, which is now standing as a sentinel of the past, occupied by the sixth generation. On its walls hang the Ware Coat of Arms, De La Warr, thus you see Long came of distinguished ancestry.

On November 1, 1815, in a large two-story home, on a hill over-looking the town of Danielsville, a son was born to Elizabeth Long. The home in which Long was born was given to Elizabeth Ware by her husband, James Long, in 1813 as a bridal present. It still stands today, but is sadly changed in appearance. The negro quarters which lined the hill in the rear have long ago disappeared. A modern porch of no architectural beauty, supplants the Colonial of the original. In the living room remains the hand-carved mantel, a facsimile of that of Edward Ware, brought by wagon from Virginia. It is an interesting reflection that in 1815 the bloody star of Napoleon set in eternal night on the field of Waterloo, Crawford Long, all unheralded was born. The

one, caused more pain than any man that ever lived, the other put an end to more pain. Other overlapping dates suggest themselves. Galileo was born the year that Michael Angelo died, and Sir Isaac Newton was born the year that Galileo died.

The maternal heredity is perhaps a stronger element in building of temperament than that of the paternal side. It will later show that his mother's sympathetic nature was inherited by her son, and this it was, which intensified his desire to assuage the agony of the knife and kept him on the alert for anything that might offer relief to suffering humanity. James Long named his little son for his friend and confidant, William H. Crawford, Secretary of State, Minister to France, candidate for vice-president of the United States. It was said that William H. Crawford was the only person to whom the Emperor Napoleon ever bowed in salutation. In naming the child it was little dreamed that the fame of the namesake was destined to eclipse that of the great Ambassador Statesman.

The parents of Crawford Long took deep interest in education, fostered and endowed the Academy at Danielsville, employed the best teachers from the North.

HIS YOUTH

James Long was well versed in law, represented Madison County in the House and Senate from 1829 continuously to 1836; was clerk of the court 17 years; was for twenty years postmaster of the town; looked upon his slaves as a sacred trust; was an indulgent father. To James and Elizabeth Long were born three other children, but it is of Crawford you have asked me to speak. As a child he was quiet and studious. It is said when he was about five years of age, missing him from the home, his father found him in the negro quarters reading the Bible aloud to them. Some months after, when playing with his little sister, he accidentally cut off three of her fingers. Hanging by the thin skin, he put them in place and calmly held them until his mother could reach the scene of the disaster, and call a surgeon.

Crawford's sister carried the scar all her life. There is no other record of surgery in one so young.

We pass quickly over his youth. There is nothing else unusual about the early life of Crawford Long. He probably went through boyhood like other boys, had the same diseases, and learned the things that little boys are wont to learn. Having a fine school at Danielsville, he became at an early age a pupil. He had a retentive memory and was inclined to books, at the age of 14 was prepared to enter college at Athens, (now the University of Georgia), but his age was prohibitive and it was only as a special favor to his father that the Chancellor, Dr. Church, permitted this precocious youth to enroll. At this time, Alexander Stephens, Vice-President of the Confederacy, was in one of the advanced classes, reading law, and by some chance of fate he and Crawford became room-mates in the old College. The two were known as "Daddy" and "Baby". As a student, Crawford was exceptional, graduating with the degree of A.M. and second honor before 19 years of age. After graduation he taught for one term in Danielsville Academy, where he had received his early training. He read medicine for a short while under Dr. Grant of Jefferson and later went on horseback, (there being no railroads or stage line) to Lexington, Kentucky, to enter Transylvania University where he often visited Henry Clay at his home in Ashland. After a year's stay at Transylvania, he proceeded to Philadelphia and enrolled in the Medical Department at the University of Pennsylvania. It was here he came in contact with the greatest medical minds in America. At the age of 23 he found, as he could have found nowhere else, the scientific traditions, the intellectual stimulant to original thoughts and deeds, the atmosphere, in other words, that was favorable, perhaps essential to his later achievements, studying under such men as Philip Physick, the Father of American Surgery. George Wood, profound scholar, taught Materia Medica. Wood's condemnation of the premature reporting of the cases and drug actions may well have decided Long a few years later to delay in publishing a report of the actions of ether. Wood insisted that observers must never be content with a single experiment. These were a few of the men to whom

the young Georgia student listened, the men who helped to guide and direct his mind.

There is little doubt that it was in Philadelphia that Crawford Long gained the knowledge which was later to make him an outstanding figure of world history. While attending the University of Pennsylvania he learned of nitrous oxide gas; that when it was inhaled it would produce delirium and a feeling of exhilaration. He knew that ether inhalations were given therapeutically and sometimes taken for sport, and that large doses would produce unconsciousness. He had probably been taught that small doses were admissible, and doses large enough to produce unconsciousness would be fatal to the patient.

After graduation he went to New York City, and being the son of a wealthy southern planter, he walked the hospitals, thus refuting the charges that he returned from New York because of his father's penury. In those days only the sons of the rich could enjoy these hospital privileges. In New York he had the opportunity of hearing Valentine Mott, J. Kearney Rogers and William Parker. Recognizing the surgical ability of the young doctor, he was often invited to assist in operations. Refusing a position in the Medical Corps of the United States Navy, he returned to Georgia in 1841, in deference to the wishes of his father that he locate there so as to be near his family. He purchased the office of his preceptor, Dr. Grant, in Jefferson, Georgia. This he considered only a temporary arrangement, because Jefferson was nearly 150 miles from a railroad with little hope of future growth. Long soon built up a wide practice and was considered the outstanding physician in that section of the State. The year 1841, the subject of inhalation of nitrous oxide gas was introduced in the village of Jefferson, says Dr. Long:

"Some persons desired me to produce some for an anticipated frolic. I informed them I had no apparatus for preparing or preserving the gas, but that I had a medicine, sulphuric ether, which would produce equal exhilarating effects, that I had inhaled it myself and considered it as safe as nitrous oxide gas. The company were all anxious to witness the effects. The ether was introduced and given to all present, and I inhaled it myself. They were all so much pleased with the exhilarating effect of the ether that they inhaled it frequently afterwards, and induced others to do so.

USE OF ETHER

"The first patient to whom I administered ether was James M. Venable. Mr. Venable consulted me on several occasions in regard to the propriety of removing two small tumors situated on the back of his neck, but postponed from time to time, having the operation performed, from dread of pain. At length I mentioned to him the fact of my receiving bruises while under the influence of the vapor of ether without suffering, and as I knew him to be fond of and accustomed to inhale ether, I suggested to him the probability the operations might be performed on him without pain, and proposed operating on him while under its influence. He consented to having one tumor removed and the operation was performed the same evening. The ether was given to Mr. Venable on a towel, and when fully under its influence, I extricated the tumor.

"It was encysted and about half an inch in diameter. The patient continued to inhale ether during the time of the operation, and when informed it was over, seemed incredulous until the tumor was shown him. He gave no evidence of suffering during the operation, and assured me after it was over, that he did not experience the least degree of pain from its performance. This operation was performed in Jefferson, Jackson County, Georgia, by me March 30, 1842."

This was the first attested operation in history performed under the influence of ether. Mr. Venable could not believe the tumor was removed until the tumor was shown him. He suffered no pain. There is no moment in the progress of the science of medicine so memorable as this one. Within a few years of this operation several Northern doctors challenged Dr. Long's priority of discovery, seeing money in it, which Dr. Long never saw. The history of their controversy, or the high spots of it, cannot be better stated than Fr. Frank K. Boland re-

cords it in an article:—"Crawford W. Long, the Discoverer of Anesthesia". Extracts follow:

> "The story of Long's discovery of anesthesia is not mere hearsay nor tradition, but is supported by convincing documents and legal evidence, which lately have been deposited in the Library of Congress, Washington, D. C. Four witnesses were present during Long's first operation with ether, and all testified to the fact in sworn affidavits. These valuable papers have been preserved by Dr. Long's descendants. Three children of a family of twelve, survive today: Miss Emma M. Long, Athens, Ga.; Mrs. Eugenia Long Harper, Atlanta, Ga.; and Edward Crawford Long of San Antonio, Texas. Also two grandchildren and three great grandchildren."

The central figures in this picture are Crawford W. Long, the fearless surgeon, and James Venable, the heroic young boy. This hero was a relative of Samuel Venable the donor of Stone Mountain. Wonder must have arisen in Long's mind as he thought of the agonies inflicted by the surgery he had seen in the hospitals of Philadelphia and New York, as compared with the peaceful slumber of the patient on whom he had just operated. A sense of grave responsibility would be in a man who believed he had done a mighty thing, but felt the necessity of proving it further, in order that he would not mislead others. He saw the glad rays of the sun—night became day.

> "No hour so sweet, when hope, doubt and fears
> Mid deepening stillness watched one eager brain
> With God-like will decree the death of pain."

Hear what Jim Vandiver says 25 years later: "The day that James Venable had the tumor cut out I happened to be in Jefferson. I well remember it; can never forget that memorable day—March 30, 1842. A group of excited men were gathered on the public square of the village not far from the little office of Dr. Long. I inquired the cause of this gathering and was told that Venable, in opposition to the wishes of his family, was letting Dr. Long put him to sleep to cut out a tumor. They vowed should the boy fail to arouse from the effects of the ether, that they would lynch Long. I did not see the operation, but I did station myself at the steps of the office in which the operation was being done, to beg the crowd to stand back, and quietly await the result. Dr. Long was my friend and I believed in him. Not long to wait, the door opened, and we were told all was over. James Venable was safe and all right, the tumor out and no pain felt by the patient, the tumor in the possession of the miracle man."

It may interest you to know that the authenticated original bill for the first operation is preserved by the family of Dr. Long. He charged 25c for the ether and $2.00 for the operation. A copy of this bill was sent to Arthur Brisbane with permission to publish it if he did not think the present day surgeons would drop dead on reading it. He replied that if modern surgeons lived after reading it, patients certainly would not after getting it. Later Brisbane, in visiting Georgia, motored from the University at Athens to the village of Jefferson where Dr. Long performed this operation under anaesthesia and says to 40,000,000 readers: "Boston claims it for Morton, but Georgia shows that Crawford W. Long did the first operation four years earlier, March 30, 1842."

This year, 1842, was to my father the most eventful of his life. For it was in August that very year, my mother, his first and only love, became his wife. While in College in Philadelphia, father would spend his vacations in Georgia with his parents. On one of these visits, he saw on the streets of Jefferson, a graceful and attractive young school girl at home for her vacation—Caroline Swain, the daughter and only child of her father, George Swain, a Georgia planter. She was a niece of the then, Governor of North Carolina, David Swain. The young M. D. inquired who she was, fell in love with her, and vowed he would marry her as soon as she was old enough—love at first sight, and ever afterward. He was 10 years her senior. On reaching the age of sixteen, August 1842, she became his bride. Her diary gives many interesting facts and personal reminiscences. Did time afford I would tell you of them. Both were poetical, writing poems occasionally, some of which have been published. They made their home in Jefferson until late in 1849, removed to Atlanta, where father believed a big city would

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sometime be; a prophecy fulfilled long ago. So sure of it, in 1850 he purchased from a Mr. Cone half an acre of land in what is now the center of the business section of Atlanta, built a brick two-story house in which he lived and had his office. The house was very much the type of those in Philadelphia.

Not long was he to be a citizen of Atlanta. Although enjoying a lucrative practice, a fond father begged to have him nearer him, so offered to set him and his younger brother up in drug business, purchased the large drug store of Reese & Ware. In the rear of the store an office was set aside for Crawford Long, and which he occupied until he joined the "Great Physician up yonder." He purchased in 1851 his residence in Athens, which is now a part of the University of Georgia. Grandfather, to be with his children, purchased also a home in Athens but fate decreed otherwise. A brother-in-law came on a visit, became desperately ill. Father diagnosed the case as Asiatic cholera and in a few hours the life of my grandfather went out, with two slaves—4 in one hour.

OTHER CLAIMANTS

Back to 1842 we turn again, for we love to linger with the boy doctor as he made possible the relief of man, we see him with determination and bated breath during the sleep that might not awaken. Jefferson was an isolated village 150 miles from a railroad; no paved roads, automobiles or airplanes, so that he had to rely only on himself. Older practitioners urged upon him the danger and the disastrous results that might follow, and they believed would, but he persisted in his ether practices. While he was waiting to publish results, other claimants were asserting their claims. Yet, up to 1846 he had done eight operations painlessly with ether. At the persistent demands of Dr. Long's friends, hearing of these claims, he allowed United States Senator Dawson to present his case, even writing himself to one contestant as follows: "It becomes each one of us to use all honorable means to advance his own claims, and I know you will not blame me for attending to this matter which so much concerns my reputation." Seeing money in it, which my father never saw, these three Doctors up North challenged Long's priority. He was criticized for not publishing his discovery at once. Had they forgotten Jenner waited 20 years to publish his, and made only 23 demonstrations to recount? Do you think if some one had published about vaccination after Jenner had spent 19 years in experiments and research, he would any the less (have) been the discoverer? Long did publish to the world by every means at his command at that time. He had no press to broadcast; not even a country newspaper; no Boston Hospital in which to give a demonstration; no Medical Society before which to read a paper (for the Medical Association of Georgia was not organized until 1849). He told every one with whom he came in contact of this relief from pain, especially members of the medical profession. Naturally other doctors, especially those his senior, were incredulous of such a remarkable thing, and were slow to give it a trial. He had no Bigelow to publish it for him. Instead, Long, from the first, published his operation of March 30, 1842, verbally and in other legitimate ways: first, by always operating in the presence of witnesses; second, by making no effort to keep secret the agent inhaled under another name; third, by encouraging publicity by public discussion, and urging the employment of it by other physicians. So you see it was known over a large territory. Charles Smith, known as "Bill Arp," says:

> "As early as 1842, the Professor of Chemistry at University of Georgia lectured to his class on the properties of ether and of the practical demonstration of Dr. Crawford W. Long. I was a member of the class and it was a revelation to me."

Perhaps Dr. Long was not mercenary enough to apply and get a patent and make ether prohibitive except to the well-to-do classes, nor did he ask the Government to recompense him for what should prove a boon to mankind. The seeking of a patent for the drug after being used in a Boston Hospital certainly reflects no credit upon the seeker as a medical philanthropist. Of the 1842 discoverer of ether anaesthesia it has

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been said that he stumbled on it. Suppose he had. would that deprive him of any honor? Columbus reasoned that the world was round, and that sailing westward from Europe, India could be reached. He was right, but in his effort to reach India, he stumbled on the American continent. Does this make him any the less the first to see America? The fall of an apple showed first the laws of gravitation. Did Galileo, Newton and Madam Curie, and Pasteur and Edison stumble on their discoveries? The lessons of their lives will not be learned if we teach that toiling men repair the world accidentally. Father discovered the anesthetic nature of ether exactly as Newton discovered the law of gravitation. He deduced it. His discovery was a reasoned conclusion. He made his discovery with his head. His courage gave him power to accomplish, and a faith that directed. The giving of ether as a surgical anaesthetic was no haphazard accident, but was reasoned out by observation and demonstration on himself. How simply were his claims presented Congress in attested affidavits of patients and witnesses, the invitation to other claimants to visit his office, examine his account books for charges for the operations and question living witnesses. Dr. Charles T. Jackson in 1854 visited Dr. Long in his office, examined all data in the presence of Charles H. Andrews, his trusted prescription clerk. After the interview, Jackson expressed himself as perfectly satisfied with the proofs. "It appears," said Jackson, "he employed sulphuric ether as an anaesthetic agent first —March 30, 1842, in extirpating a tumor; second—July 3, 1842, amputation of a toe; September 9, 1843, extirpation of three tumors; January 8, 1845, amputation of a finger. Copies of letters and depositions proving these operations were shown me by Dr. Long. I then called on Professors Joseph & John LeConte, then of the University of Georgia at Athens and inquired if they knew Dr. Long and what his character was for truth and veracity. They knew him well and both assured me that no one who knew him in that town would doubt his word and that he was an honor to his profession. On Long's folio journal or account book stands the following entry:

James Venable:

March 30, 1842, Ether and Excising Tumor	$2.00
May 13th, Sulphuric Ether	.25
June 6th, Excising Tumor	2.00

These records bore the appearance of old and original entries in the book. He is a modest, retiring man and not disposed to bring his claims before any but a medical or scientific tribunal. Had he written me in season I would have presented his claims to the Academy of Sciences of France, but he allowed his case to go by default, and the Academy knew no more of his claims than I did. The 1854 Anaesthesia Bill was up for final reading and friends of the claimant were awaiting the decision, when United States Senator Dawson of Georgia, arose to announce that none of the three original claimants were entitled to compensation, as Dr. Charles T. Jackson had investigated the claims and gave to Dr. Crawford W. Long the credit. Jackson therefore withdrew from the contest, and here ended the famous controversy which waged from 1849 to 1854. Father entered into no squabble with any of the claimants. Nothing a man can say is so powerful as saying nothing. To argue brings him down to a level with those with whom he argues. Silence convinces them of their folly. Although he entered into no controversy, in his spare moments he guarded his own claims by procuring further evidence from witnesses of operations he performed anaesthetized by the inhalation of sulphuric ether. What a part did that little account book recounting the Venable operation in 1842 play in history, and help to establish for the young Georgian, Crawford W. Long, priority of ether anaesthesion. The more the life of my father is studied and you come in contact with his every day life, the more you see he was a model for all followers of the healing art. History is made by men and makes fascinating reading; to an unbiased mind the chain of evidence leaves no doubt as to its genuineness.

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HIS LIFE

What shall I tell you of the professional life of my father? Sixty-two years God loaned him to the world, and for nearly forty years he practiced his profession. His name was a household word. He was a modest man, earnest, sympathetic, faithful and true; more intent upon healing the afflicted than upon perpetuating his name, he calmly went his useful way, caring for his own, never boasting or brooding; kindly and fair to all. He said of his profession: "I am as much called to practice medicine as a minister is to preach the Gospel. My profession is a ministry from God to me."

Stricken by apoplexy at the bedside of a patient, death found him fulfilling the tenderest and the holiest duty that pertains to that work—the ushering of a life into the world. As it came in, however, his own began to go out. With a supreme effort he forced from him for a moment the waters through which he was to pass on his outward way—for a moment, the midnight which was to envelop him on that way, but which was to break at the end into glorious morning. "Care for the mother and child first," he managed to articulate to the watchers standing by, when they would have ministered to him. Then the darkness and the waters overcame him. The soul of a noble man passed, as he would have it pass. It passed as such a soul should have passed. We would not have had it otherwise. Faithful to duty, he died June 16, 1878.

The Etiology of State Medicine

By O. A. STIENNON, M. D.
Green Bay

1. The strange theory that given a decreasing number of potential patients, the more doctors we set free among the public, the more prosperous each will be and the less will be the aggregate cost of medical care; that therefore the state must support a higher and broader medical school to furnish more, better, and cheaper physicians for our much suffering people.
2. The solemn dogma of the American College of Surgeons, our self-appointed moralizing hierarchy, that every man, be he ever so poor, so humble, so ignorant, so shiftless, is by divine right entitled to the last word in medical service, and by that they mean, a standardized patient, five standardized specialists, a standardized specialized nurse, and a super-standardized hospital. The corollary to that preachment is—don't trust your family physician though he hails from a school that has been purged, exorcised, standardized, annointed and sanctified by these self-same high priests of Aesculapius.
3. The theory that group practice organized on a share basis, with a credit manager and other accoutrements of big business, is an humanitarian institution.
4. The dictum that there is no place for sentiment in the practice of medicine (vide Dr. Ray Lyman Wilbur in Majority Report on Medical Cost).
5. The modernism that the government is responsible for medical care to the poor and that there is no longer any virtue in private charity (shade of Hippocrates!)
6. The propaganda that "standard medical service" is beyond the means of the average provident individual; that the state is responsible for our health anyway, and that therefore, one should have no compunction about not paying a doctor.
7. The smug belief that the benefit derived by the patient is always in proportion to the fee extracted, and that high cost is a guarantee of good service.
8. The theory that a good doctor must first be a social lion or pretend to be one, or that we can fortify ourselves in the confidence of the people by high-hatting them.

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FOREIGN ACCEPTANCES TO DATE:

Dr. Roberto Alessandri, Prof. of Clinical Surgery, Medical Dept., Royal University of Rome, Rome, Italy.
Dr. A. Mario Dogliotti, Prof. of Clinical Pathology, Royal University of Turin, Turin, Italy.
Sir Harold Gillies, London, England.
Dr. Hans Guggisberg, Prof. of Gynecology, University of Berne, Berne, Switzerland.
Dr. Paul Strassmann, Prof. of Obstetrics and Gynecology, University of Berlin, Berlin, Germany.

TENTATIVE:

Mr. A. Lawrence Abel, F.R.C.S., Surgeon Cancer Hospital, London, Eng.
Prof. Mario Donati, Head of Dept. of Surgery, University of Milan, Milan, Italy.
Dr. Ferdinand Sauerbruch, Prof. and Head of the Dept. of Surgery, University of Berlin, Berlin, Germany.

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9. The opportunism that medical ethics have outlived their usefulness, or that the golden rule of professional honor is unsuited to our present state of sophistication.
10. The notion that a medical society is a medium of self-exploitation to which we pay dues; have a monthly meeting when for a moment we are all for one and one for all, but for the rest of the time every man for himself.
11. The strange ethics concerning medical advertising. If a doctor advertises in the Jerkwater Weekly that he is possessed of special skill in the treatment of dandruff (and he may be telling the truth) he is forthwith adjudged a low down quack unfit for decent society. His sin against sacred medical tradition is enormous in that it is just too crudely frank. There is another type of advertising which appears to meet the high proprieties, and at the same time is infinitely more effective; it is, of course, not called advertising, which connotes base acquisitiveness, but euphemistically referred to as "dignified conservative publicity". This type contemplates the artfully cunning use of the metropolitan news column, which, whether or not intended, does powerfully produce a public impression that can be richly profited by. By the use of "dignified publicity" one can indeed go far, even attaining the majestic proportions of an oracle before whom the common herd genuflect in awe. Thus may the air of respectability be preserved and at the same time motives may be served which good taste should better keep concealed. However, it is a sort of respectability that somehow does not seem to ring true; there is something synthetic and unstable about it, which when exposed to light is apt to decompose and offend the senses.
12. The convenient theory that great pharmaceutical houses can write better prescriptions for our patients than we, and that therefore we ought to forget materia medica and become their detailers to the public.
13. The credulity of accepting as simon pure medical science today, what will probably be unalloyed bunk tomorrow.
14. The prime delusion that the State, that is to say politicians, bureaucratic commissioners, directors, managers, and a host of secretaries, social workers, case workers, co-workers, slow workers, no workers, reporters, recorders, compilers, statisticians, solicitors, examiners, inspectors, inquisitors, licensors, coordinators, cooperators, subordinators, counselors, accelerators, mediators, moderators, meddlers, and complicators, not to mention probable grafters, fixers, tricksters, shysters, and chiselers, can be relied upon to furnish a better, cheaper, and simpler medical service to the already suffering public.

But enough of this, lest I be accounted a snarling cynic, when as a matter of fact, I am a beaming optimist.

If we but strip off the ugly accretions of the whoopee age, the rank and file will be revealed as true to tradition, as ever they were. Can it be possible that in this day of vaunted science and enlightenment, we have not the resourcefulness to adjust ourselves to present needs? Must we acknowledge defeat at the hands of detracters? Are we too blind to see, too proud to retrench, too soft to endure adversity, too weak to fight? I do not believe the medical profession will sell its birthright for a mess of State pottage, however attractive. Given the leadership of loyal, unselfish men, with heads below the clouds, and close enough to realities to guage public needs, the rank and file will rise to the occasion as they have always done, and our so-called medical problem will vanish in the thin air.

SIXTH MEDICO-MILITARY SYMPOSIUM

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BOOKS RECEIVED FOR REVIEW

The Spastic Child. By Marguerite K. Fischel. The C. V. Mosby Co., St. Louis, Mo. Price $1.50.

The Laboratory Notebook Method in Teaching Diagnosis and Clinical History Recording. By Logan Clendening, M. D. Price 50¢. The C. V. Mosby Co., St. Louis, Mo.

Postures and Practices During Labor Among Primitive Peoples. By Julius Jarcho, M. D., F. A. C. S., New York. Paul B. Hoeber, Inc., New York.

A Textbook of Gynecology. By Arthur Hale Curtis, M. D. Professor and Head of the Department of Obstetrics and Gynecology, Northwestern University Medical School; Chief of Staff and Chief of the Gynecological Service, Passavant Memorial Hospital, Chicago. Second edition, reset. Cloth, $6.00 net. W. B. Saunders Co., Philadelphia.

Medicine Marches On. By Edward Podolsky, M. D. Price $3.50. Harper & Brothers, 49 East 33rd St., New York City.

The Power to Love. By Edwin W. Hirsch, M. D., associate in urology, College of Medicine, University of Illinois. Alfred A. Knopf, Inc. Price $4.00.

BOOK REVIEWS

Any scientific publication reviewed in this column may be obtained for inspection. Orders for such inspection should be directed to the Medical Library Service, 424 N. Charter Street, Madison, Wis.

Contagious Diseases. What They Are and How to Deal with Them. W. W. Bauer, M. D. Published by Alfred A. Knopf. Price $2.

This does not pretend to be a medical text book. It is a book intended for lay readers and particularly for mothers who have children to protect against communicable diseases, and if they do not succeed in this have cases to nurse. It is most important for them to know how these diseases are spread, how they may be prevented, how to nurse communicable disease patients intelligently, and to know their obligation to the community as well as the obligation of the community to them in respect to disease prevention. The author has written a book which contains all of this information. He has written in a simple style understandable to any intelligent mother or lay person. All physicians who have the care of families in which there are children will find their practice easier and more effective where this book is read. W. D. S.

Modern Drug Encyclopedia and Therapeutic Guide. By Jacob Gutman. Paul B. Hoeber, Inc., New York.

This encyclopedia lists, by name, manufacturers and supposed therapeutic usefulness of over eight thousand drug preparations including foods, beverages, and many other miscellaneous preparations. The composition is given for most of the preparations.

No book can be published that can list and describe all the proprietary preparations since the list is constantly growing. The author hints at this in that this volume is listed as the First Edition.

This work should be exceedingly valuable particularly for a pharmacist and also should be in medical libraries for reference purposes. A. L. T.

"I Know Just The Thing For That". By J. F. Montague, M. D., Medical Director New York Intestinal Sanitarium. Price $2.00. The John Day Company, Inc., New York, New York.

This book which is "dedicated to patients without doctors and doctors without patience" is obviously published for lay perusal. Written in very simple language with candor and an interesting style, abounding in witticisms, it will be read with pleasure and real interest. The author, a gastroenterologist, discusses the harmfulness of cathartics and self medication with them, particularly does he object to the claims of manufacturers and advertisers for these products. He brings out the lack of protection that the now existing Pure Food and Drug Laws furnish. He goes on to discuss the symptomatology and treatment of colitis and states that many conditions ranging from backache to insanity may be due to colitis. He insists that a physical examination is not complete without proctoscopic examination. Dietary and medicinal treatment for constipation is given.

There are some inaccuracies and many will naturally disagree with some of the author's statements. However, in the main, the advice given is sound. This book, as well as many others of its type, may well add to the number of hypochondriacs who are always particularly numerous where gastro-intestinal symptoms exist. In this regard, the paragraphs on cancer are so written that unnecessary alarm may be felt by many of the readers. Generally, however, the subject material of the book will be beneficial rather than harmful. O. O. M.

Hypertension and Nephritis. By Arthur M. Fishberg, M. D., Associate Physician to Beth Israel Hospital; Associate in Medicine, Mount Sinai Hospital, New York, New York. Third edition, thoroughly revised. Price $6.50 net. Lea & Febiger, Washington Square, Philadelphia.

The third edition of the standard text is justified by reason of advances made in the subjects discussed within the recent past. Encyclopedic in scope, the text constitutes a reference of exceptional value. Further importance is granted this volume by reason of the occasional summarizing paragraph at the conclusion of certain chapters.

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The author has not completely given way to the present trend toward adequate protein diets in nephritis. The assumption that protein should be restricted whenever the nonprotein nitrogen of the blood is elevated, reflects this reactionary viewpoint. Recent studies have established the sacrifice of body proteins when dietary sources are unduly restricted. An arbitrary level of 40 grams or any similar figure is illogical, since the bodily needs of a given individual vary in direct relation to his weight. It has been furthermore established that the protein end-products of extrinsic or food proteins are no more irritant to the kidney than are such wastes derived from intrinsic sources.

The recent work of Hirschfelder on magnesium poisoning leads to serious questioning of the wisdom of the intravenous administration of magnesium sulphate in hypertensive encephalopathy and eclampsia gravidarum, as recommended by the author. Indeed, even the oral administration of magnesium sulphate in ordinary therapeutic doses may result in retention of magnesium with resultant depression and death. Obviously, this is one of the details in which the rapid growth of medical information outraces the capacity of even the extraordinary text to keep pace.

A similar situation is encountered in the discussion of the treatment of acute coronary thrombosis. No mention of the great utility of oxygen inhalation and intravenous glucose injection is found in this relation.

By and large, this monograph is one of the most valuable available on the subjects of hypertension and nephritis. Its organization lends itself to quick reference and the materials are well organized from the teaching standpoint. W. S. M.

The A–B–C of Refraction. By F. D. B. Waltz, M. D., Detroit, 1933, 86 pages. Price $1.75.

In the preface of this little volume the author states that its purpose "is to give to the general practitioner concise and practical information regarding the correct fitting of glasses which will be of great value to him in his practice". While the information set forth in the book would be of unquestionable value to the general practitioner in gaining an understanding of refraction, a thorough knowledge of this subject would require a much more complete presentation than that given within the pages of this small volume. The old adage, "A little knowledge is a dangerous thing", applies here quite as well as in more hazardous fields of medicine and surgery. The mastery of refraction requires years of patient study and practice and cannot be acquired by reading any text, much less one so brief as this.

It is the general opinion of ophthalmologists in this country that general practitioners should be discouraged in the practice of refraction unless they make a real study of the subject. A general practitioner can, of course, acquire the necessary knowledge but he should devote much more time to it than that indicated by this volume.

This little book does contain much information of value and as a guide or introduction to the subject of refraction may serve a useful purpose. The information contained within its pages is, on the whole, accurate. F. A. D.

The Pneumonokonioses (Silicosis), Bibliography and Laws. By George G. Davis, M. S., associate clinical professor of surgery, Rush Medical College, University of Chicago; attending surgeon, Cook County Hospital, Industrial Medicine, Inc., 844 Rush St., Chicago. Price $7.50.

This volume constitutes an exceedingly comprehensive reference source for the bibliography and laws relating to pneumonokonioses. Beginning with the classical source of Agricola, 1556, these references have been brought down through 1933. The cross-indexing by name and subject is very well organized. The abstract of the laws according to the several states is furthermore indexed by citation of characteristic suits.

This source reference should be of inestimable value to medical as well as lay-workers in a field of growing interest and importance. The voluminous literature which has grown up about this subject, is an indication of this growing interest and it is to be hoped that from the maze of growing information the logical direction of effort shall be toward a prophylaxis of silicosis. Mere codification of laws and rating of disability from such exposures are admissions of inadequacy of the control of a recognized and preventable industrial hazard. The industries and the insurance carriers are alive to their responsibility. Medicine is rapidly falling into step with the advance. W. S. M.

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1911

"The limits of assimilation of the different sugars vary and are as follows:

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"Maltose: Over 7.7 grams per kilogram (Reuss).

"Lactose: 3.1-3.6 grams per kilogram (Grosz).

"Cane sugar: Probably about the same as lactose (Reuss)."—*J. L. Morse, and F. B. Talbot: Physiology and pathology of the digestion of the carbohydrates in infancy, Boston M. & S. J., 164:852-855, June 15, 1911.*

1912

"Maltose has for many years been considered one of the most valuable of infant foods in modifying milk formulas; but the German school in the last few years has called special attention to the value of this sugar as a substitute for milk and cane sugars in conditions of intestinal fermentation. It is more easily assimilated and more rapidly absorbed than lactose or saccharose and it may be taken therefore by the infant in larger quantities without producing sugar fermentation."

"Maltose is especially indicated in the feeding of very young and delicate infants, and in all cases where either milk or cane sugar has produced intestinal fermentation and sugar intoxication. In the feeding of maltose it has been found advisable to combine it with about equal parts of dextrin. In Germany, and later in this country, 'Soxhlet's Nahrzucker' (which contains maltose 52.44 per cent., dextrin 41.26 per cent., and sodium chlorid 2 per cent.) has been largely used. Mead's Dextri-Maltose (malt sugar), which contains about equal parts of dextrin and maltose, is a similar preparation which may be used instead of milk sugar or cane sugar for modifying milk mixtures."—*B. K. Rachford: Diseases of Children, D. Appleton & Co., New York, 1912, p. 125.*

1913

"It is well to start with one ounce (albumin milk, or albumin-buttermilk) to every pound of body-weight in the twenty-four hours, increasing gradually until two or three ounces to the pound of body-weight are being given. Then add sugar, preferably a malt sugar, about one-fourth of an ounce at a time to the twenty-four-hour quantity, until an ounce or an ounce and a half is being given."—*J. Foote: Principles of treatment in malnutrition and atrophy of infants, Interstate M. J., 20:1913, No. 6.*

1914

"Milk sugar and cane sugar may be used in infant feeding, but my preference is for malt sugar. Mead and Johnson put up a convenient preparation which they call Dextri-Maltose and which consists of maltose 51 per cent., dextrin 47 per cent., sodium chloride 2 per cent., and which has a food value of about 110 calories per ounce."—*J. A. Gannon: Whole milk dilutions in feeding normal infants, Washington Med. Annals, 13:38-43, Jan., 1914.*

1914

"Dextrin-maltose causes the greatest gain in weight, cane sugar less, and lactose produces the least gain."—*M. S. Reuben: Observations on milk station infants, Arch. Pediat., 31:176-196, March, 1914.*

1914

"A composite opinion of the sugars is in favor of dextri-maltose, milk sugar and cane sugar in the order named."—*R. A. Strong: Essentials of modern artificial feeding of infants, Lancet-Clinic, March, 14, 1914.*

1914

"Experiments show that sugars vary in their rate of absorption, some being assimilated rapidly, while others distribute their nutriment over a longer period. For example, maltose is most promptly assimilated, cane sugar next and milk sugar slowest."

"The condition in which dextri-maltose is particularly indicated is in acute attacks of vomiting, diarrhea and fever. It seems that recovery is more rapid and recurrence less likely to take place if dextri-maltose is substituted for milk sugar or cane sugar when these have been used, and the subsequent gain in weight is more rapid.

"In brief, I think it safe to say that pediatricians are relying less implicitly on milk sugar, but are inclined to split the sugar element, giving cane sugar a place of value, and dextri-maltose a decidedly prominent place, particularly in acute and difficult cases."—*W. D. Hoskins: Present tendencies in infant feeding, Indianapolis M. J., July, 1914.*

1915

"In the severe cases (of diarrhea) he (Benson) uses Finkelstein's casein milk with malt sugar. He also believes that dextri-maltose is to be preferred to milk sugar or any other sugar, as the infants gain more rapidly and digest more easily this form of sugar."—*R. A. Benson: Observations on 1,500 artificially-fed infants, Med. Century, Feb., 1915, p. 33; abst. Arch. Pediat., 32-556-557, July, 1915.*

1915

"Until very recently we have taken it for granted that milk sugar was the best, but now many consider that malt sugar is even better. However, the malt sugar is not used in its pure state, but in the form of extracts, as dextri-maltose."—*E. B. Lowry: Your Baby, Forbes & Co., Chicago, 1915, p. 162.*

1915

"Cane-sugar (saccharose), like most of the other disaccharids, is not absorbed as such, but must first be split by the invertase of the intestinal secretion into the two glucoses, dextrose and levulose, which are readily absorbable. Maltose (malt-sugar) occupies an exceptional position among the disaccharids, in being partly absorbable as such. This is probably due to the fact that it can be split not only by the maltase of the digestive juices, but also by the same ferment being present and active in the circulating blood (Chittenden and Mendel)."

"Anticipating a little, we may mention that all cases, in which lactose may advantageously be replaced by other carbohydrates, are pathological, and without exception the result of unsuccessful attempts at artificial feeding; they will therefore be discussed under that head.

"Dextrin, intermediate between sugar and starch, is physiologically nearer to the former; we shall have occasion to see that, under certain conditions, it may supplement sugar very advantageously. Given together with maltose, it materially delays the fermentation of the latter; Stolte observes that the more complex the carbohydrate the longer fermentation is postponed."

"All malted foods contain dextrin, and there is reason to believe that their value largely depends on their being somewhat complicated; such, at least, is the opinion of Usuki and Stolte, who believe that a mixture of carbohydrates is more slowly absorbed than a pure sugar, and therefore tends to check fermentation in the intestine. Southworth explains the matter more definitely, by attributing the antifermentative action entirely to the dextrin, which is not fermentable as such, but only after it has been split into maltose, a process that takes place only gradually, and in the later stages of digestion."

"I make it a rule to give the ordinary formula with dextrin-maltose whenever the usual milk or cane-sugar mixtures seem to cause excessive fermentation and colic, or are attended with the evacuation of soap stools. I decidedly prefer this, as a preliminary measure, to going over at once to some very low fat combination, which can only be a temporary makeshift at best. I also find dextrin-maltose an excellent addition to albumin-milk when the first object of that food has been achieved and a gain in weight is desired; in this way I have succeeded in feeding albumin-milk far beyond the period usually advised, with highly gratifying results."—*F. L. Wachenheim: Infant-Feeding; Its Principles and Practice, Lea & Febiger, Phila., 1915, pp. 31, 33, 146, 158.*

1915

"The infant with diarrhea and vomiting is given nothing but tea for from twelve to twenty-four hours, no longer, and then the albumin milk is commenced, not over 5 gm. ten times a day, with 3 per cent. of a maltose-dextrin mixture. The amount of albumin milk is increased by 50 gm. each day until the daily ration totals 300 gm. After the weight has become stationary, carbohydrates can be added up to 5 per cent. of the maltose-dextrin mixture."

"Albumin milk is not so uniformly effectual in dysenteriform diarrhea as in cholera infantum. Whey seems to act better, diluted half and half with oatmeal gruel. After the starvation period he gives 50 gm. of the whey and increases by 50 gm. daily with equal amounts of oatmeal gruel. As improvement sets in 3 per cent. of a dextrin-maltose preparation can be added."—*L. Langstein: Cholera infantum and other severe diarrheas in infants, Therap. Monatsh., V. 29, August, 1915; Abst. J.A.M.A., 65:1314, Oct., 7, 1915.*

1916

"Dextri-maltose, having a higher absorption tolerance than the other sugars, is less likely to cause intestinal disturbances when large amounts of it are given."—*H. R. Mixsell: A brief résumé of the role of carbohydrates in infant feeding, Arch. Pediat., 33:31-36, Jan., 1916.*

1916

In cases of malnutrition, and indigestion in infancy, "The appetite improves rapidly, and the stools soon become normal in appearance, if the sugars are intelligently prescribed. By this I refer to proper proportions of dextrin and maltose. When there is a tendency to looseness, I have used the preparation known as 'dextri-maltose,' for the extra carbohydrates; . . ."—*M. Ladd: Further experience with homogenized olive oil mixtures, Arch. Pediat., 33:501-512, July, 1916.*

Continued down to 1934

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THE WISCONSIN MEDICAL JOURNAL

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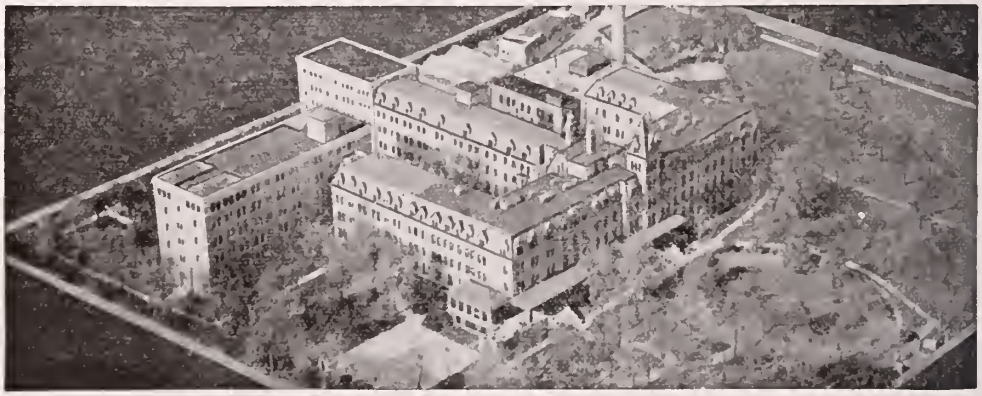

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THE WISCONSIN MEDICAL JOURNAL

Volume XXXIII OCTOBER, 1934 Number 10

The Presidential Address*

By THOMAS J. O'LEARY, M. D.
Superior

IN 1841 this Society was organized primarily to safeguard the health of the people of the state of Wisconsin, and secondarily, for the members to help each other; and each year a new president is installed. In assuming duties of the president of the State Medical Society of Wisconsin, I am deeply conscious of the honor conferred upon me and well aware of the trying conditions and the weighty problems which confront us. My predecessors in this high office prior to the last two years have all devoted their energy to the improvement of the practice of medicine from the standpoint of the patient, but the conditions of the past two years have been changing rapidly; even more energy has been expended by physicians to improve the average medical status of their patients, in the end that the people of the state of Wisconsin have never been as healthy as now.

In the early days of the nineteenth century medical practice was chaotic. There were no practical regulations. Medical colleges were established in Philadelphia, Boston, New York, and other of the larger centers, which developed few high grade men, but there was no organization to control or educate the men who desired to care for the sick. The main thought of this Society as well as societies in other states, therefore, was the betterment of medical education and regulation of the practice of medicine.

We therefore realize from the above statements the primitive idea of organized medicine; the spirit to help. This is the very foundation of our success and will continue to be the means of an everlasting permanency. We frequently hear our organization likened to a labor union, but who ever heard of a labor union whose members devoted ninety per cent of their energy in behalf of their employers?

At the present time we are confronted with many important problems, the solution of which will require much careful planning. Well-meaning social workers, health workers, politicians, department store owners, would-be reformers, economists, socialists, communists, and others, are all trying to change the present methods of medical care so that they will concur with their ideas. That is, they want to destroy the spirit of the organization. This is the reformer's hey-day, and he is going to make the most of it, knowing that there is an overproduction of physicians and the income levels of the masses have been lowered to such an extent that the average physician's income is greatly reduced, a condition that the reformer thinks is creating unrest within the rank and file of organized medicine.

SOCIALIZED MEDICINE

I am convinced that we are opposed to socialized medicine, state medicine, or medicine under insurance plans, voluntary or compulsory. It is quite evident that the term "socialized medicine" is a red flag to a great majority of the physicians of this state.

It is quite true that we have other forms of state medicine which are accepted as a matter of course, and no one seems to get excited about them. The care of the insane by the state which we have had for the last fifty years or more is a definite form of state medicine; the state laboratory for diagnosis is distinctly state medicine. The distribution of various toxins and biological preparations is state medicine. The hospitalization of indigent patients paid for by city,

* Presented before 93rd Anniversary Meeting, State Medical Society of Wisconsin, Green Bay, September 13, 1934. Address of the incoming President.

county, or state, is state medicine. The care of tuberculous individuals and the hospitalization and treating of our veterans in government hospitals is state medicine.

To what form of state medicine is it that the physician objects? Surely not to the types just mentioned! It is only in well organized, well conducted, ideally located institutions that this class of patients can be properly cared for, but I am convinced that the medical organization of the state should have some voice in the control of such institutions that are primarily established for the care of the physically and mentally disabled.

The family physician should be protected in all such endeavors for which his education and training have prepared him in the diagnosis and care of the sick and injured. He should be permitted to be in charge of, and supervise health examinations, not only of school children, but of adults; the administration of vaccines and toxoids and other biological remedies.

If we are to continue to practice medicine as now conducted, and by this I mean that if the family physician is to be retained as such to administer to the sick and injured, then he must be able to retain his patients as individuals. The formation of groups, either by lodges, insurance companies or other groups, must be discouraged.

In a recent partial survey as a part of the C. W. A. program, the lack of preventive measures amongst the young of school age was clearly demonstrated. Your retiring President sensed this long before the survey was made. He realized that doctors were reluctant to take the initiative in their individual communities. The survey disclosed a considerable percentage of children in each community whose parents could pay for their services. Consequently, he has, and still is, advocating the employment of a medical man, socially trained to take the leadership in the movement to organize the profession that this work may be in the control of the physicians in each individual community.

I heartily endorse this movement. If we continue to be indifferent, this will be another phase of the practice of medicine that will pass into the realm of state medicine. Leadership must come from the medical profession if this work is to be successfully carried out with credit to our community physicians. It must be remembered that the public foots the bill, and if we are not careful in carrying out the plans the public will eventually decide as to the procedure.

During the last twelve months there has been an increasing amount of discussion of the problems of economics; in the press, in magazines, (both lay and medical), and on the platform. Medical and hospital problems are dwelt on by persons in every walk of life. The literature has been both instructive and destructive; the writers both informed and misinformed. At times I have almost been compelled to believe that some of the writers and speakers hold that economic salvation for the United States lies in thrusting upon the country a program of compulsory insurance. Well paid proselyters have spread this gospel from coast to coast. Representatives of this and that fund for lay organizations, for the most part, have preached to the medical profession and the public that the only road to medical salvation lies in the church of government controlled medicine. They have even gone so far as to divide our physicians into two groups: reactionary and progressive. They claim, of course, that the progressives are followers of their own holy belief.

We have been, and are going through, a period of economic distress. Medicine along with every other line of human endeavor has felt its strangling embrace. In a land of plenty, poverty has brought suffering to millions. Countless American citizens have been unable to pay for food for their families, and farmers and manufacturers have been unable to sell their materials and the products of their farms.

Worthy citizens have also gone without medical services and hospital care because they have been unable to pay for them, while physicians sat in empty offices and hospital executives contemplated rows of empty beds. I have yet to hear of any plan for the socialization of the food industry in which the state or government will take over the farm and factory to be managed for the benefit of

the people. I have yet to be told of any plan for government operation of the clothing industry for the benefit of the people. Can you imagine the gasp of horror any such suggestion would create?

The argument for socialized medicine stresses the need for medical services and hospital care for the people regardless of their ability to pay, because good health is the foundation of the nation. This is very true, but they do not tell you that countries which have had socialized medicine for a number of years have an increased mortality of thirty to fifty per cent. They also emphasize the fact that free choice of physicians will be reserved, insuring the present patient-physician relationship. Statements such as these sound like pre-election promises, because any form of socialized medicine either state or the insurance plan will be governed by lay commissions, and the physicians will be subservient thereto. Where is the demand coming from for a change in the established service rendered by organized medicine? Not from the vast majority of physicians or from substantial citizens. In my own community I have never heard it discussed by lay citizens.

I know they would resent very deeply systems which would deprive them of a free choice of physician or the right to seek medical aid if so needed. We know from present day experience how officious social workers would become under any plan of socialized medicine. The trend of opinion of people outside of organized medicine is forcibly stated in an editorial from a periodical opposed to medical therapy. This particularly well-edited publication recognizes the injustice of the proposed politically controlled state medicine.

"The family physician who brought kindliness, ready sympathy and unselfish service in large quantities along with his pills and potions has been passing from the American scene; more and more his place has been taken by a complex mechanism, a highly departmentalized professionalism, with impersonal efficiency its dominating sentiment. Now there is a tentative plan for a broad organization of 'state medicine', as recently outlined by the secretary of the Milbank Memorial Fund of New York. This plan, utterly impersonal, proposes that the American population—including that sixty-two per cent which the fund's spokesman says receives no medical, dental or eye care of any kind—shall be coerced into supporting financially and yielding physically to the domination of a group of state-employed men.

"It is difficult to understand why every citizen—including those who by choice would adhere to a rival school, to no school, or who depend upon prayer for healing—should be compelled to comply with such a regulation. Incidentally, it is strangely foreign to the legend of the family doctor, who worked under the motto, 'To each according to his need; from each according to his means.'

"Yet it is just this point which the Milbank fund stresses as its reason for proposing compulsory state medicine. The complexities of modern medical practice, it is claimed, have elevated its cost above the means of many who wish it. Therefore, what could be simpler than for everyone to contribute his proportionate share of the total cost of medical aid, thus minimizing the per capita cost according to the well-known practice of insurance?

"If those who feel they wish material aid in their illness were left free to enter or refrain from participation in such a scheme, no criticism could be leveled at it. But, in order to make the plan thoroughly effective, says the fund's secretary, it must be made compulsory upon all. But will that sixty-two per cent of the people who have not felt the need of medicine sufficiently to seek its aid—although it is offered without cost in countless hospitals and clinics—permit themselves to be saddled with medical peonage?

"When practical politics enters the room, personality flies out of the window. Psychology, practical and personal, by whatever name it is known or however simply it is manifested, is one of the most valuable assets of the successful physician—successful in rendering aid and comfort to the suffering patient.

"The ability to instill a clinging confidence can never be replaced by the expediency of the practical politician. Does anyone have grounds for the slightest doubt that under state medicine politics would not dominate and sustain the medical appointments?

"The source of this desire for state medicine is not the medical profession. Its members have not sought this process of regimentation. The profession will not be regimented if each member will do that which he rather passively hopes will be done for him by others—take steps to arouse public opinion, each in his own circle of contacts. The very confidence which the individual physician arouses in his patients, will, in the aggregate, prove the greatest menace to this insidious propaganda. In addition to individual effort, organized, co-operative measures are essential. Organized medicine has a potential influence sufficient to drive its opponents to cover.

"Whatever may be the outcome of this campaign to institute state medicine, the result will be charge-

able to the profession; its defeat, to co-operative, intelligent activity, its establishment, to a greater or lesser passivity. The responsibility is direct; the challenge is clear. The medical profession must solve medical problems; it alone has the intimate knowledge which can furnish an intelligent and happy solution."

IDEALS OF MEDICINE

Compulsory health insurance was inaugurated in 1883 by the notorious Bismark, of "blood and iron" fame. It naturally attracted little attention at the beginning in English-speaking countries. In 1912, however, when Lloyd George forced sickness insurance on the profession in Great Britain, the proceedings in our mother tongue have led to a constant increase of articles against the scheme. (The latest estimate I have seen a few months ago, of physicians there receiving public monies is 20,000). In Soviet Russia the plan has been carried to the extreme.

For many years it has been a joke about the proclivity of lawyers at medical school commencements, banquets, etc., to lecture the doctors about their proper conduct. In the recent past a number of lay organizations have entered the field as well, their full-time directors, secretaries, or what not, are profuse with their advice and admonitions.

Nicholas Senn, our famous fellow-citizen of years gone by, inoculated himself with fragments of cancerous tissue to test the contagious theory of malignancy. He was followed by Henry Head, the celebrated English neurologist, who cut the nerves in his forearm to investigate the rate of healing and the mode of repair. Quite recently four workers of the New York City Health Department volunteered to submit to injection of the new poliomyelitis vaccine before it was distributed to the public, risking not only their lives but the prospect of permanent crippling. (The heroism of Reed, Carrol, Lazear and their associates to prove the vector of yellow fever is so well known to our profession it calls for mere mention.) So far we have not learned of any of these lay directors, etc., submitting themselves for similar investigations.

From the lay propaganda one would assume the profession receives all the money expended for medical care, while it is well known its share is not over thirty-three per cent. It has been estimated the total expenditures for all sorts of medical services are not much in excess of about three per cent of the national income, in normal times, of course. It has been estimated also that the amount spent in this country for many luxuries, in each instance exceeds that for physicians' care.

In the mid-eighties, diploma mills were rather common out here in the West. I have been told members of graduating classes who failed to pass in those days, made a trip of a few hundred miles, and actually returned with a diploma before their successful classmates received their own. By the turn of the century, the number of medical colleges, —good, bad, and indifferent—approximated over three hundred; by the energetic efforts of the Council on Medical Education of the American Medical Association, the number has been reduced to about half a gross—to use a commercial term.

Even with this marked reduction the number of graduates is about five thousand annually from the approved schools. To this must be added—say four hundred, from foreign countries and the non-approved schools. There is a woeful disproportion in the rates of distribution, sunny California, for example, having one doctor to four hundred eighty-three of the population; the other extremes being South Carolina and Montana with one to fourteen hundred odd citizens.

In addition to the osteopaths, chiropractors, naprapaths and similar cults, there is a horde of New Thought devotees, miracle-workers, and psychic mountebanks. Witness the number of "Swamis", and "Yogis", from India or some other far-off clime. ("The hills are green far away," as the old saying has it.) Their ads full of glowing promises are found in our metropolitan dailies, and they are common sights on the streets, turbanned, bearded, well-dressed and invariably looking well-fed. With all this competition no wonder some younger members of the profession look to State Medicine as the remedy.

PRINCIPLES OF ETHICS

In the mean time many have become affiliated with contract practice, industrial practice, or as full-time associates in hospitals. To clarify the situation at the Cleveland meeting of the American Medical Association, three amendments to the Principles of Ethics presented by the Judicial Council were adopted by the House of Delegates. The first concerning so-called contract practice in condensed form is as follows:

" 'By contract practice' is meant the carrying out of an agreement between a physician or a group of physicians, and a corporation, organization or individual, to furnish partial or full medical services to a group or class for a definite sum or a fixed rate per capita. Such practice per se is not unethical. However, certain features or conditions make a contract unethical, among which are: 1. When there is solicitation of patients. 2. When there is underbidding to secure the contract. 3. If the compensation is inadequate to assure good service. 4. When there is interference with reasonable competition in a community. 5. When free choice of a physician is prevented. 6. When the conditions of employment make it impossible to render adequate service to the patients. 7. When the contract because of any of its provisions or practical results is contrary to sound public policy. Each contract should be considered on its own merits and in the light of surrounding conditions."

So-called "group practice" in existence for many years now, is apparently growing rapidly; a year or so back it was estimated there were over three hundred "groups" in all, located in practically every state. Much of the opposition to this type seems to arise from the unprofessional methods of advertising, etc., set in force by the lay business managers. As regards this phase the amendment runs—

"The ethical principles actuating and governing a group or clinic are exactly the same as those applicable to the individual. As a group or clinic is composed of individual doctors, each of whom, whether employer, employee or partner is subject to the principles of ethics herein elaborated, the uniting into a business or professional organization does not relieve them either individually or as a group from the obligation they assume when entering the profession."

Of these three amendments, the last one to be noticed relates to physicians working on a salary for organizations founded by lay businessmen. As might be expected, the Judicial Council is very precise on this point. They decreed—

"It is unprofessional for a physician to dispose of his professional attainments or services to any lay body, organization, group or individual, by whatever name called, or however organized, under terms or conditions which permit a direct profit from the fees, salary or compensation received to accrue to the lay body or individual employing him," etc.

The federal government itself is responsible at times for abuse of medical charity. At the recent,—and momentous,—meeting of the American Medical Association, a delegate from the District of Columbia introduced a resolution protesting against cabinet officers, senators, congressmen and their families receiving free treatment in government hospitals and clinics. Some activities of the Veterans' Administration have been curtailed of late, but I learn that at the Venereal Disease clinic run by the U. S. Public Health Service, at Hot Springs, about one hundred new patients daily are flocking in under the recently organized Federal Transient Bureau.

I am convinced that we will not at the present time face any organized plan in this state to foist socialized medicine upon us; that is, if we continue to give the fine service in the future that was so generously given in the past, especially in these trying times. But I am not so sure but what it might descend upon us as a federal gift, another noble experiment.

Realizing that cancer ranks second in the causes of death in this state, that the cancer committee is now well organized, that they have a definite program for presentation of facts for the education of the public, and that the State Health Department is cooperating to the extent that they have added cancer to the reportable diseases, I feel it my bounden duty to beseech each and every member of this Society to aid in any manner whatsoever the work of this committee, so that they may be rewarded for their earnest efforts.

We all know that the mortality rate is not being lowered in spite of intensified scientific research, that it is only through education of the public that we can hope for betterment of the conditions. The committee has a definite outline whereby the can-

cer gospel will be carried into every component society and it is with this thought in mind that I call upon the Auxiliary for their aid. This fast-growing organization can be of tremendous assistance to the program above stated. I know that this organization is willing and eager at all times to aid the doctor in his efforts, and I am sure that it will be doubly eager to make sacrifices for their fellow-mankind. I see a high-spot for the Women's Auxiliary in this campaign.

In conclusion, in reference to socialized medicine, it is self-evident that to throttle this propaganda concerted action by our own and other state medical societies is imperative, with the American Medical Association as a leader.

The Lloyd George plan came on the British profession like a bolt from a clear sky. So, quoting the words of the immortal Benjamin Franklin: "In time of peace prepare for war."

Clinical Signs, Considerations and Therapy of Brain Tumors*

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THE admissions at the Wisconsin Psychiatric Institute have materially changed during the last years. Formerly we had an abundance of cases of neurosyphilis, multiple sclerosis and of encephalitis, but now we are confronted with many advanced and a large number of suspected brain tumors. We have no explanation to offer for this change but we do not believe that more accurate examination and modern methods of investigation alone account for this increase in brain tumors.

I shall review the amnestic and clinical symptoms, very briefly the histo-pathological differentiations and the diagnostic therapeutical procedures concerning this problem. The therapeutical results determine, naturally, the accomplishments of a scientific research, which by no means is alone a question of technical surgery. We must consider conscientiously the analysis of a brain tumor and thereafter we have to answer the questions when, where and if the case should be operated upon. It is essential to recognize the tumor syndrome, but from the history of timely development, from the various symptoms presented and from the histo-pathological consideration, the above questions when, where and if to interfere have to be answered. Today we do not operate advanced malignant or metastatic tumors in different organs of the body, profiting from such experiences we should accept a fatalistic resignation if necessary in brain tumors.

The highly developed focal or neuronic diagnosis with the goal of determining exactly the regional destruction and the interference in functions of known centers and tracts is theoretically desirable, but I challenge this mode of investigation as being practical, workable and always correct. The errors of tumor localization even with cardinal signs of certain gyri or tracts are greater than the publications on this subject admit. Experience has taught me to consider first the physical and topographical possibilities between brain, meninges and skull, and secondly to rely on specific neuronic focalization. To make this statement clear I refer to a meningioma growing into a silent area of the brain. The general symptoms may be very marked but still the neuronic or focal signs are lacking. If they occur later in the picture, then they are neighborhood symptoms and are conditioned by pressure, edema or by a shifting in the ventricular or vascular hydrodynamics. An anosmia can be a focal tumor sign of the olfactory bulb, of the uncinate or hippocampal gyrus, or of the anterior perforated substance, but again it may be a neighborhood symptom from a basilar or a frontal tumor, and furthermore it may

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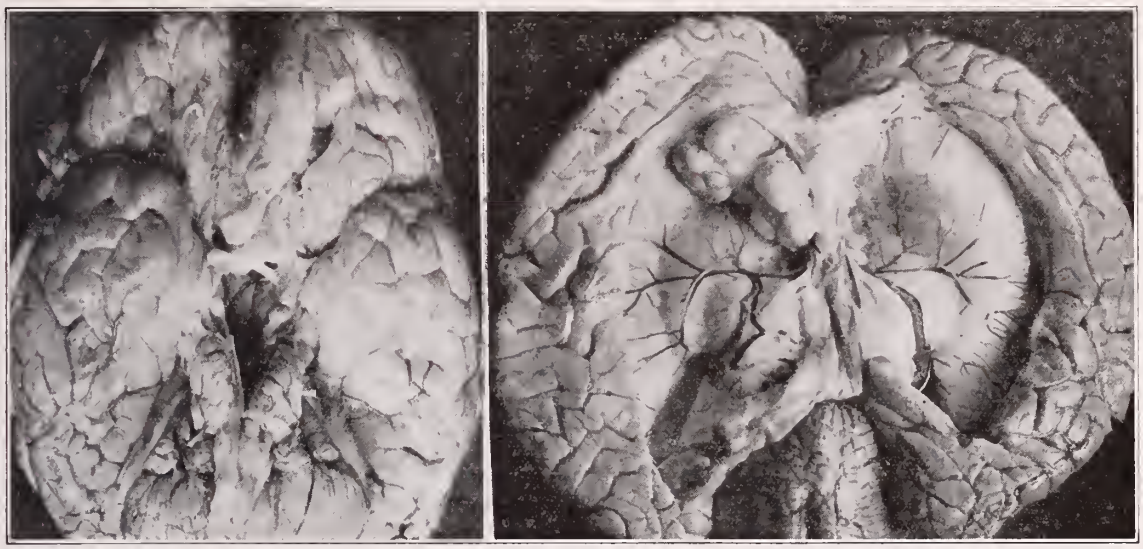

Fig. 1. H. L. G.—47 yrs. Except for severe influenza in 1920, no illness. 3 mo. afterwards Mayo Clinic because of headache, blurring of vision and malaise. Findings: bilateral choked discs of 4 diopters, normal fields, slight horizontal nystagmus; weakness of rt. face. X-ray of skull and spinal fluid normal. Diagnosis, increased intracranial pressure, probably on a meningo-encephalitic basis. Recommendation: subtemp. decompression for temporary relief. 1921 rightsided temp. decompression: fluid accummulation over the temp. lobe led to diagnosis of localized arachnoiditis (Pseudotumor). Adm. Wis. Psych. Inst. 12–7–33 with complaints: head pressure, mental sluggishness. Findings: smell reduced on rt.; discs: bilateral atrophy right—left secondary to choked discs of 2 diopters, veins dilated and tortuous, arteries attenuated; fields normal; weakness of left lower facial nerve no reflex, sensory, muscular or equilibratory abnormalities. Laboratory findings: negative. Encephalogram performed in consideration of chronic leptomeningitis with a basilar block resulting in internal hydrocephalus which could explain the complaints in view of meagre physical findings. 100 c.c. of cerebrospinal fluid removed and replaced by 80 c.c. of air. No air entered the basal cisterns or ventricular system postmortem: anterior of the rather flattened optic chiasm was a tumor (fibrous type of astrocytoma) which extended into the left frontal lobe forming a grape-like tumor mass and filling the anterior horn of the left ventricle. Note the compression of the left olfactory nerve and of the optic chiasm and the marked internal hydrocephalus with the obstruction of the dilated foramen of Monro.

be only a general pressure sign of an extensive hydrocephalus accompanying a cerebellar tumor (Picture 1). Therefore, the neuronic interpretation, and I consider neuronic as focal sign, is extremely difficult and often erroneous. The teaching of today is the division into general, neighborhood and focal signs, which, at least, in a specific sense, cannot be accomplished clinically. The difficulties become augmented if the various signs are caused by a shift either by compression or dilatation of the ventricular system or by congestion or constriction in the regional blood vessel supply. Furthermore, more consideration must be given to the spacial variation between brain, cerebrospinal fluid and skull as well as to the constitutional reactions in the course of brain or vascular changes in different individuals. These alterations can be evaluated by comparing the physical with the psychic pattern constitution of the given tumor case (Picture 2).

We know that at times the clinical diagnosis between a cerebellar or a frontal tumor is impossible because the type of conditioned ataxia cannot be analyzed and both may present classical signs of each other resulting from pressure in the opposite direction from either pole. Such a diagnostic error proves again that the intensity of the general tumor signs depend upon the swelling or edema of the brain, upon the hydrocephalus, and only secondarily upon the tumor itself. We have to keep in mind, therefore, that a large tumor will present few clinical signs as long as it does not interfere grossly with the ventricular and vascular circulation or the latter's anatomical location.

The general tumor signs are headaches, nausea with or without projectile vomiting, choking of the discs, dizziness, bradycardia,

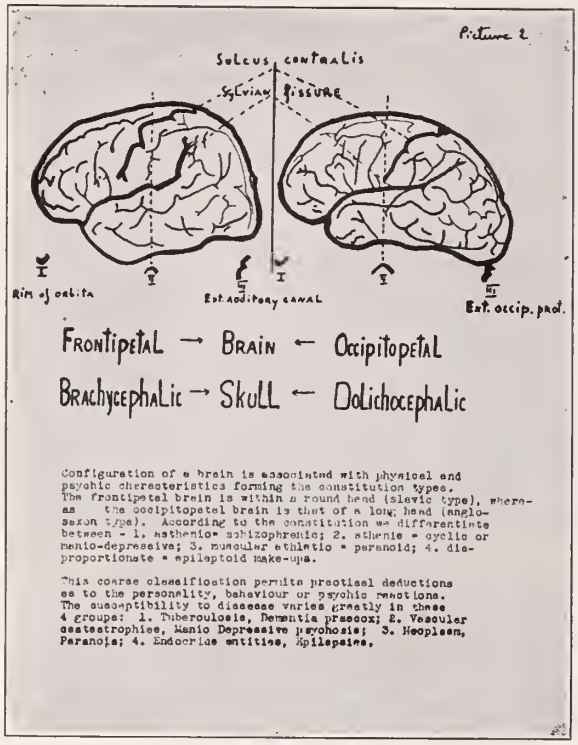

Fig. 2.

psychic changes, epileptiform attacks and alterations in the spinal fluid composition. In our brain tumors, headaches have been present constantly and have been always the first symptom. Exacerbations of the boring type varying in intensity are typical. The headaches alone are of no localizing value. They are rarely present in tumors of or around the basal ganglion. Cases of so-called idiopathic epilepsy with periods of localized severe headaches as alternating equivalents should be investigated for brain tumor and one must question the diagnosis of epilepsy. Naturally, all causes of producing headaches including migraine or labyrinthitis have to be ruled out. In chronic joint-muscle pain or chronic paresthesias with neuritis for which no rheumatic, arthritic or infectious etiology can be found, one should keep in mind the possibility of a brain tumor especially if headaches are accompanying the pain sensations. The former are not uncommon with frontal lobe tumors whereas the latter occur with tumors in the optic thalamus or in the posterior fossae. Persisting headaches become intensified by: 1. active and passive changes in the extreme position of the head; 2. artificially raising the increased intracranial pressure by such procedures as compressing the jugular veins, by holding the breath or by closing nose and mouth and forcible expiration (Valsalva test). The degree of intensity is often accompanied by spasm of the neck muscles and shrugging of the shoulders.

Dizziness or giddiness may be associated with nausea or with attacks of projectile vomiting. It is of no localizing value but a frequent subjective complaint in the history. The sensation of whirling and rotation dizziness or of falling constantly in a certain direction is characteristic for a neoplasm in the posterior fossae, after migraine or middle ear (vestibularis) disturbances have been ruled out.

The most important objective sign of a brain tumor is the choking of the discs varying from hazy borderlines with congested tortuous veins to definite elevation from 1 to 10 diopters with or without peripapillary hemorrhages, to be followed in the late stages by secondary optic atrophy. Choking of the discs are caused in 65 to 70% by brain tumors. We have seen a number of frontal tumors without this phenomenon. In pituitary tumors it is always absent but here we find commonly an early pressure atrophy of the optic nerves. For the inexperienced examiner of eye grounds we recommend to test the pain sensation of the exits of the trigeminal and major occipital nerves. A firm pressure upon the supra-infra orbital and mandibulare formaminae and upon the mid-occipital region between the mastoid and major occipital protruberance results in severe pain exclamation and defense movements in all cases with increased intracranial pressure. A distinct pain sensation, if present bilaterally and over all mentioned points, is a clinical synonym for increased intracranial pressure with choking of the discs. (Picture 3)

An early or even an advanced increased intracranial pressure does not interfere with the functions of the inner ear, that means, we do not observe increased vestibular functions except in those cases which directly affect the eighth nerve or one of its branches. Nystagmus is of no aid in localizing brain tumors nor is it a necessary sign to accom-

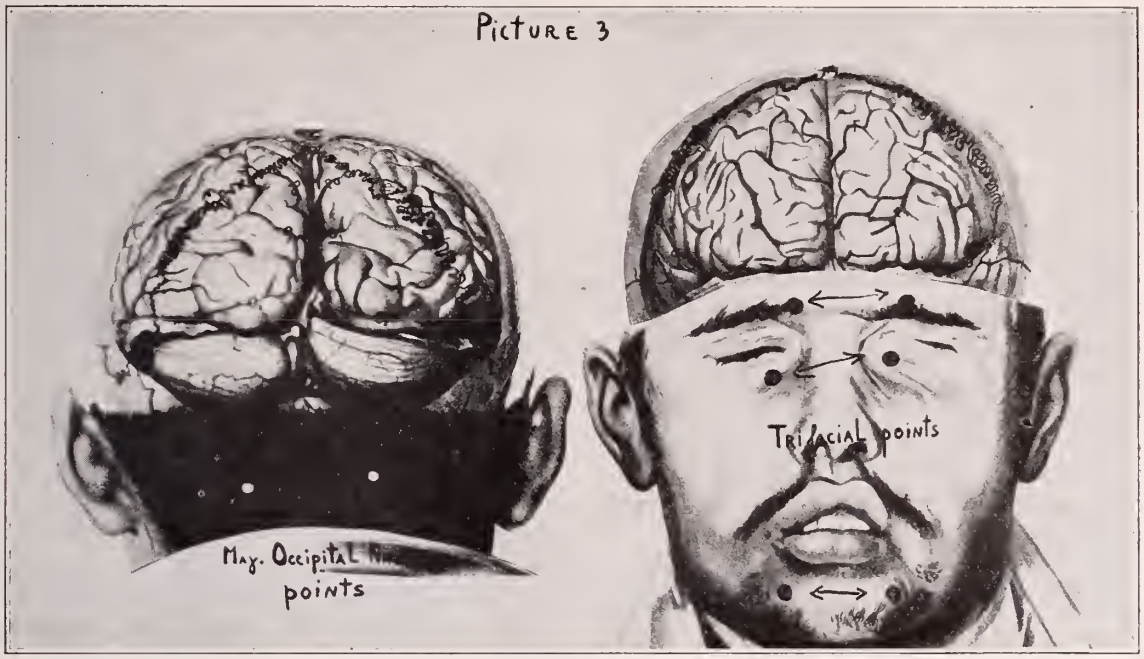

Fig. 3.

pany either them or increased intracranial pressure.

SPINAL FLUID EXAMINATION

The information which we obtain from spinal fluid examination has been disappointing for the localization or even for the general brain tumor diagnosis. We compiled from our cases the following rules: (1) increased globulins (Ross–Jones and Noguchi) faintly positive to positive, normal cell count (0 to 10), and sugar (45 to 60 mg.), but definitely increased measured pressure suggests a tumor; (2) xanthochromia may be either the result of a hemorrhage or is caused by a ruptured glia or astrocytoma cyst into the fluid spaces; (3) the gold sol curve, if present, falls into the mid zone, 0001221000, but rarely changes the burgundy red beyond the violet color; (4) the spinal fluid on metastatic tumors may contain tumor cells and, therefore, we recommend centrifuging and staining of the sediment.

Lumbar or cisternal punctures are often necessary for the elimination of other possible pathological entities.

An important phase in our investigation has been the tabulation of psychic alterations in the early, in latent and in the late stages of brain tumors with an attempt of localizing correlation. We are unable at present to suggest even a psychic focal or a psychic neighborhood sign even with reference to tumors in the frontal lobe, in the corpus callosum or around the basal ganglia. As mentioned above, the normal psychic pattern system befitting to the individual constitution must be considered before evaluating mental alterations in this patient with a brain tumor. Changes in character, personality and behavior may be caused by constant headaches, head pressure and general discomfort. Loss of initiative, excitation, stupor, confusion, disorientation resembling various types of psychoses may be the effect upon the widely distributed psychic centers in the brain either by general or ventricular pressure or by vascular inefficiency. Real exogenous or endogenous depressions have not been observed in our series, even in cases of blindness, deafness or of complete invalidism. The final psychic picture of a brain tumor are periods of deep somnolence ushering in the ultimate ante mortem coma. Frontal tumors give rise to an apathetic dementia, most commonly the amnestic, confabulative syndrome of Korsakow associated with lack of insight or realization of the affliction. The happiness, contentment and indifference

of the helpless, crippled brain tumor case resembles the psychic pattern of advanced multiple sclerosis or of chronic encephalitis. We consider it to be an important organic sign. The text books refer erroneously to euphoria or Witzelsucht as a characteristic psychic reaction in frontal tumors. The observed euphoria differs greatly from the emotional jokiness of the alcoholics, from the excitable, talkative queerness of the hypomanics, and from the expansive, grandiose folly of the general paretics. The brain tumor euphoria is always a reaction to question or stimulation from the surroundings, is not spontaneous, and impresses us only as being from inadequate to frivolous in consideration of the grave physical condition.

Epileptiform attacks of general or of Jacksonian type are early warning signs of brain tumors in the cerebral hemispheres and they may precede for years the final clinical diagnosis. Parker at the Mayo Clinic analyzed 313 tumor cases and found in 20.4% epileptiform attacks. In 38 cases it was the initial symptom and in 13 cases it was the only persistent symptom over a period of several years. That the occurrence of epileptiform attacks is not higher and not more frequently referred to in statistics suggests a pre-existing disposition to convulsions in with brain tumor afflicted individuals. As a definite focal or neuronic symptom only the regionally defined irritations of the pre-central gyrus are usable.

Complicated neurovegetative reflex disturbances in their most commonly occurring chronological order are vomiting, belching, yawning, coughing, rumination and oral retention of food. Cerebral vomiting is explosive, projectile, independent of food intake and usually at the peak of severe headaches. It is an early characteristic of brain tumors conditioned by direct irritation of the vagus or the reticular substance in the cranial oblongata or caused by pressure around and in the fourth ventricle. Yawning is seen more commonly in thalamic or subthalamic tumors which interfere with the functions around the third ventricle and they may be a forerunner of short or long narcoleptic sleep episodes. Anomalies in the pulse rate in the form of a slow, irregular tumor pulse (typical for brain abscess) is extremely rare. It is not characteristic and of no diagnostic significance in brain tumors. Definite fluctuations in the pulse rate from a recumbent to an erect position need investigation if associated with other signs, but again they are no typical signs. We have never seen in our brain tumors, even in those with greatly increased intracranial pressure, an abnormal elevation or depression in the blood pressure. From the literature, I assume that only brain tumors which stimulate the functions of the posterior lobe of the pituitary gland by increasing the production of pressure substance present abnormally high blood pressure readings. Respiratory abnormalities occur only in tumors compressing the oblongata or in the final stage during which the Cheyne–Stokes' rhythm is the rule. The total and differential blood count, temperature, urination and bowel functions are not altered by brain tumors nor by increased intracranial pressure. Urinary or rectal disturbances occur usually during apathetic, lethargic episodes or in the course of excited restlessness, and then they are the result of transient loss of the emotional control mechanism for these functions.

TWO CLASSES

Brain tumors must be divided into extra- and intra-cerebral neoplasms, the latter being alone the true brain tumors. Many of the tumors present predilective localization with characteristic clinical signs which depend naturally upon the affected region. Tumors occur in certain periods of life, the meningiomas around 30 to 40 years, whereas the cerebellar medulloblastoma is the tumor of childhood. The extracerebral mostly connective tissue tumors originate from the meninges, from the sheaths of the brain nerves or from the brain appendages among which the pituitary and epiphyseal glands are the outstanding ones. They are slowly growing, consequently the clinical signs are developing over a long period. The main representative of this group is the globoid or flat meningioma or endothelioma (in the old classification called fibro-sarcoma). These tumors may be found in the olfactory groove (Picture 4), along the ridge of the lesser wing of the sphenoids, in the falx, in

Fig. 4. M. S. T.—36 yrs. Headaches for several years. Vomiting for 4 weeks. Exam.: tumorous facies, lethargy, loss of smell bilat., postneuritic optic atrophy, partial loss of taste. Sudden death. Diag.: Meningioma in ant. fossae.

the suprasellar region or around the meningeal perforations of the cranial nerves, but originate most commonly from the sinuses especially from the anterior portion of the superior longitudinal sinus. Their great vascularity, their tendency to calcify and to erode the adjoining bones makes x-ray investigation a necessity as a further aid in the localization. The clinical course of a meningioma can be divided into three stages: (a) the period of latency without neurological signs; (b) the initial period with mild compression of the adjacent brain tissue and blood vessels; and (c) the period of irreparable pressure upon cells and tracts. Extracerebral tumors of common interest and with a favorable prognosis are (1) those originating from the sheath of the acoustic nerve (8.7% of all intracranial tumors) with the symptoms referable to the cerebellopontine angle, and (2) the benign adenomas of the pituitary gland, the latter producing a hyperpituitarism, present the picture of acromegalia with bitemporal hemianopsia, polydipsia and polyuria.

The intracerebral tumors, being within the brain tissues, need a different consideration as they infiltrate and are destructive. Therefore, they interfere very soon with cellular and tract functions, they disturb the circulation and the ventricular mechanism early and they are very early accompanied by brain edema. These tumors are divided into three groups: (1) glioma; (2) angioblastoma; (3) metastases from a carcinoma or sarcoma.

The collective name glioma is unsatisfactory for clinician and neuropathologists. The excellent classification of Cushing and Bailey dividing the glioma from morphological, embryological and histological points of consideration in fourteen forms is clinically not always applicable as various tumor combinations commonly occur. The three large families comprising 79.8% of all neoplasms are: (1) spongioblastoma glioblastoma multiforme; (2) astrocytoma; and (3) medulloblastoma. They differ widely in age of occurrence, site of origin and biological behavior. 30.8% of the glioma are called spongioblastoma multiforme. It is the acute malignant glioma of adults of middle age situated exclusively in the cerebral hemisphere. The clinical course, ushered in often with a sudden, dramatic onset and imitating a cerebral vascular catastrophy is rapid and progressive, presenting within a short span a hopeless situation. The infiltrative destruction and the marked brain edema hasten the decline. The clinical evolution comes to an end within twelve months and is associated with many ups and downs conditioned either by hemorrhages or softenings into the large growth often resulting in very few localizing signs. Regardless of therapy, these tumors invariably have a fatal outcome.

The astrocytoma, a more or less rather firm glioma, occur mostly in the cerebral hemisphere of adults but also in one lobe of the cerebellum of younger people and are somewhat more frequent (37%) than the spongioblastoma multiforme. Because of their slow progression over months and years without definite clinical fluctuations in their symptomatology and their tendency to cystic degeneration, they offer a favorable prognosis. Operations render good results as

complete removal of the cyst and the mural node are possible and with this desirable goal accomplished the patient may survive indefinitely.

A very malignant glioma located almost exclusively in the cerebellum of children from 2 to 10 years is the medulloblastoma. This reddish-grey tumor originates from the roof of the fourth ventricle or from the vermis, presents vomiting without nausea, staggering and trunkal ataxia, and terminates life from the onset of symptoms to death as an average within fifteen months. Twelve per cent of all glioma are of this type which has a tendency to metastasize toward the brain stem or downward to the spinal cord. Operations result in temporary improvement but all cases die from local recurrence or extension of the tumor, therefore, x-ray should be the choice of therapy which may prolong life beyond the usual span.

The classification of brain tumors based on the histological evidences of their malignancy is fascinating but as yet the clinician has not profited sufficiently from this investigation because no definite correlation between pathological and clinical knowledge has been established. The histopathological information is of the utmost importance for the various steps of the therapy and will, in my opinion, eliminate in the future many unnecessary operations for malignant brain tumors. Two-thirds of all glioma are clinically malignant and only one-third are benign. From a practical point of view, the clinician must differentiate between malignant and benign tumors, and, therefore, I shall attempt to give you briefly the clinical aspects of either group.

A malignant or acute glioma may occur in all phases of life but most commonly it affects people between 20 to 60 years. It presents a very rapid evolution of signs and the average course is fatal within 4 to 12 months. The symptomatology centers around an axis syndrome of definite psychic alterations in the form of flattening out of the intellect and behavior and is accompanied by functional disturbances of the diencephalon, that is, the area around the third ventricle, and the aqueduct. Edema in this region displaces the basilar brain towards the normal side distorting the ventricular relation and the functions of the midbrain and internal capsules. The intracranial pressure alone cannot be responsible for these phenomena as we do not observe such gross psychic changes in an enormous obstructive internal hydrocephalus. The obstruction from the third to the fourth ventricle or the obliteration of the foramina of Monro cause the catastrophy which is always present in the late tumor stage. Local signs of varying spread and severity occur in the malignant tumors according to the site and size of the lesion. Rarely do we encounter epileptiform attacks but spastic or flaccid hemiplegias are common. These tumors have to be differentiated from encephalitis, encephalomalacia, or abscess formation by a carefully executed spinal puncture. The operative results are poor and often death occurs upon surgical interference. A palliative trephine is often desirable and advisable for symptomatic relief. A mortality of 44% accompanies operation in these tumor cases.

The benign or chronic glioma occurs in the earlier periods of life and it is not associated with alterations in the psychic and metabolic sphere. The onset is insidious over many years or at least over several months before even the suspicion of a brain tumor arises. The clinical duration of a benign glioma averages 40.6 months. Even after establishing the diagnosis, choking of the discs is absent for a long time and the fluctuations in general signs without any focal localization are large. The benign glioma is associated with epileptiform attacks and mild confusions but their occurrence depends entirely upon the location of the tumor. In the later stages when edema, choking and lethargy have become manifest, a clinical differentiation from a malignant tumor is not possible.

This grouping of brain neoplasms into malignant or benign types is only possible in the supratentorial tumors whereas the infratentorial tumors cannot be grouped into malignant or benign types except in children.

Blood vessel tumors form 2% of all intracranial neoplasms. They must be divided into angioma (more or less a malformation) and hemanglioblastoma. The angioma lo-

cated in the cerebrum is composed of tortuous vessels—arteries, veins and capillaries—giving rise clinically to a definite bruit and producing all types of epilepsy and showing calcifications in the x-ray picture. The hemangioblastoma (Lindau's tumor) occur exclusively in the cerebellum and are associated with angioma of the retina, pancreas, liver and kidneys. It is a familial tumor occurring in young adults and can be diagnosed only from the co-existing angiomatosis of the retina.

Tumors in the cerebellum are often without localizing signs for a long period. As soon as the growth has interfered with the ventricular system, then headaches, vomiting and choking of the discs usher in the picture of cerebellar involvement. In children with cyclic projectile vomiting and equilibratory dysfunctions, the presence of a tumor has to be ruled out by repeated examinations of the eye-grounds. A block phenomenon in the cerebrospinal fluid circulation is of the utmost importance in all pathological conditions within the posterior fossae, and it must be our goal to determine early cause and site of the obstruction. If the latter is infratentorial, surgery offers a better prognosis than in cases with a supratentorial obstruction.

Increased intracranial pressure which prevents often a cooperative examination and a possible localizing diagnosis can be partially or completely eliminated by dehydration. We recommend 50% glucose solution in preference to hypertonic salt solution for this procedure which at the same time relieves many of the subjective complaints. Glucose can be given repeatedly in amounts from 25 to 100 c.c. intravenously. In addition, 50% magnesium sulphate solution by mouth, ounces 1 to 2, or rectally, ounces 2 to 6, supports the dehydration process materially.

All cases should be submitted routinely to a stereoscopic x-ray investigation which often reveals many important factors such as mottling in increased pressure, calcification in the tumor, of the blood vessels and of the choroid plexuses, or destructions and erosions of bony structures.

The greatest contribution to the localization of intracranial tumors is Dandy's ventriculography and encephalography. We request its use upon utter failure in clinical localization but do not demand its routine application.

There is no general agreement as yet as to the best technical procedure and the various routes to fill the ventricles with air remain the ventricular, cisternal or lumbar punctures. We feel that in all cases with very moderately increased or with normal intracranial pressure, the encephalography with Bleckwenn's two needle-burette method is simpler, more deductive and instructive because by this procedure the basal cistern, sulci and gyri are outlined at the same time. Dixon and Ebaugh 503 cases—mortality 0.25%; Pancoast and Fay 1529 cases—mortality 1.2%; Bleckwenn 750 cases—mortality 0.4%.

The encephalography is contraindicated in cases with definitely increased intracranial pressure, and in all subtentorial neoplasms. A vacuum induced in the spinal canal by lumbar puncture and increased pressure in the cranium may result in a downward displacement of the cerebellar tonsils with the following compression of the medulla in the foramen magnum (Foraminalhernia). Such a possibility may occur in any case with pressure phenomena and explain the fact that a single diagnostic lumbar puncture can become dangerous and even fatal.

The ventriculography is a surgical operation which always results in tissue damages, as the needle trocars must perforate healthy brain substance before the ventricular horns can be tapped. It is at times extremely difficult to find the horn especially if the latter is compressed or displaced. The surgeon performing this procedure of air filling must not attempt to drain the ventricle system as it will lead to such an increased intracranial pressure which necessitates immediately a craniotomy.

From the displacement and abnormalities, especially of the ventricular silhouette, but also from the basilar cisterns and sulci fillings, deductions as to obstruction and compression can be made.

Of late the angiography (Moniz, Loehr, Jacobi), an arterial encephalography using as a contrast medium Thorotrast which is injected either into the common or internal carotid arteries, has given excellent localizing x-ray pictures in brain tumors.

The logical treatment for brain tumors is, naturally, their complete removal by surgery and with the present advancement in neurosurgery much has been accomplished. Even if a heroic procedure results in death either on the operating table or within 24 hours after the operation, nevertheless excellent life saving results have been recorded. In advanced cases of brain tumor, we do not recommend operations but we assume a fatalistic attitude. Deep x-ray therapy without preceding exploration is often unsatisfactory in its results, whereas a partial removal of the tumor with follow-up serial radiations can prolong life materially in many cases.

Limitations of Intravenous Urography*

By HANS W. HEFKE, M. D.
Milwaukee

THE introduction of a new diagnostic means of great importance often leads to definite reactions of the medical profession. Some physicians will be over-enthusiastic and see only progress and advantages, others are over-conservative and pessimistic. Only after some time has elapsed and large groups have tested the new, comparing it with the old, can an unbiased opinion be reached.

The history of intravenous urography is very interesting. Years ago at the Mayo Clinic it was found occasionally possible to make intravenous pyelograms (always cystograms) by the intravenous injection of large doses of sodium-iodide. The percentage of success was so small and the reactions often so severe that this method was never used. After cholecystography was perfected, some investigators turned again to the task of making intravenous urography feasible. Rosenau in Germany could produce rather good urograms by the intravenous injection of a combination of sodium iodide and urea. The pyelognost, however, was rather toxic. Swick and von Lichtenberg in Berlin introduced Uroselectan (called Iopax in the U. S. A.) as a drug which was suitable for the purpose and not too toxic. It had been developed by Roeth and Binz. That von Lichtenberg played and plays such an important part in the introduction and perfection of intravenous urography is only too fitting. He was as a student the first patient on whom a cystoscopic pyelogram was done by his teacher, Voelker. Since the advent of Uroselectan, Skiodan (called Abrodil in Europe) and Neo-Iopax (called Uroselectan B in Europe) have been introduced and largely taken the place of the Uroselectan.

Our series deals with the evaluation of results in one-hundred consecutive cases of intravenous urography. Too small to reach definite conclusions, the group is large enough to report our experience with the method, especially some cases which emphasize its limitations. The difference in ascending and descending pyelograms must be emphasized. Von Lichtenberg has repeatedly pointed it out. Interpretation of the two diagnostic methods must be done, always having in mind the fact that an instrumental pyelogram gives a more distinct shadow of the anatomical, but dilated pelvis. An intravenous pyelogram shows a dimmer shadow of the physiologic appearance of pelvis and ureters. The physiologic changes in the tonus of the urinary system must be considered. Some calyces might not be visible, because there is a hypertonus, the pelvis might only be partially filled, the ureters might show absence of filling in certain areas. In order to achieve an anatomical as well as a physiologic urogram, we have used bag compression over the anterior bladder region for ten minutes after the intravenous injection; the first film has been taken with compression on, the second a few minutes

* Presented before the Radiological Section of the State Medical Society of Wisconsin.

after the compression had been taken off. In such a way we have succeeded in a considerable number of cases, to get a much better anatomical visualization as compared with the second film. (See illustration 1 & 2). At present we use Skiodan: Neo-Iopax having given us more severe local and some general reactions in the few cases in which we used it. Of great importance is the matter of preparation. Gas in the bowels is one of the most difficult problems and responsible for many unsatisfactory examinations. We prepare the patient by giving from 1 to 2 ounces of castor oil the night before and by forbidding any food or water the morning of the examination. We can see an advantage of taking a series of films only when the filling is unsatisfactory in the first two films taken respectively ten and fifteen minutes after the intravenous injection. It is obviously necessary to take a flat film first; stones of slight density might otherwise be overlooked. If a large amount of gas is present, the preparation of the patient is repeated.

REPORT OF CASES

In our consecutive series of one hundred cases, 89% gave satisfactory and diagnostic pyelograms. In 39% no pathology was demonstrable: 22% showed dilatation of the pelvis or ureters of slight or marked degree (6 of the bilateral): in 9% stones were found: absence of filling of one kidney was seen in 10 cases (tuberculosis, non-functioning hydronephrosis, surgical removal, congenital absence). There was a duplication of ureter and pelvis in 3 cases, 1 case of polycystic kidney, marked degree of ptosis in 3 cases, and 2 cases of bladder pathology (contracted bladder and diverticulum). In 11 cases the films were not diagnostic, in as much as the kidney pelvis, calyces and ureters were not shown sufficiently to exclude pathology; 2 of them were in small children; in 5 of them there was so much gas in the bowels that the region of both kidneys was obscured; the rest either had very poor function of the kidneys (very low phenol-sulphon-phthalein output) or a marked hypertonus of the urinary system.

Especially has von Lichtenberg emphasized the difference between a physiologic and "anatomic" urogram, that is between a descending and ascending or intravenous and instrumental pyelogram. One must learn to interpret the two types of urography from a different point of view if one wants to avoid mistakes. The muscular apparatus of the urinary system is continuously changing its tonus; calyces and pelvis might be contracted so that a filling of the entire system might not take place. The ureter shows in normal cases peristaltic waves, which must not be mistaken for spasms or obstruction. If the entire ureter is shown, that means probably a lack of normal tonus and some degree of disease. The difference in concentration and time of excretion can be explained by the normal or abnormal function of the kidney tissue. On the whole, continuous absence of any filling in one kidney means a non-functioning kidney. It must be kept in mind, that the function might be abolished only temporarily, for instance in the presence of a ureteral stone and occasionally shortly after introduction of a ureteral catheter. It would lead to serious surgical errors, to regard non-function of one kidney as indication for surgical removal of it. Other cystoscopic data, or if cystoscopy is impossible or contraindicated, a repetition of intravenous pyelography must be resorted to. Occasionally one can not see any filling in either kidney pelvis or ureter and yet finds the bladder filled with contrast material. It would of course be a mistake to say that there is no function in either kidney. Such a finding is seen especially in children. There the pelvis and ureters are so thin and narrow and apparantly often hypertonic, that the contrast material is not present in sufficient thickness to cause a shadow.

If the kidney function is decreased by disease of the kidney substance, the excretion of the Skiodan or Uroselectan is correspondingly impaired. However, the comparative values of phenol-sulphon-phthalein and the density of the shadow from intravenous Skiodan injection do not necessarily correspond. It seems that even kidneys with a very low phthalein output are still able to excrete and concentrate the Skiodan sufficiently for a diagnostic intravenous pyelogram. Some-

times it is necessary in such cases to take another film after one-half hour or one hour. When Skiodan is used, there seems to be hardly any advantage in waiting for a better concentration. In our series the films taken 10 or 15 minutes after the intravenous injection were always the best, even in cases with decreased kidney-function.

The failure of dependable and continuous filling of the kidney-pelvis and the calyces makes intravenous urography in our opinion unreliable for the early diagnosis of tuberculosis or tumor. Fairly well advanced cases of either disease can usually be clearly demonstrated. Lesions which involve only one calyx or part of a calyx might be entirely missed. On the other hand some deformities of the calyces must be checked by an ascending pyelogram, when there is any clinical suspicion of tuberculosis or tumor.

CONTRAINDICATIONS

Of contraindications there are only a few. A very poor function of the kidneys with urea retention in the blood, especially uremic or pre-uremic states should be excluded. We have not seen any general reaction even in cases with some increase of the urea in the blood. The cases with a tuberculosis of the kidneys have not shown any bad after effects, neither have the ones with goiter. One should hesitate to administer the iodine containing material to patients with exophtalmic goiter. If one finds an idiosyncrasy against iodine, one should advise against this examination. One patient had a quite marked general iodine reaction (malaise, vomiting, edema, etc.) for about twenty-four hours after the injection, which was very troublesome. Pregnancy is no contraindication. In fact the kidneys and ureters are usually shown very nicely, probably due to a certain dilatation and lack of tonus.

The main field for the use of intravenous urography is in cases, where cystoscopy is contraindicated or impossible; that is in acute or subacute pyelitis, ureteral or urethral obstruction, prostatitis; in cases where one kidney is absent with danger of infection of the other, when repeated pyelograms are necessary, and when anomalies are suspected. It is of great help in many cases of

Fig. I. Intravenous pyelogram with compression over the lower pelvis.

stones when the position of them must be demonstrated. When a unilateral hydronephrosis has been found, it helps to show its real extent (absence of injection under pressure) and the status of the other side, which rather frequently and surprisingly also shows hydronephrosis, a fact which might be of great assistance in the management and the indication for surgery. In the general field of medicine many cases of obscure pain in the abdomen can be explained by some degree of dilatation of the kidney-pel-

Fig. II. Same case as Fig. I without compression.

Fig. III. Intravenous pyelogram of right hydronephrosis.

Fig. V. Retrograde pyelogram of hydronephrosis. A previous intravenous pyelogram failed to show this pelvis.

vis and ureter, even when other symptoms might be almost absent. It seems that there is a much greater number of such cases then generally suspected.

A few case reports with reproduction of films may explain some of the difficulties in diagnosis from intravenous urography and present its limitations in certain conditions.

Case I. (Illustration 1 & 2): Clinically this case was a pyelitis (during and after pregnancy). The film shown in illustration 4 would have been quite unsatisfactory; this film was taken without compression. A large amount of gas obscures the insufficiently filled kidney pelvis and ureters. On the film taken after 10 minutes of compression (illustration 1) the anatomical state of the urinary system is shown very satisfactorily.

Fig. IV. Same case as Fig. III. Retrograde pyelogram showing hydronephrosis.

Case II. The intravenous pyelogram showed a rather poor filling of the left kidney pelvis, which was of unusual shape. There were two stones in the junction of the upper calyx with the kidney pelvis and above them a large dilated calyx, reaching the cortex. The ascending pyelogram gave a much better picture of the pathologic condition, especially of the normal, lower half of the kidney, a fact which indicated to the surgeon the advisability of a resection of the upper portions of that kidney.

Case III. (Illustration 3 & 4): The difference in the size of a hydronephrosis, as seen in an intravenous (illustration 3) and an ascending pyelogram (illustration 4), can be shown in this case. Of importance is also that the state of the other kidney can be pictured. The intravenous pyelogram shows a decrease in the function on the right side and as yet a fair amount of contractibility, as compared with the ascending pyelogram, which indicates a large sac with very little cortical tissue.

Case IV. (Illustration 5) An intravenous pyelogram showed a very large left kidney with no function. The presence of a tumor, the absence of a filling on that side, the absence of symptoms typical for an infected hydronephrosis and the age of the patient were interpreted as in favor of a new growth. At a re-examination sometime later the palpable tumor, however, had disappeared and

a cystoscopic pyelogram showed a rather large left hydronephrosis.

Case V. Intravenous urography showed a consistent deformity of the left kidney-pelvis with poor filling of some of the calyces. The right kidney pelvis was slightly dilated. As clinical findings did not point out to the presence of a tumor, an ascending pyelogram was done. It confirmed a deformity of the pelvis, but showed the calyces to be intact and not displaced appreciably. The diagnosis of a tumor was not possible from this appearance. Operative or other control was not possible.

CONCLUSIONS

1. Intravenous urography, although of the greatest diagnostic importance, has certain limitations.

2. The difference in appearance of descending and ascending pyelogram is emphasized and must be considered.

P. S.—During the last year Neo Skiodan has been used for intravenous urography and the reliability and efficiency of it has been even better since.

Bromism; A Review of the More Recent Literature and Analysis of Sixteen New Cases*

By ANNETTE C. WASHBURNE, M. D.
Madison

BROMIDES were discovered by Balard in 1826 and introduced into therapy by Graf in 1840. Intoxicating effects were first observed in 1850 by Huette. Since this time a number of reports dealing with bromide poisoning have appeared in the literature. However, despite these recent warnings, cases of bromism (the majority induced by physicians) continue to appear. Within the past two years, we have seen sixteen among hospital admissions alone.

This article does not presume to *condemn* bromides, since their usefulness in spastic colitis, insomnia, mildly agitated cases, etc., has been well established. It rather represents an endeavor to focus medical attention on the dangers of *unsupervised* bromide therapy.

A review of the recent literature summarizes the situation as follows:

PHYSIOLOGICAL EFFECTS

(a) Bromides affect every part of the brain and cord with the exception of the medulla.

(b) Their action is one of depression on the motor cortex and of sedation on the cord.

(c) Excessive use of potassium bromide results in degeneration of the cortical cells beginning in the periphery of the dendrons.

(d) Bromides tend to act as anaphrodisiacs.

(e) Margolin concludes that sodium bromide has a stimulating effect on the thyroid gland of the guinea pig. He has observed an increase in mitotic figures, slight but definite softening in the colloid substance, and an increase in the size of the acinus cells.

(f) Excessive doses of bromides (especially the potassium salt) paralyze the heart, causing it to stop in diastole.

(g) When bromides are taken into the system, their absorption is followed by the elimination of an equivalent amount of sodium chloride. This well known fact was first suspected by Bill in 1868. Since then Diethem, Doane and Weiner and others have placed the chloride substitution toxic threshold between 25–30%. The toxicity depends on the ratio $\frac{\text{absorption}}{\text{excretion}}$.

(h) Elimination of bromides starts rapidly but proceeds slowly. With no treatment other than bromide withdrawal, bromides may be demonstrated in the blood twenty days after the last dosage.

(i) The variation in individual susceptibility may be partly accounted for by permeability changes. Walter and Levin believe that meningeal permeability is *increased* in meningitis, central nervous system syphilis, arteriosclerosis, insomnia, chronic alcoholism and diabetes and *decreased* in schizophrenia and epilepsy. This

* From the Department of Neuro-Psychiatry, University of Wisconsin, Madison.
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latter observation may account for the large amounts of bromide tolerated (without toxicity) in the precox group reported by Wright. Doane and Weiner add anemia, cachexia and dehydration as conditions where the body fluids are poor in chlorides and hence the bromide threshold lowered.

II. LABORATORY DETERMINATION OF BLOOD BROMIDES

The Walter–Hauptman colorimetric method furnishes an accurate means of determining the exact amount of bromide present in the blood.

The test may be briefly outlined as follows: 10 c.c. of blood is drawn from the vein of the patient. To 2 c.c. of the serum is added 4 c.c. of distilled water and 1.2 c.c. 20% trichloracetic acid. The solution is shaken and allowed to stand for one-half hour. To 2 c.c. of the filtrate 0.4 c.c. of acidified gold chloride is added. The solution is mixed and compared against Buerkes colorimeter. The formula is

$$20 \times \frac{\text{standard mgm. Na Br.}}{\text{Reading of serum}} = \frac{\text{mg. Na Br. per 100}}{\text{c.c. of serum.}}$$

Readings below 50 are of no significance. Walters believes that blood bromides of 125 and over may produce psychotic manifestations. We have seen readings as high as 375. The ratio between bromides in the blood and in the spinal fluid is a fairly constant one. Walter gives it as 3–1.

III. FREQUENCY OF BROMISM

While it is difficult to estimate the *number* of cases of bromism, it is easy to understand why they are present. First, the surprising frequency with which physicians prescribe bromides; second, the prevalence of such conditions as epilepsy, hypertension, senility, alcoholism, hyperthyroidism, neuroses, etc., which many physicians still treat with bromides; and, third, the ease with which bromides may be procured at drug stores. These preparations are sold either as frank bromides, bromo-seltzer, or in the form of other patent medicines. In two hundred consecutive prescriptions Seppe found bromides to be the *third* commonest ingredient and the *most* common of all the toxic drugs employed.

IV. PHYSICAL MANIFESTATIONS OF BROMISM

(a) *General*—The patient is usually tired and sleepy; often there is a feeling of ill defined malaise.

(b) *Skin*—In addition to the well known brom acne, which is not always present, there are the brom "rashes", pruritus, and rarely ulcer formation (bromo-derma tuberosum).

(c) *Mucous membrane irritation*—There have been described, persistent cough, follicular angina, conjunctivitis and the absence of previously positive gag and corneal reflexes.

(d) *Cardio-Respiratory*—Irregularity of the pulse rate is not uncommon. Tachycardia has been observed in several cases. In the more serious intoxications, cardiac paralysis has been described and the respirations may vary from rapid and shallow to slow.

(e) *Gastro-Intestinal* — These symptoms consist as a rule of anorexia and constipation.

(f) *Muscular* — Muscular fatigue and weakness are occasional complaints.

(g) *Genito-Urinary*—A diminished urinary output with albuminuria has been described.

V. NEUROLOGICAL MANIFESTATIONS OF BROMISM

The neurological findings have been well outlined by Diethem and may be enumerated as follows:

(a) Expressionless facies (resembling the Parkinsonian mask).

(b) Double vision and sluggish reaction of pupils to light.

(c) Dysphagia.

(d) Ataxia of gait and speech (dysarthria).

(e) Coarse hand tremor.

(f) Increased sensitivity to pain and touch. (Anesthesia of the dependent muscular system has been described by Seppe.)

(g) Twitching in the flexor muscles of the arms.

(h) Reflexes—abolishment or dimunition in the gag, corneal, abdominal, knee and Achilles reflexes.

VI. MENTAL MANIFESTATIONS OF BROMISM

Levin divides the mental phase into

1. Simple bromide intoxication.
2. Stage of delusions and hallucinations.
3. Paranoid stage.

In the early course of the intoxication, increased irritability, with intermittent periods of restlessness and drowsiness may be noted.

As a psychosis develops, there is disorientation for time and place. With the clouding of consciousness come hallucinations. Most frequently these are visual and consist of—

1. Color disturbance (everything appearing as brown or black).
2. Apparent change in the size and shape of objects—micropsia (Lilluputian figures) or macropsia (large animals).

Olfactory, gustatory and auditory hallucinations occur less commonly.

Delusions, when present, are most frequently paranoid. Ideas of persecution and of reference are sometimes seen. The patient's attitude may be sluggish, euphoric or even hypomaniacal. A disturbance in the association of ideas similar to that seen in schizophrenia has been described.

VII. LABORATORY MANIFESTATIONS OF BROMISM

(a) Blood bromide determinations of over 100 mg. per 100 c.c. of serum may be significant.

(b) Elevation of the basal metabolic rate during the stage of intoxication with subsequent drop after treatment, was present in six of our cases.

(c) A low intelligence quotient (Binet Simon) during the stage of intoxication with subsequent rise after treatment, was noted in two of our cases.

VIII. PROGNOSIS

With treatment recovery is usually rapid. One of our patients, with a blood bromide of 375 mg. who was acutely psychotic in the morning, became rational at night after receiving 2000 c.c. of normal saline subcutaneously.

However, recovery may be delayed by

1. Organic disease.
2. A pre-existing psychosis.

Although the mental picture is usually an acute one, Levin has discussed the possibility of a chronic psychosis developing.

IX. TREATMENT

There has been some question concerning the harmful effect of sudden withdrawal. It is our experience, which coincides with that of Levin that this is rarely the case.

Treatment consists of

1. Withdrawal of bromides.
2. The administration orally or subcutaneously of normal saline.

Wile has called attention to the difficulty with which bromides are passed through the renal epithelium and believes that a rapid introduction of chlorides may produce renal irritation. Wagner and Bunbury feel that chloride eliminates bromide from the tissues faster than the kidney eliminates it. The amount of normal saline to be used varies according to the degree of intoxication present. At the time this article was submitted for publication (March 1934) we were employing larger quantities of normal saline than at present. We now use between 400–800 c.c. per day. Administration by mouth is preferable to hypodermoclysis and less hazardous than intravenous injection which we feel is seldom justified.

The length of treatment is guided by

(a) Improvement in the clinical picture.
(b) Blood bromide determinations.

X. CONDITIONS TO BE DIFFERENTIATED

Doane and Weiner mention encephalitis, general paresis, Korsakoff's syndrome, tuberculous meningitis, head injuries and uremia. To these we might add paralysis agitans, mild thyrotoxicosis and schizophrenia of the paranoid type.

CASE REPORTS

In an endeavor to avoid tedious repetition, the following cases of bromism are summarized in graphic form.

Grouping the tabulated cases, one observes the following factors:

1. All but two cases occurred in females.
2. Age variations extended from 10–69 years.

3. In all but five cases, the entrance complaint suggested a functional disorder.

4. In all but one case, the bromides had been prescribed by physicians who had failed to supervise their therapy.

5. Dosages (where it was possible to estimate them) reached as high as 336 gr. of bromides a day.

6. Bromide therapy was prescribed for epilepsy, hyperthyroidism, rheumatism, migraine, spastic colitis, cystitis and multiple sclerosis.

7. The more common physical findings included tachycardia (3 cases), acne or rash (3 cases), and drowsiness (5 cases). One case (complicated by acetanalid poisoning) was in stupor.

8. The more common neurological findings included dysarthria (6 cases), tremors (5 cases), ataxia (7 cases), reflex changes (8 cases), sluggish pupils (3 cases).

9. The more common mental findings included irritability, dullness (7 cases), hallucinations (4 cases), and delusions (5 cases).

It is interesting to note that in one case at least bromides failed to act as an anaphrodisiac (clitoris crises, case 10).

10. Basal metabolic readings, before and after saline therapy, were obtained in six cases and showed consistent lowering of the rate in each case after treatment.

11. Intelligent quotients (Simon Binet) were obtained on two patients before and after bromide therapy and each showed a rise after treatment.

12. It was not possible in every case to obtain accurate data as to the actual amount of normal saline used. As an average 1–2000 c.c. were administered in twenty-four hours.

13. The period of "recovery" refers to the earliest period at which the clinical symptoms disappeared. It does not refer to the clearing of the blood bromides. This was not effected for a much longer period.

Three of the cases outlined above are of sufficient interest to discuss in some detail.

Case 9—F. R., a white male, age 44, had complained of sinus headache for several years. Against the advice of his physician, he had taken bromo-seltzer in moderate size doses for some time. Five days before admission, the patient became very restless and took the contents of a six ounce bottle of bromo-seltzer daily for five days.

After three days, the restlessness increased markedly. The fourth day he became irrational, and on the fifth he was in a stuporous condition.

Examination at the time of entrance showed the patient to be conscious but lethargic. Speech was irrational and dysarthric. There was cyanosis of the lips and finger tips. The skin had a brownish appearance. Pupils reacted to light. Respirations were of the Cheyne–Stokes' type, pulse 54 and of poor quality. Cardiac rate was irregular. Blood pressure was 150/80. Blood drawn for examination was dark brown in color.

A diagnosis of acute acetanalid and bromide poisoning was made.

Caffeine sodio-benzoate, grains 7½ and 2000 c.c. of normal saline (subcutaneous) were given.

By the following day, pulse and respiration were stabilized. 2000 c.c. normal saline was repeated. The thick speech, cyanosis and semi-stupor gradually improved until eight days later when patient was entirely rational.

Due to two unfortunate errors, the initial samples taken for blood bromides and methemoglobin were misplaced. The first bromide reading was not obtained until after the patient had received approximately 12,000 c.c. of normal saline. The reading at this time was 75 mg. per 100 c.c. serum.

Readings repeated on the eleventh and eighteenth days after admission showed respectively 200 and 250 mg. bromide per 100 c.c. serum. This increase may have been due, in part at least, to the more rapid tissue elimination alluded to above. It also suggests that had an initial reading been obtained, it would have been very high. The patient made an uneventful recovery.

According to our estimation, this patient had received (within the five days prior to admission and without reference to previous doses):

Acetanalid	720 grains
Sodium bromide	1,680 grains
Caffeine	192 grains

Case 11 is of interest because the bromism developed while in the hospital. Since there had been no previous history of taking bromides, one may assume that the entire picture developed as follows:

E. P., a white female, age 52, admitted with the chief complaint of feeling tired. The patient had been over-working, was worried over financial affairs and was considered to have a late involutional background. Physical and neurological examinations on admission were normal. Other than a feeling of mild depression, there were no mental symptoms. The following data is self-explanatory.

Admitted on 7–30–32.

From 7–30–32 to 8–8–32 patient received 800 grains of sodium bromide (an average of 80 grains a day given in divided doses). On 8–8–32 the first symptom, drowsiness, was noted.

The dose was decreased for the next two days

								CLINICAL				LABORATORY						
PATIENT	AGE	SEX	PRIMARY COMPLAINT	INITIAL DIAGNOSIS	FINAL DIAGNOSIS	DR. SOURCE	DOSE	PHYSICAL	NEUROLOGICAL	MENTAL	BP.	R. B. C. Ad.	R. B. C. Dis.	L. W. Ad.	L. W. Dis.	S. B. C.	Br.	RECOVERY
1. E. S.	19	F	"Nervousness"	Toxic goiter	Colloid goiter. Bromism.	Physician	3x Sr., gr. V, 1.5 hrs.6 wks.	Acne. Palpable thyroid. Pulse 180.	Jactations. Tremors.	Aural hallucinations. Paranoid delusions.	112	+29	-4			14,900	5,900 c.c.	2 days.
2. G. B.	18	F	"Spells"	Epilepsy	Idiopathic epilepsy. Bromism.	Physician	Tr. Gran I. t.i.d.			Dull.	800	-4	-12	66	82	11,300 8,100	5,900 c.c.	
3. V. F.	15	F	"Fits"	Epilepsy	Traumatic epilepsy. Bromism.	Physician				Dull.	350	-5		59	71	9,300		11 days
4. L. G.	28	M	"Disorganized"	Not made	Psychoneurosis. Bromism.	Physician		Acne.	Gag 3 Corneal 0	Irritable. Paranoid delusions.	300					5,150	Left hosp.	
5. M. B.	65	F	"Nervous"		Senile arteriosclerotic dementia. Bromism.			Anxious facies.	Ataxia. Romberg +. Astereognosis. K. J. 0	Paranoid delusions.	300							
6. T. W.	58	F	"Nervous"	Rheumatism	Chronic atrophic arthritis. Bromism.	Physician		Mask face. Leprosy.	Dysarthria. Dysmetria. Ataxia. Tremor. Gag 0 Corneal 0	Irritable. Visual hallucinations.	190	+37	-13			8,900 5,150	1,900 c.c.	4 days
7. A. L.	21	F	"Nervous"	Migraine	Migraine. Bromism.	Physician	4x Sr., gr. XII 1.6hr., 5 mos.	Tense. Pupils sluggish.	K. J. diminished.	Hypomanic.	140							
8. M. B.	21	F	"Pain in stomach"	Spastic colitis	Spastic colitis. Bromism.	Physician	3x Sr., 2 mos.	Pale.		Irritable.	125					10,800 8,830		
9. V. F.	44	M	Brought in in a stupor.		Acute asthenic and bromism. Intoxicated.	Self administered.	1 bottle Sroom Tablets, 2 "by mouth" days.	Cyanosis. Extremities. Pupils sluggish. Neck rigidity. Babinski (+) Babinski-Strokes Kernig (+)		Restless. Irritable. Irrational. Violent. Stuporous.	75 170 250					12,450 8,650		8 days
10. E. L.	57	F	"Nervous"	Cystitis	Neurosis. Bromism.	Physician	Br. Gran I, t.i.d. 2 wks.	Sluggish pupils.	Tremor. Dysarthria. A. + K. J.	Depressed. Clitoris crisis.	300	+ 8	- 4			5,900		
11. I. T.	50	F	"Wried"	Test case	Bromism.	Physician	3x Sr., gr. V, 1 day, 10 days	Tremor. Sluggish pupils.	Dysarthria. Ataxia. K. J. 0	Nervous. Excited. Incoherent. Delusions. Hallucinations. Hypnotized.	275	+41	-20			18,080	5,500 c.c. 2 days	3 days
12. L. B.	46	F	"Numbness"	Goiter	Psychoneurosis. Bromism.	Physician	3x Sr., gr. X t.i.d. 10 days	Pulse 120. Palpable thyroid. Pulse 168/10.	Romberg +. Ataxia. Tremor. Dysarthria. Gag 0 Corneal 0	Slight euphoria.	200	+26	-18			18,400	1,000 c.c.	4 days
13. C. F.	7	F	"Fits and stupors"		Psychoneurosis. Toxic goiter. Bromism.	Physician		Pulse 104. Palpable thyroid.	Ataxia. Gag 0. Corneal 0.	Emotionally unstable.	125	-12		70		7,800	Pt. left.	
14. [illegible]	27	F	"Bad nerves"	Hysteroid	Neurosis. Bromism.	Physician Patient	Br. Sr., gr. XV, t.i.d.	Greasy. Grow.	Dysarthria.	Irrational.	81						5,700 c.c. 3 days	3 days
[illegible]	23	F	"Crazy"	Psychoneurosis	Intoxication. Bromism.	Physician	7x pints 2 wks.	Greasy. Restless.	Ataxia. Tremor. Dysarthria.	Delusions. Visual hallucinations.	125	- 9				9,700	With drawal	7 days
[illegible]	46	F	"Nervous"	Implied fresh multiple sclerosis.	Combined sclerosis. Bromism.	Physician and self medication.	Patent medicine and bromides.	Greasy. 8	Ataxia. Tremor.	Nervous.	8[illegible] Clear [illegible]	- 5		74		5,150	1,000 day	

(8–8–32 and 8–9–32), patient receiving 30 grains a day.

The following two days (8–10–32 and 8–11–32) she received 70 grains. At this time she became restless and complained of paresthesias in the fingers.

From 8–11–32 to 8–14–32 she received 180 grains. On 8–14–32 nocturnal excitement and ideas of fear were noted.

From 8–14–32 to 8–17–32, 240 grains were administered.

On 8–18–32 the patient was irrational, disoriented, and had visual hallucinations.

On 8–19–32 paranoid delusions were marked. The patient had a marked dysarthria and ataxia. A psychiatric consultation was requested. A blood bromide determination was made and showed 375 mg. per 100 c.c. serum. 2000 c.c. of normal saline were started subcutaneously. Two days later (after receiving 4000 c.c. of saline) the patient was rational. Three days later (after a total of 5500 c.c. normal saline) all symptoms had disappeared and the patient made an uneventful recovery.

Case 14—A white female, age 46, had been diagnosed by her physician as psychoneurosis and had been given bromides. The husband of the patient trebled the physician's dose. At the end of two weeks, she had received one and one-half pints of a bromide mixture. At this time she developed an acute psychosis with delusions of persecution and macroptic hallucinations. The patient was considered insane and committed to the State Hospital for the Insane. Three days after her admission there, she became rational and was transferred to the Wisconsin General Hospital for gall-bladder studies. A blood bromide taken here showed 125 mg. per 100 c.c. serum (some seven days after the last dose of bromide).

The patient now recalls perfectly her mental confusion, ataxia and dysarthria.

SUMMARY

1. The more recent literature on bromism is reviewed.

2. An analysis of sixteen cases of bromism is made.

3. From the above, one may conclude that

(a) Bromides administered without adequate supervision may prove dangerous.

(b) Adequate supervision includes clinical examination and blood bromide determinations.

(c) Treatment consists of withdrawal of bromides and the conservative administration of sodium chloride.

ANNUAL CONFERENCE AT CHICAGO

Seven officers of the State Medical Society of Wisconsin and component societies were in attendance at the annual conference of state secretaries held in Chicago during September. Officers present in addition to Mr. Crownhart were President T. J. O'Leary, Superior; President-Elect, R. M. Carter, Green Bay; Past-President S. J. Seeger, Milwaukee; Treasurer, Rock Sleyster, Wauwatosa; G. W. Krahn, Secretary of the Oconto County Medical Society, and Mr. Theodore Wiprud, secretary of the Medical Society of Milwaukee County.

Thrombophlebitis of the Lateral Sinus*

By F. S. COOK, M. D.
Eau Claire

IN A SERIES of sixteen hundred mastoid cases we have encountered twenty-five cases of thrombophlebitis of the lateral sinus. In the study of these, their symptomatology and treatment, we have brought out many interesting phases.

It was in 1880 that Zaufal advised ligation of the jugular vein for sinus thrombosis, but it was not performed until 1888 by Lane and again in 1889 by Balance. The anatomy of the cranial sinuses present a very simple picture. (Fig. 1) They are all intra-dural. The dura is split into two layers to enclose the sinuses. The outer portion is thinner, therefore less resistant to infection. They are rigid tubes and do not collapse. There are no muscle fibers in the sinus wall nor do they possess any valves. The lateral sinus extends from the torcular to the jugular foramen, a horizontal portion 2–2½ inches long, to the knee, then a vertical part 1½–2 inches passes out at the jugular foramen into the bulb, which is dome shaped. The turns and constrictions have a duty of slowing the emptying of the cerebral venous circulation. Entering into the lateral sinus are the superior petrosal, which enters the lateral sinus at the knee and the inferior petrosal which enters the lateral sinus at the bulb. These two are very important in thrombosis of the lateral sinus as they may be the pathway of a reversed venous current in the complete blocking of the lateral sinus in the usual place.

The reason that we have phlebitis of the lateral sinus is that a portion of it lies in direct contact with the mastoid which is frequently infected. The cavernous sinus lies directly under the sphenoid sinus and is infrequently infected, due to the fact that we seldom have necrosis in this sinus.

In order to understand the etiology of sinusphlebitis we must classify our mastoid as (1) hemorrhagic (2) coalescent (3) chronic with cholesteatoma. In the hemorrhagic type we have thrombophlebitis of the mucosal lining of the cells extending through the bone into the lateral sinus. In the coalescent type we have destruction of the bone extending to the lateral sinus. The lateral sinus coming in direct contact with infection, usually a perisinus abscess, causes an inflammation of the wall of the sinus. The same is true of chronic mastoiditis with cholesteatoma. This direct contact causes an insult or injury to the sinus wall.

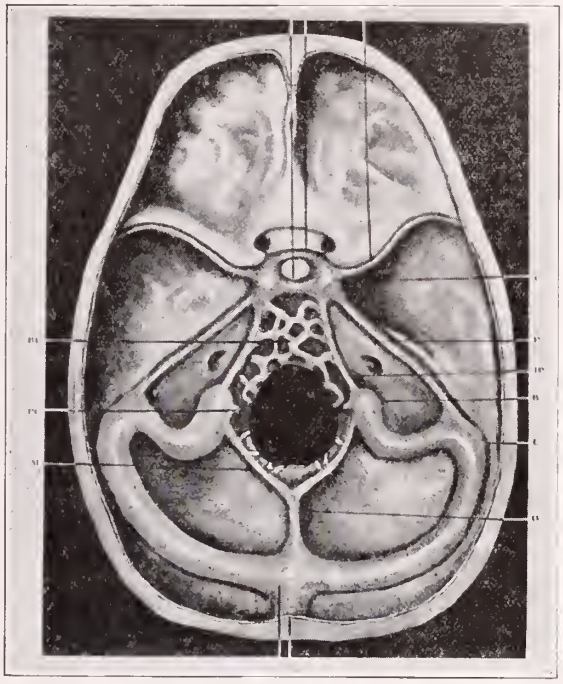

Fig. 1. Horizontal section of skull showing venous sinuses at base. B, jugular bulb; BP, basilar plexus; C, cavernous sinus and circular sinus; IP, inferior petrosal sinus; L, lateral sinus; M, marginal sinus; O, occipital sinus; P, superior petrosal sinus; PC, posterior condyloid vein; SL, superior longitudinal sinus; SP, sphenoparietal sinus; T, torcular.

Thrombophlebitis must be divided into three varieties: first is the virulent type which comes so rapidly that the organisms pass through the sinus wall into the blood stream so fast that it causes no thrombus. These cases die rapidly and no thrombosis can be demonstrated, but if sections are

* Read before the spring meeting of the Central Wisconsin Society of Ophthalmology & Otolaryngology at Wisconsin Rapids.

made of the sinus wall the story can be told. The second variety is the marantic sterile thrombus which is protective in nature and does not give any symptoms and is the one found in mastoids in which it seems necessary to explore the sinus. The third type, and the one we deal with most frequently, is the infective thrombus. These can be divided into mural and complete thrombi.

CAUSES OF THROMBUS

The text books speak of a rare condition in which the infection comes from the blood stream and lodges in the lateral sinus. I doubt that any of us have seen this condition. The most frequent cause is a mastoiditis with a perisinus abscess. This causes a phlebitis or inflammation of the lateral sinus. There is a rush of platelets from the center of the blood stream to the injured intima in an attempt to repair the damage. As a result there is a slowing of the blood stream and an increase in the clot. Eventually this clot increases from a mural clot to a complete obstruction; the bacteria passing through the sinus wall find a good culture bed in the clot and the result is an infected clot. As small pieces of this clot get into circulation we have our chills and temperature reactions and metastasis. Two of the most common places of thrombus are below the knee in vertical position and in the bulb.

Referring to figure two it will illustrate how an infection can occur as a primary bulb infection. There may be a dehiscence of bone in the floor of the middle ear between the bulb leaving a layer of periosteum and mucous membrane through which infection can travel very fast, or there may be remnants of fetal veins giving a direct communication between the middle ear and the bulb; thus an acute purulent middle ear infection can rapidly develop into a primary bulb infection. In our cases of primary bulb infection we have noted the absence of mastoid cells and the close proximity of the lateral sinus to the posterior wall.

SYMPTOMS

The symptoms of the violent infective phlebitis without the formation of thrombus are very striking. There is an acute otitis media with a high temperature—great prostration and no relief from paracentesis. Chills develop immediately. The blood picture shows a high leukocyte count with a high percentage of stab cells. Operative findings coincide with those of hemorrhagic mastoiditis. The sinus wall is inflamed and upon opening it no clot is found. The patient passes out rapidly and transfusions or anything you do for him do not help. In the infective thrombus type the history of ear infection is quite important. We have seen cases with chills and high temperature, all the characteristic symptoms of thrombosis, with a dry ear, but upon going into the history have found that the patient had had a running ear one week to two or three months previously, and we feel that although the ear is dry there is a residual infection in the mastoid cells which has lain dormant and is gradually coming into activity causing a perisinus abscess with thrombosis. This we have demonstrated at operations.

Fig. 2. Vertical section through middle ear and jugular bulb, showing spread of infection from middle ear to bulb via dehiscence in floor of middle ear, and via vein passing through floor of middle ear. A, infected vein passing from the middle ear to the jugular bulb; C, cochlea; D, dehiscence in floor of middle ear; E, external auditory canal; F, facial nerve; J, jugular bulb containing thrombus; T, middle ear containing inflammatory exudate; V, vestibule.

The temperature curve:

In all cases of mastoid infection that are not doing well, it should be the routine to take a temperature record every two hours.

This may clear up the diagnosis. There is a characteristic step-ladder temperature, which, if carefully looked for, can be brought out in most cases. The rise in temperature is usually very steep, reaching 102 to 105 and coming down to normal within an hour to two hours. If your two hour temperature is not taken this may be overlooked.

Chills:

We feel that chills are present to a more or less degree. It may present itself as a slight chilly feeling or a marked chill in which the patient will shake the bed. This usually occurs on the ascending temperature and will last anywhere from ten minutes to a half hour.

Blood count:

Twelve to twenty-four hourly estimates of hemoglobin and reds may give you valuable information. Progressive loss of hemoglobin and red cells indicate a virulent infection and call for rapid surgical interference. We have seen the reds drop one-half million in twenty-four hours.

Stab cells:

The importance of the stab cell count is a very much debated question and Watkins, of the Mayo Clinic, in personal communication, says they do not consider them as valuable as the toxic cell. We have found that an increasing stab count from twelve up is a pretty good indication for surgery.

The appearance of the patient:

This can be very deceiving if seen between chills. They usually look well, feel well and are quite apt to put you on the wrong track.

The Toby test:

This is done by using a spinal manometer and compressing the jugular vein of the opposite side. If there is an increase of spinal pressure up to two hundred or three hundred m.m. of mercury it is a good indication that the vein is blocked. We do not consider it of any value in a mural thrombus.

Headache:

We have found in our series of cases that headache is a valuable symptom—more so in cases in which the mastoid has been operated and persistent headache continues.

Metastasis:

This is usually a late symptom but does appear in a small number of cases. Metastasis may appear in the form of a redness or swelling of a joint, which disappears without any suppuration, or it may go on to abscess formation. It may occur in the brain, lungs, joints or skin.

Blood culture:

In our blood cultures we have found bacteria in less than fifty per cent of the cases. The culture taken at the time of a chill or at the peak of the temperature curve has given us more positives than those taken in the interval between the chills. The differential diagnosis in cases of running ear and mastoiditis complicating the following conditions, all of which produce chills, step-ladder temperature and positive blood cultures, is difficult:

(1) Malaria
(2) Typhoid
(3) Erysipelas
(4) Acute Miliary Tuberculosis
(5) Pneumonia
(6) Orbital Cellulitis
(7) Septic Endocarditis
(8) Acute Tonsillitis
(9) Cervical Adenitis
(10) Pyelitis

In these conditions we should be very conservative in recommending surgery and work in close harmony with the internist.

TREATMENT

The treatment is: early recognition and removal of the source of infection which is usually in the mastoid. The mastoid operation should be very thorough and complete. Usually a perisinus abscess is found which exposes the vein to us without much trouble. However, if the plate over the lateral sinus is not necrosed, the mastoid operation should continue with parallel strokes of the chisel until the sinus is exposed. (Fig. 3) Enough should be uncovered to allow free inspection. The sinus wall may be found thickened and gray in color. Usually there is an absence of pulsation if the thrombus is complete. The bone should be removed with rongeur forceps, as high as possible to the

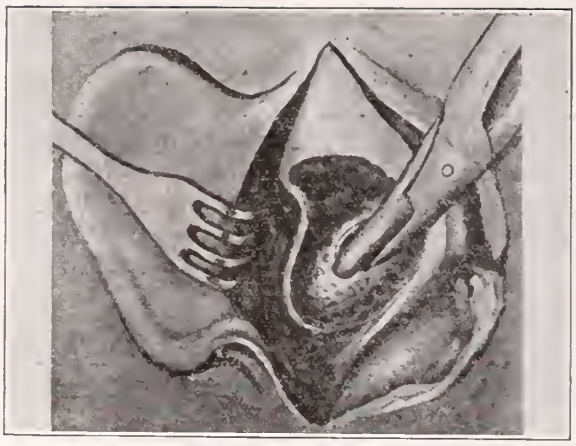

Fig. 3. Enlarging opening in inner table over sigmoid sinus with rongeur.

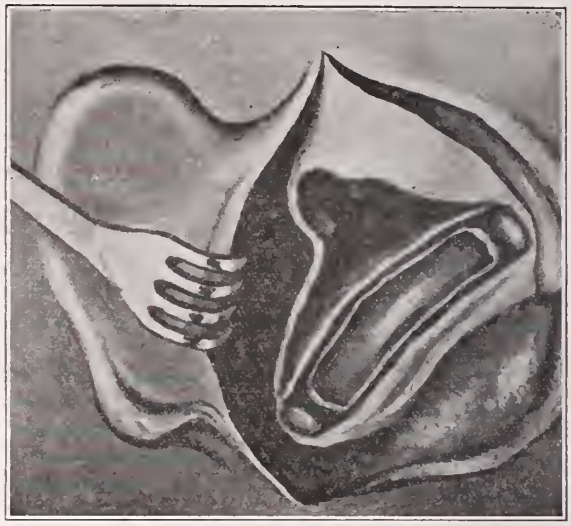

Fig. 4. Outer wall of sinus removed.

knee, and carried down as far as possible. (Fig. 4) Packing of strips of gauze made into a roll is packed between the bone and the sinus wall (Fig. 5) cutting off circulation from both ends. Then with a clean sharp knife an incision is made in the sinus wall, parallel to the sinus, and the clot evacuated. If a thrombus is found, before removing the packings from either end of the wound, the jugular vein is ligated in the neck above the branching of the facial vein. Exposure is made by an incision along the anterior edge of the sternocleidomastoid, which is retracted. The fascia is dissected until the vessel sheath is encountered. The vein is always external to the carotid artery. The sheath is opened and a ligature thrown around the jugular vein above the facial branch and tied. (Fig. 6) This is a safeguard in preventing air emboli, should the vein be accidentally opened. Should the thrombus extend below the facial branch, extend the incision down and ligate below the thrombus. It is not often that you can demonstrate a thrombus in the vein extending down this low but if this should occur it is well to ligate all branches and evacuate the thrombus.

We have not found it necessary to resect the vein in any of our cases. When this has been done go back to the mastoid, remove the packing from one end—if there is free bleeding the vein may be clear. Re-

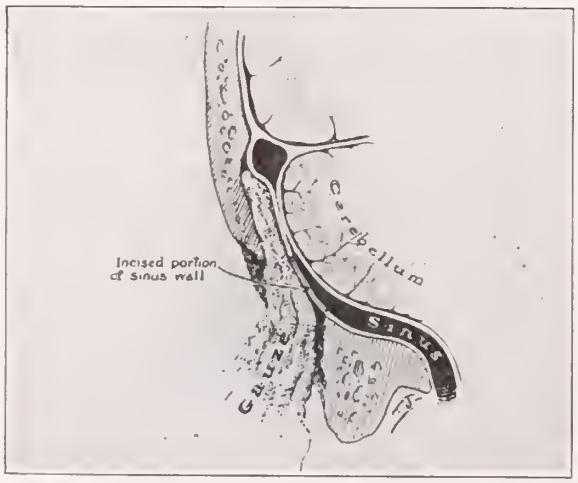

Fig. 5. The proper way to pack off a lateral sinus; put gauze between bone and sinus wall—not in sinus.

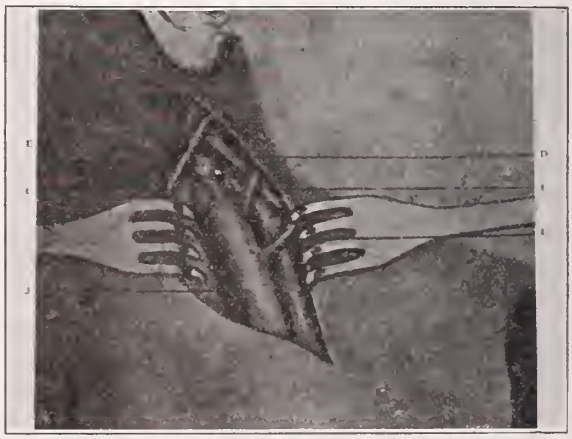

Fig. 6. Sheath of great vessels divided, internal jugular vein separated from surrounding tissues, and double ligated above facial vein. C, carotid artery; D, anterior belly of the digastric muscle; E, external jugular vein; F, facial vein; J, internal jugular vein; L, lingual vein.

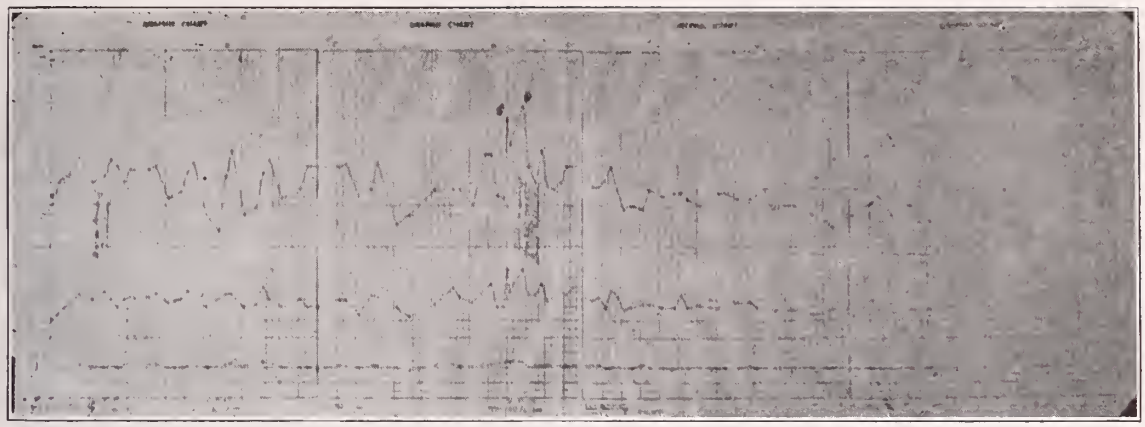

Fig. 7, Case 1. Shows chills and step ladder temperature with complete cessation after completing mastoid operation.

place the packing, remove it from the other end and look for free bleeding. Should this not occur it is evident that the end of the thrombus has not been reached. A curette is used to remove all the clot possible. If free bleeding is not obtained, a drain is put in the sinus. We have not found it necessary to remove the bone back to the torcular to get to the end of the clot but have found that by cutting off the jugular circulation and draining the vein it has taken care of the situation. The wound is then dressed as in any mastoid operation. Packing between the sinus wall and bone is removed on the fourth or fifth postoperative day.

POSTOPERATIVE CARE

In some cases the patient will not have any more chills and will go on to complete uneventful recovery. In others they may have one or two violent chills and then go on to recovery. We have seen them have chills every day for forty days and then go on to recovery. We think the most critical time for a patient is just after they are operated. Their body resistance should be brought up with fluids and forced feeding. If their chills continue and they do not pick up, a transfusion should be given and should be repeated as often as necessary. We have given as high as ten and twelve transfusions. We try to have a new donor for every transfusion as we believe there are donors who produce the right kind of antibodies for that particular case and only by the use of different donors can we find that particular donor. The use of immuno-transfusions, we think, has a very promising future. One case in which we got an immediate cessation of chills we had used a mercurochrome transfusion. The whole blood transfusion method is used, giving two hundred to three hundred c.c. and repeating in a week or ten days. These cases are sometimes very discouraging but the battle can usually be won by a careful follow-up and supportive treatment. We should not get discouraged if the chills continue for a long period of time, from thirty to forty days, as they surprise us a great many times and get well in spite of this.

CASE REPORTS

We have selected a few case reports that are interesting and will illustrate the various types of thrombophlebitis:

Case No. 1. Shirley T., age 14 years, seen in consultation 3–20–33, complained of headaches, chills, and high temperature.

Past history:

Earache in both ears five weeks previously; both ear drums ruptured spontaneously—right ear first. Pain and fever continued. Temperature reached as high as 103 with no chills. Both mastoids extremely tender. Had a double mastoidectomy performed by his home doctor. Surgeon reported that the right mastoid was worse; that he had exposed the lateral sinus at operation and it had a normal blue appearance. Patient's condition continued favorable for one week, when he developed a severe chill with temperature reaching 104. In twelve hours had second chill with temperature of 104. At this time I saw the case, in consultation, during the chill. This chill lasted about thirty minutes. The

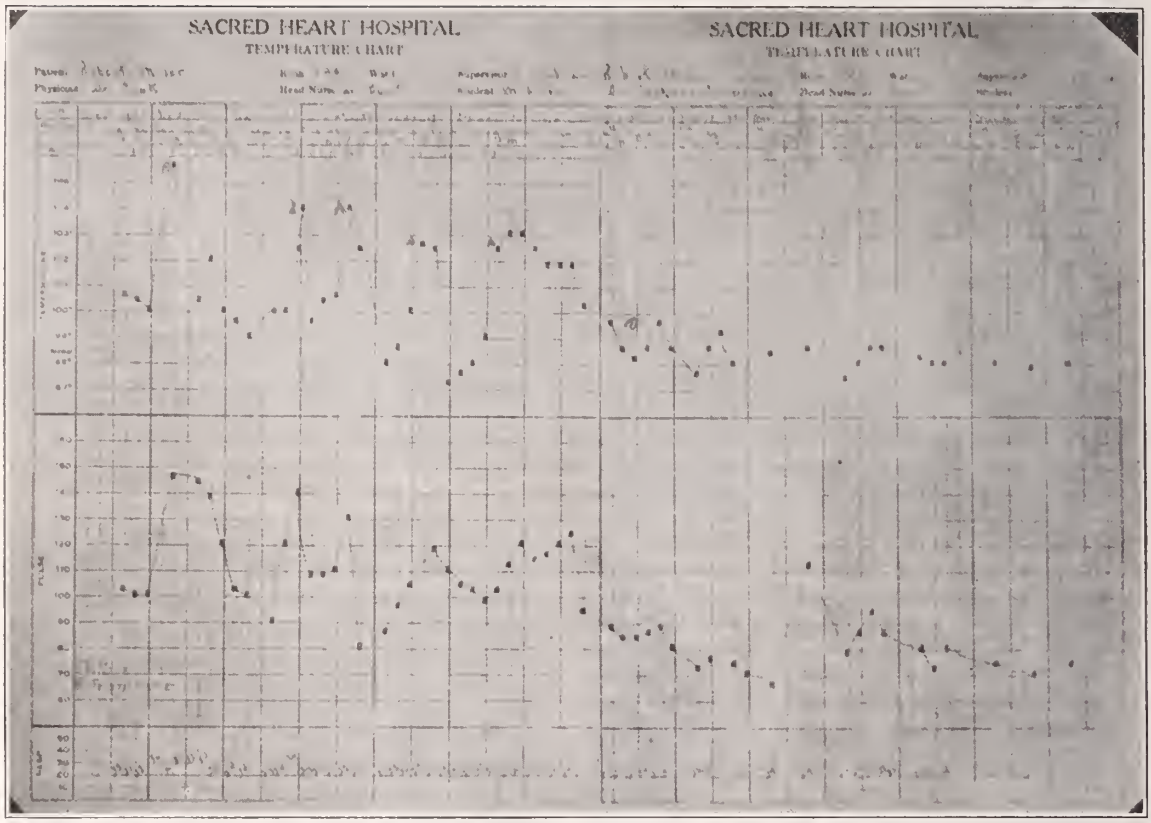

Fig. 8, Case 2. Crosses show chills; circles show transfusion given.

general appearance of the patient was that of a very sick boy.

Findings:

Both mastoids apparently healing—considerable discharge from both ears. Some palpable glands in the right side of the neck. The fundi were normal, sensorium normal and no Kernig reaction. In view of the fact that both mastoids had been operated and we had a boy with a typical thrombosis syndrome, it was decided to re-open both mastoids. On re-opening it was found that a very incomplete operation had been done. The antrum had not been opened; the entire cellular structure was soft and hemorrhagic. On the right side there was a small patch of lateral sinus exposed which was thickened and gray. There was no pulsation. The sinus wall was exposed by removal of bone. The sinus was opened and no thrombus found. The left mastoid was found to have had a very incomplete operation. The sinus was uncapped and found normal in color. This patient never had another chill and went on to complete recovery in ten days time.

Comment:

This was a case of phlebitis of the lateral sinus following an incomplete mastoid operation. The completion of this operation relieved the trouble.

Case No. 2. Robert M., age nine years, seen 2–20–33. Referred by Dr. Renz. The complaint was drowsiness, chills and high temperature. One month previously had had influenza. Three weeks previously had developed a right acute otitis media. The drum was opened, drainage continued for five days and then stopped. One week ago developed chills and high fever. Since then the patient has been drowsy and slipping fast.

Findings:

Right ear drum was dull and retracted. No discharge and no tenderness over the mastoid. Spinal puncture was negative—x-ray of the right mastoid showed coalescence of cell walls. Ophthalmoscopic examination showed marked congestion of the retinal veins. The Kernig reaction was absent. Blood culture was positive for streptococcus.

Blood count:

Red cells 3,500,000;
white cells 18,000;
hemoglobin 70%;
stab cells 25.

The next day the right mastoid was opened. The cells were small and infected but with the appearance of a healing mastoditis. The lateral sinus was uncapped and found grayish and thickened with no pulsation. It was opened and greenish pus escaped. The jugular vein was ligated above the

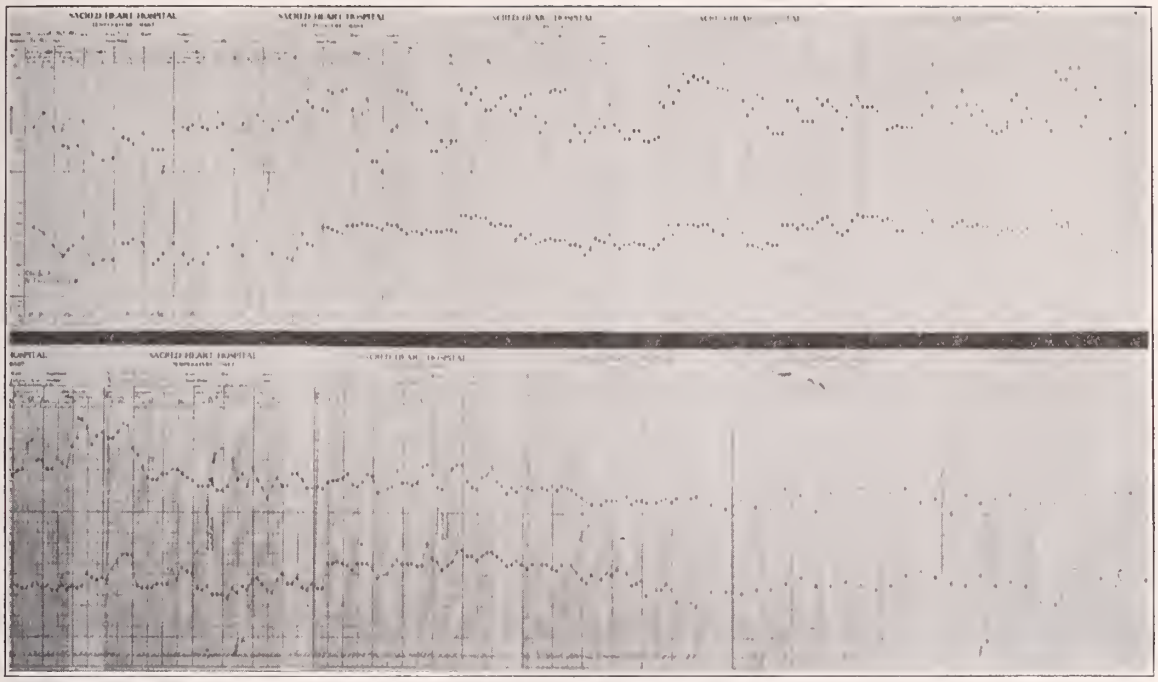

Fig. 9, Case 3. Lasting 55 days.

facial branch. The sinus was then opened and a section of the external wall taken out, curetted to the torcula without securing free bleeding and the clot removed from the bulb area. A drain was placed in each end of the sinus. The patient was brighter the next day. The third day he seemed to be losing ground but did not have any chill. The blood picture showed a progressive loss of red cells and hemoglobin. He was then given a transfusion of 250 c.c. of whole blood. The picture changed immediately. He went on to complete recovery in ten days' time.

Comment:

When we saw this case his ear was dry but he had the picture of thrombophlebitis. Going into the history, he had had an acute ear infection three weeks previously. We did not get free bleeding from either end of the sinus. A drain took care of the trouble. As a result we did not have to take away a portion of the skull to get to the end of the clot. The magic work of a blood transfusion.

Case No. 3. Margaret M., nurse, seen 12–25–28. Complained of a severe earache in the right ear.

Past history:

Has had infiuenza and also gives a history of repeated attacks of acute otitis media.

Findings:

Right drum bulging—mastoid tender—temperature 102. A paracentesis was done. Ear discharging freely, pain and temperature continued with increasing tenderness. Four days later the mastoid was opened. The cortex was found thick and hard; the cells were filled with pus and an area of what appeared to be dura in the posterior superior part exposed. It was beefy red in color and was at the end of a necrotic area of bone. The entire mastoid bled very freely. One week later she developed a step-ladder temperature with a positive blood culture of pneumococcus. On 1–6–29 the jugular was ligated, sinus opened and thrombus removed. Wound in the neck became infected 1–21–29. It was opened and drained. The chills stopped for three or four days to return every twenty-four hours. It lasted for fifty-six consecutive days. She was given transfusions on the 20th, 25th and 35th days. After the last transfusion the chills were not as hard, the temperature did not go as high and at the end of the fifty-sixth day came down to normal and the patient went on to complete recovery.

Comments:

The interesting part of this case is the rapid onset of the mastoid infection, undoubtedly of hemorrhagic type, the formation of a thrombus and the recovery after fifty-six days of chills. This should give us courage to fight with these cases and not give up hope if the chills do continue for a long period of time after ligation of the jugular vein.

Case No. 4. Leona T., age 13 years, seen 2–1–33. Referred by Dr. Geo. Griswold. Complained of right ear discharge, tender mastoid, chills and high temperature.

Past history:

The right ear had been running for one year, with a foul discharge. No treatment. A chill, vomiting and high fever came on six days previous

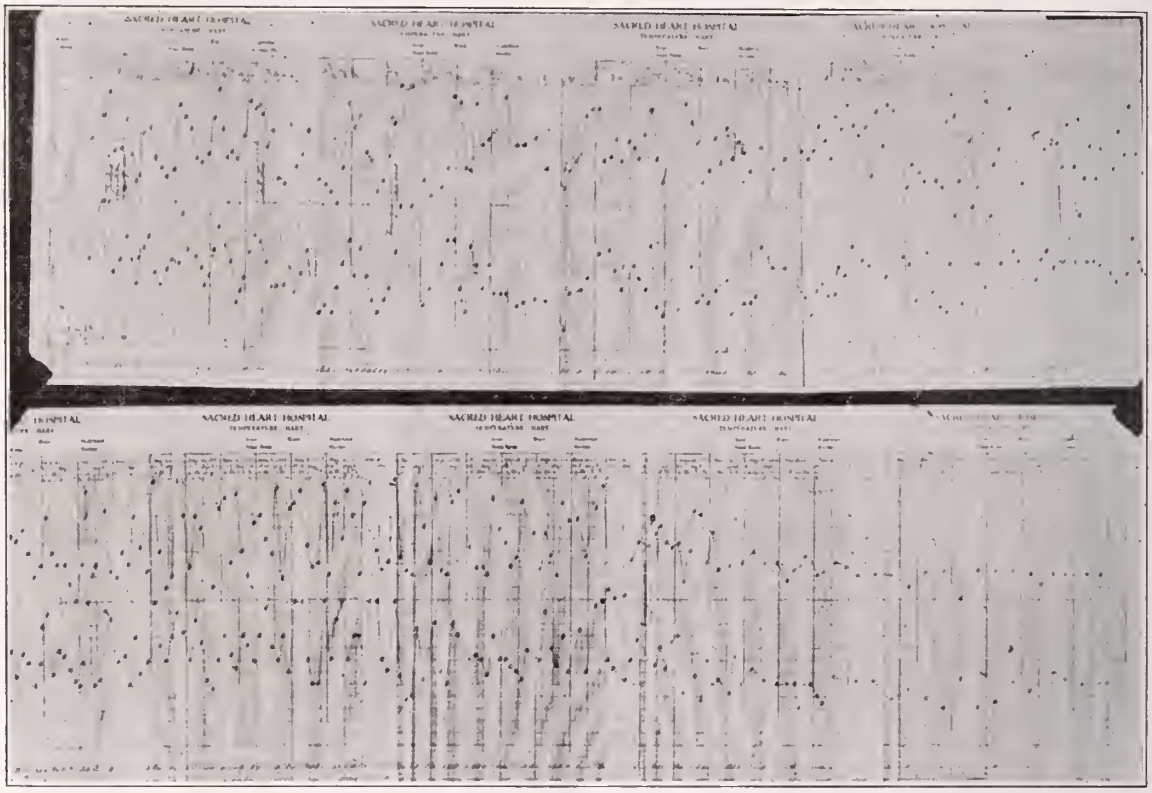

Fig. 10, Case 4. Had a chill every day for 43 days.

—a severe second chill three days previous to the time of admission to the hospital.

Findings:

Right ear: foul discharge, tender mastoid. A chill developed while examining the patient and temperature reached 105. No rigidity of neck muscles. Fundi showed considerable congestion of the retinal veins. Operation of the mastoid revealed a large abscess cavity, foul smelling, with cholesteatoma. The plate over the sinus was destroyed and the lateral sinus was bathed in pus. The wall was thickened, gray and of a doughy feeling. The jugular vein was ligated above the facial branch. The sinus was opened and a thrombus removed. There was no bleeding from either end. Drains were placed in the sinus. This girl had a stormy convalescence; a chill every twenty-four hours for forty-three days. Transfusions were given on the 1st, 4th, 7th, 22nd and 43rd day. On the 30th day there was a profuse discharge of pus from the wound in the neck which undoubtedly was a retropharyngeal abscess caused by metastasis through the vertebral veins. The blood picture showed the effects of the infection in the blood stream—hemoglobin going as low as 30% with red cells numbering 2,300,000. Stab cell count ranged from 14 to 30%. The Schilling chart was not constant, going to the left at times and to the right at other times. After the last transfusion her chills stopped and she made a rapid comeback.

Comments:

This case shows the danger of a chronic running ear. We could not get free bleeding from either end of the sinus which may have accounted for the protracted chills. The improvement of the blood picture after each transfusion was very striking. The absence of metastasis in both of these cases is noticeable.

RELATION OF POSTGRADUATE MEDICAL INSTRUCTION TO PUBLIC HEALTH

Leroy E. Parkins, Boston (Journal A. M. A., Aug. 25, 1934), points out that hard and fast lines cannot be drawn between public health problems and the private practice of medicine. The public health physician attacks this problem primarily from the group standpoint, while the private physician is concerned chiefly with the individual patient. The public health physician has a large field of undisputed practice in guaranteeing pure food and water supplies, supervision of quarantine laws and all similar public safeguards. These are obvious mass health problems. The improvement of community health beyond these broad realms is largely a problem of individual attack. No corps of public health physicians and nurses can alone hope to cope successfully with this immense, vital, human problem without the friendly, active cooperation and assistance of the whole medical profession. That this cooperation has not existed at all times is patent to any observer who reads vital statistics for various communities. The causes of such failures are varied. New discoveries and improvements are constantly being made in all fields of medicine and related science. It is a major problem in private practice as well as in the realm of public health to provide the practicing physician and health worker with this new knowledge. A working educational system is needed that is flexible enough to meet all practical requirements. A statewide program of postgraduate medical instruction may be of interest in visualizing ways and means of active participation by public health physicians in assisting the organized profession to secure instruction in preventive and curative medicine.

Malignant Intraspinal Meningioma; A Case Report

By D. J. TWOHIG, M. D., H. A. DEVINE, M. D., M. O. BOUDRY, M. D.
Fond du Lac

THERE is still considerable controversy in the medical literature regarding the terminology of the malignant tumors that arise from the meninges. Kernohan prefers to designate these tumors as malignant meningiomas,[1] instead of sarcoma, or meningeal fibroblastoma,[2] or arachnoid fibroblastomas.[3] Malignant intracranial endotheliomata was recognized in 1927 by Craig[4] and at the present time this group of tumors is accepted as a definite neuropathological entity.

CASE REPORT

Mrs. E. G., age 60 years, previously in good health, began to suffer from intermittent attacks of pain in the left lumbar region in the summer of 1932. She noted that walking gave some relief but that lying on her back made the pains worse. It was common for her to assume a kneeling position in bed, and extend the entire spine to relieve the pain.

In January of 1933 the pain became more severe and radiated from the left lumbar region to the umbilicus. Its course was always the same. Weakness was noted in the left leg, and the extremity was described as having a cold feeling. Walking became impossible without the use of a crutch.

The symptoms grew progressively more severe and by June, 1933, control of the rectum and bladder was lost. Weakness developed in the right leg and the patient became bedridden. Daily catheterization and enemas were necessary. The patient noted that all sensation was absent below the umbilicus, and motion of the lower extremities was impossible. The legs were described as being stiff, shrunken, and drawn-up. The pain in the left lumbar region became very severe and extended down the left leg posteriorly.

Physical examination in October of 1933 revealed the following positive physical findings: slight lateral nystagmus; moderate extension tremor in both hands; complete loss of tactile, thermal, and pain sense below the umbilicus; bilateral ankle and knee jerks, the right being more marked than the left. Ankle clonus was more marked on the left than on the right. The anal sphincter was considerably relaxed and spasticity was present in the muscles of both legs.

Laboratory examination of the urine revealed an acid reaction sp. gr. 1–020; albumin 2 plus (.03%); Leukocytes, one plus. Examination of blood: Hemoglobin, 14.5 grams; red blood cell count, 4,520,000; white blood cell count, 5,800; coagulation time, three and one-half minutes; Wassermann, negative; blood grouping IV (Moss.) Spinal Fluid Report: Fluid was faintly yellow. Cell count, 1.2 cells per cubic centimeter; Gold curve, 0011233210; Ross–Jones and Noguchi, positive; Wassermann, negative. The left lumbar pain increased about 50% following spinal puncture.

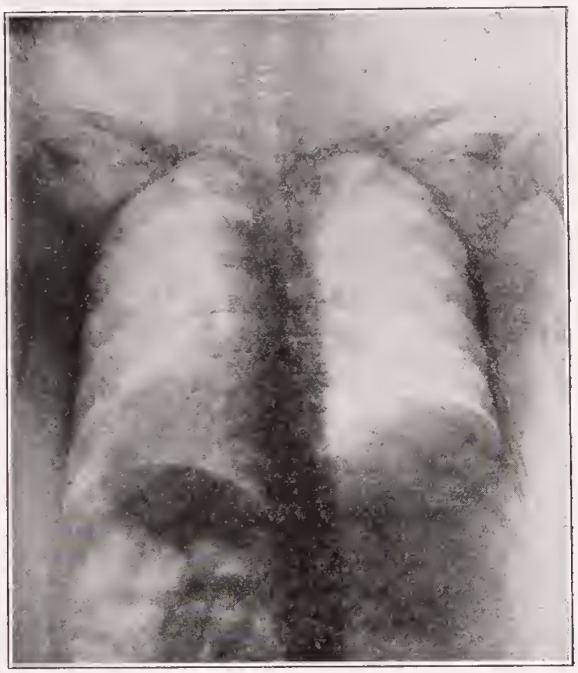

Fig. 1. X-ray of spine following injection of four cubic centimeters of iodized oil in the lumbar region. A complete block is noted at the level of the ninth dorsal vertebra.

Four cubic centimeters of iodized oil was injected into the spinal canal at the left of the fourth lumbar interspace. Figure 1 is the x-ray obtained one-half hour later. A complete block is present at the level of the ninth dorsal vertebra.

At surgery, an extramedullary cord tumor was removed from the left side of the spinal cord. It was covered by the arachnoid, and the pedicle arose from the area where the eighth dorsal root enters the spinal cord.

The tumor, 2 c.m. by 1½ c.m. by 1 c.m., was soft on palpation and cauliflower-like in appearance. Figures 2 and 3 are microphotographs which reveal calcium depots and the typical cellular arrangement of a meningioma. Mitotic figures were fairly abundant.

The patient made an uneventful recovery and stated that she was able to feel some sensation in her limbs on the second postoperative day when the nurse bathed her. First voluntary urination oc-

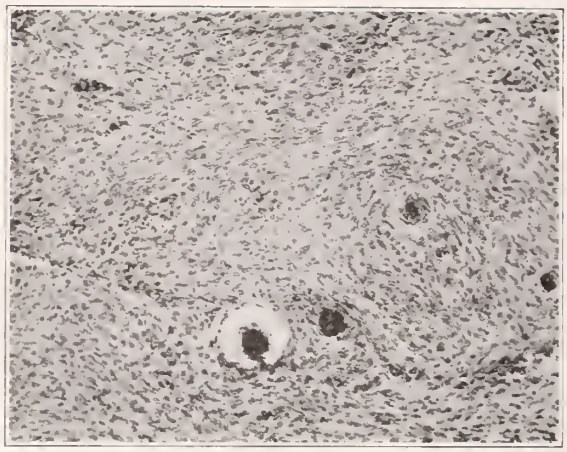

Fig. 2. The arrangement of the cells is typical of a meningioma. The dark masses are deposits of calcium. (Low Power)

Fig. 3. This section shows two mitotic figures, as evidenced by the paired dark masses. (Oil Emersion.)

curred on the tenth postoperative day. She could move both feet on the eleventh day. First voluntary defecation occurred on the nineteenth postoperative day. At the present time, September, 1934, the lady is able to walk about the house without the use of a cane or a crutch. The left leg is slightly spastic, but no spasticity is present in the right leg. The atrophy has improved about 90%. Sensory sensation is practically normal. The most annoying feature of her convalescence was generalized muscular aching in all the skeletal muscles previously paralyzed.

COMMENT

The prognosis in this case is not certain as the meningioma is malignant as evidenced by the presence of mitotic figures throughout the tumor. A recurrence is probable unless every remnant of the tumor has been removed. If the tumor does recur, it will probably be more active than the primary growth.[1]

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Traumatic Rupture of the Sigmoid with Intra-Abdominal Hemorrhage

By G. M. La CROIX, M. D. and C. E. RYAN, M. D.

Shiocton *Appleton*

TRAUMATIC rupture of the sigmoid is one of the most uncommon of conditions, therefore, it is deemed of sufficient importance to report this case. Careful survey of the literature does not reveal an identical case, one of ruptured sigmoid following a fall upon a fork handle, although Rumbaugh[1] has reported a boy aged 13 inflicting a similar injury by falling on a broom stick. Rumbaugh's case recovered. Behrend and Herrman[2] report a case of ruptured sigmoid which followed a colonic irrigation given by a naturopath. The patient died in eleven hours. Numerous cases are in the records[3,4] of rupture of the sigmoid resulting from accidents or misuse of compressed air (pneumatic) tools. Cooke[5] reports twelve cases of intestinal rupture following automo-

bile accidents. All of the lesions, however, were of the small intestine except one case of the ascending colon.

REPORT OF CASE

M. A., aged 39, a white man, on July 17, 1933, while sliding down from an unusually large load of hay, struck the handle of a fork stuck vertically in the ground. The handle, measuring about 2 inches in diameter, passed through a heavy denim overall, the underwear, penetrating the anus and pushing upward into the rectum to a depth of about 14 inches. He removed the fork handle himself. He was seen about ten minutes later, lying flat on his back, with his knees drawn up, complaining that the lower one-half of his abdomen hurt. The lower abdomen was rigid and extremely tender to touch. His anus was lacerated and bleeding. A diagnosis of ruptured anus, rectum and sigmoid was made. He refused assistance, arose to his feet and stepped into a car, was driven about a mile where he got out of the car and into an ambulance, again refusing assistance. The patient did not complain on the way to the hospital (22 miles) except that going down hills caused a sickening feeling in the pit of his stomach. Upon arriving at St. Elizabeth Hospital, Appleton, he vomited profusely. He was pale and in great pain. The entire abdomen was board-like. Temperature 98, pulse 98, respiration 22, leucocyte count 9000, 60% polymorphonuclears. He was prepared and sent to the operating room.

Under ether anaesthesia a low mid-line incision was made. There was much free blood in the abdomen. A fecal odor was present although no feces were found in the abdominal cavity. The bleeding arose from numerous vessels along a rent in the sigmoid. Hemostasis was obtained after much difficulty. The sigmoid was torn for about 6 inches on its anterior surface, most of the tear being of the mucosa, a small portion was through the mucosa. The laceration was closed with linen. An opening about 3 inches in diameter in the pelvic mesocolon was closed with a purse string suture. A soft rubber tube and drain was placed in the pelvis and the abdomen closed. The anus was widely dilated, with a deep laceration radiating laterally on each side. The anal and rectal mucosa was badly lacerated, with much venous oozing. No attempt at repair was made because of the critical condition of the patient. The rectum was packed with vaseline gauze, with the idea in mind to do a plastic repair at a later date. The patient was returned to his room, given hyperdermoclysis and other necessary supportive treatment.

The convalescence was very stormy. There was much fecal drainage through the rectum. On the second day the gauze pack was removed from the rectum and a tube well greased with vaseline reinserted. On July 22nd a severe diarrhea developed. On the morning of the 23rd a fecal odor was noted, a fecal fistula developing the same day. On the 25th the patient stated that he felt some return of the function of his anus. On August 1st the fecal drainage stopped entirely, returning slightly during the next three days. At this time his condition was critical. On the afternoon of the 4th he experienced a slight chill which was followed by enormous amount of fecal drainage both through the incision and the anus. This profuse drainage continued until August 7th when the patient had a fully controlled natural bowel movement, the first since his accident 21 days before. On August 10th the fecal fistula had closed. From this time on recovery was uneventful except for large amounts of excess granulation tissue developing in the incision. The temperature during the first few weeks of hospitalization varied from 99 to 101, only on two occasions rising to 102. He was discharged from the hospital September 12th, 57 days after admittance. He was back at farm work November 1st. At this time proctoscopic examination revealed a normal anus, rectum and sigmoid.

This case presented several very interesting features, notably the large lacerations in the sigmoid and pelvic mesocolon, and the anal destruction. Obviously, the proper procedure in cases of ruptured or suspected rupture of the sigmoid is immediate operation, death being inevitable in unoperated cases of ruptured bowel. A most interesting observation was the great degree of sudden dilatation that the anal sphincters endured without rupture. The apparent loss of function of the anal sphincters for a period of 21 days undoubtedly resulted either from excessive dilatation or nerve shock, possibly both. Their sudden recovery of function was of interest after the long period of inactivity.

SUMMARY

1. A case of ruptured sigmoid, lacerated pelvic mesocolon, intra-abdominal hemorrhage, lacerated rectum and anus, treated by immediate operation with ultimate recovery.

2. Ruptured sigmoid or cases of suspected rupture should be subjected to immediate operation if their condition permits.

3. The anus will recover its function after as long as three weeks of complete inactivity.

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(Continued on page 788)

THOMAS J. O'LEARY, M. D.

President, State Medical Society of Wisconsin, 1935

Dr. Thomas J. O'Leary of Superior was born in 1881 at Wabasha, Minnesota. He attended the parochial and public schools at Wabasha, and received his degree of M. D. at the College of Physicians and Surgeons at the University of Illinois in 1906. He served his interneship at St. Mary's Hospital in Superior, Wisconsin, in 1906–1907; and began general practice in Superior following interneship.

Since 1915 his practice has been devoted to surgery. At the present time Dr. O'Leary is head of the Surgical Department at St. Mary's Hospital; attending surgeon at St. Francis and Good Samaritan Hospitals; surgeon to the Soo Line and Great Northern Railroads. He is Past President of the Douglas County Medical Society the Interurban Academy of Medicine, the Eleventh District Medical Society and a Fellow of the American College of Surgeons.

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« « « EDITORIALS » » »

The Green Bay Meeting

FOR lack of adequate facilities in which to house our ever enlarged annual meetings, recent years have seen Madison and Milwaukee as the selections of the Society. A year ago the Council approved the invitation of members of the Brown-Kewaunee-Door County Medical Society that the Society hold its 93rd Anniversary Meeting at Green Bay. The invitation was subsequently accepted by the House of Delegates.

The meeting is now history but it will ever be a history of happy memories for the members of our Society and Auxiliary who were in attendance. Not alone committee chairmen and officers, but members of both the Society and its Auxiliary gave their fellow members a most gracious and cordial welcome. Nothing was left undone by Green Bay physicians and their wives to make the 1934 meeting the outstanding success that it was in fact. Theirs is the satisfaction of knowing that again the membership will refer to the sessions of 1934, as those in 1924, as being "The Green Bay Meeting." Truly it was just that.

To the Chairman of the Committee on Scientific Work we are happy to say that the program arranged met with outspoken approval of members everywhere. It was a privilege to attend "The Green Bay Meeting."

Credit Where Credit is Due

TWO years ago the Industrial Commission of Wisconsin, eager to obtain more information about the disease silicosis, sponsored and conducted a two-day meeting in Chicago. At this conference men of authoritative standing presented the most recent knowledge and opinions involved in silicosis. It was a most noteworthy occasion, not only from an educational point of view but more because the whole plan and idea expressed so well the progressive and conscientious attitude of the members of the Commission toward the responsibility placed upon them.

That same splendid attitude and desire to "do their job as well as possible" was again demonstrated several weeks ago when all members of the Commission, the chief examiner and several other members of the staff, attended that most interesting session on silicosis conducted by the Trudeau School of Tuberculosis at Saranac Lake.

At this meeting the plan and method of dealing with the silicosis cases in Wisconsin was given frequent favorable mention, and, while not considered ideal, it was the general opinion of men from other states that Wisconsin was handling this problem more satisfactorily than any other state. The Industrial Commission of Wisconsin certainly deserves real credit for its splendid showing in this connection.—O. L.

Relief of Intractable Pain

THE relief of pain has always been one of the physician's problems. Pain of a temporary nature, acute surgical pain, or pain due to trauma offer very little difficulty; the physician in these instances has a choice of a wide variety of drugs designed for the relief of pain, as well as the opiates.

The relief of chronic pain which is usually due to some chronic pathological process such as in chronic arthritis, is a more difficult matter. The relief of intractable, excruciating pain as a result of malignant disease is a still far more difficult problem. While, as a rule, this type of pain is usually not so severe that it cannot be relieved by opiates, physicians are always somewhat loath to resort to the use of opiates and usually exhaust all of the supply of analgesic drugs and physical measures before resorting to the use of them.

Patients with excruciating pain as the result of advanced malignant disease, or, in many instances, early malignant diseases where perineural extension or metastases, or where osseous metastases have occurred, producing pain, could probably be benefited generally and the local malignant lesion longer inhibited by the use of x-ray or radium if the patient could be relieved of his pain, as the severe pain usually prevents the patient from eating and sleeping.

Deep x-ray therapy has been extensively used in recent years and in most instances has had an analgesic effect on pain due to malignant disease. However, the results are not always satisfactory.

Many neurosurgeons have employed chordotomy. This is a very extensive major surgical procedure. In many instances the patient's general physical condition will not warrant such an operation and there is sometimes danger of bladder and rectal incontinence occurring. Where the growth is superficial and limited to such an area that isolation and division of certain specific sensory nerves such as about the head and neck can be done the results are more satisfactory.

Paravertebral nerve blocking, epidural, and trans-sacral nerve blocking by the injection of alcohol have been warmly advocated by several writers in recent years. In 1931 Dogliotti reported that by means of subarachnoid injection of absolute alcohol he had relieved forty cases of chronic pain in the lower back, the pelvis and the legs due to a variety of pathologic lesions. Yeomans, in 1933, used the same procedure in seven cases of lower abdominal and rectal pain due to malignancy and highly recommended the procedure. More recently, Saltzstein employed the same procedure in eleven cases with very gratifying results. Stern, using the subarachnoid injection of 95 per cent alcohol in 19 cases of pain due to malignancy reported very excellent results. A single injection in some instances gave relief for as long as eight months. Both Saltzstein and Stern are convinced that the procedure is extremely practical and safe when properly done, and, of course, dangerous to life when improperly done. Both writers observed transient paresthesia and in some cases slight weakness of a leg due to some motor paralysis as well as very slight temporary bladder and rectal dysfunction.

At the time of the publication of the article by Saltzstein, the writer had under observation three cases of carcinoma of the prostate with clinical evidence to suggest perineural metastases and x-ray evidence, in all three cases, of osseous metastases with complaints of pains in and about the pelvis, hips, and thighs, and a case of a young woman, 28, complaining of pain in the right hip and leg to the point of limping. She had had a breast amputation one year previously. The x-ray examination disclosed metastatic carcinoma in the neck of the right femur and in the descending ramus of the left pubis. All three cases of carcinoma of the prostate were very greatly relieved by the subarachnoid injection of absolute alcohol, using the technic of Yeomans. There were no postoperative symptoms or sequelae of any moment. In the case of the young women, the pain in the leg was relieved immediately. She developed, however, a distinct paresthesia of the right leg together with some motor weakness.

The results in our cases were so encouraging as to warrant our further and more extensive application of this procedure.—G. H. E.

Society Proceedings

ASHLAND–BAYFIELD–IRON

Dr. W. E. Ground, Superior, spoke on "Cancer" before a meeting of the Ashland–Bayfield–Iron County Medical Society on September 6th.

CLARK

A meeting of the Clark County Medical Society was held at the Woodland Hotel at Owen on September 5th.

Following the dinner, election of officers took place, with the following result: President, Dr. B. H. Dike of Owen; Vice-President, Dr. M. C. Rosekrans, Neillsville, and Dr. A. H. Kulig of Thorp as Secretary-Treasurer.

Dr. R. S. Baldwin of Marshfield read a paper on "Tuberculosis Meningitis" and Dr. S. E. Williams of Chippewa Falls spoke on "Anesthesia."

Representatives of the state and county relief administration discussed medical care for the indigent.

DANE

An annual golf tournament for members of the Dane County Medical Society was held at Stoughton on September 20th. This was followed by a dinner at six o'clock at the Stoughton Country Club after which Dr. Chester M. Kurtz of Madison presented a paper on "The Physician's Heart."

OUTAGAMIE

Admission of new members and discussion of plans for the programs during the coming year featured a meeting of the Outagamie County Medical Society held at the Riverview Country Club on September 6th.

PIERCE–ST. CROIX

A dinner business meeting of the Pierce–St. Croix County Medical Society was held the latter part of August at the Hotel Hudson in Hudson.

POLK

The regular meeting of the Polk County Medical Society was held on Thursday evening, August 16, at the Ike Walton Camp, Webster, Wisconsin. The Society was the guest of Dr. D. A. Maas, of Webster.

The President, Dr. L. A. Campbell, called for a report of the committees. Dr. R. G. Arveson, Frederic, reported on the district advisory committee meeting held at Eau Claire and the recent meeting of the Polk County Advisory Committee with the local relief officials. The committee in charge of the Society's booth at the County Fair reported that they had secured material from the A. M. A. and that all would be in readiness for the opening of the fair.

Dr. J. A. Riegel, St. Croix Falls, gave the scientific paper for the evening entitled, "My Errors in the Practice of Medicine".

At the conclusion of the meeting the members of the Society presented Mr. George B. Larson with a farewell gift and testimonials of appreciation for the work done for the Society.

Mr. Earl Swenson, manager of the Arveson–Diamond Clinic, was elected Secretary of the Society to fill the unexpired term of Mr. Larson. E. S.

UNIVERSITY OF WISCONSIN

Dr. William P. Murphy of Harvard Medical School talked on "The Present Status of Pernicious Anemia" with motion picture demonstration on Friday, September 28th, in the Service Memorial Institutes building, Madison.

MILWAUKEE ACADEMY OF MEDICINE

Members of the Milwaukee Academy of Medicine met on September 18th for a business and scientific meeting. The scientific program was as follows:

1. Presentation of Cases, Specimens and Roentgenograms.

2. "The Injection of Treatment of Hydrocele." By C. R. Marquardt, M. D. Discussion opened by Dr. J. C. Sargent.

3. "Alcohol in Relation to Automobile Accidents." By H. A. Heise, M. D., Director of Laboratories for Columbia and Milwaukee Children's Hospitals.

TENTH DISTRICT

The thirty-fourth annual meeting of the Tenth District Medical Society was held on September 27th, at Eau Claire. Beginning at 9:00 A. M., a surgical clinic was conducted by Dr. A. A. Strauss of Chicago at Luther Hospital, which was followed by a cancer clinic by Dr. Wm. T. Peyton of the University of Minnesota.

Following luncheon at noon, the afternoon program was presented at the Elk's Club at 1:30 P. M. Speakers and their papers follow:

"Surgical Treatment of Gastric and Duodenal Ulcers, and Cancer of the Stomach" by Dr. Alfred A. Strauss of Chicago.

"Prophylactic Immunization" by Dr. W. D. Stovall, Madison.

"Some Observations on the Diagnosis and Treatment of Malignancy" by Dr. Wm. T. Peyton, Minneapolis. A general discussion was had after each presentation.

A reception, dinner and entertainment at the Eau Claire County Club concluded the meeting.

THE WOMAN'S AUXILIARY

Mrs. Rock Sleyster, 1220 Dewey Ave., Wauwatosa, *President*
Mrs. F. Gregory Connell, 420 Washington Blvd., Oshkosh, *President-elect*
Mrs. George H. Ewell, 2024 Kendall Ave., Madison, *Secretary*
Mrs. Donne F. Gosin, 631 S. Quincy Ave., Green Bay, *Treasurer*
Mrs. R. W. Tomlinson, 1021 Park Place, Wilmington, Del., *National President*

The President's Address*

By MRS. ROCK SLEYSTER

THE reports of officers and Committees have outlined the activities of the past year and have shown a progress in developing this organization of which we may all feel very proud. We are indebted to each and everyone of these women who have worked so loyally under the splendid leadership of Mrs. Eben Carey, and I am hoping for the same support in order that during the coming year we shall not fail to carry on the same standards she has set for us to follow.

The time has long since passed when it would seem necessary to make any explanation for the existence of the Auxiliary. It was created in this state at the request of and by direction of our State Medical Society.

It must be remembered that the Auxiliary does not initiate activities but is organized to respond to requests made from the medical societies. Medical societies which have appreciated the potential helpfulness of their Auxiliaries and have planned work for them to do, are enthusiastic in their praise of this whole scheme of cooperation and it is quite natural to look for and expect the most active Auxiliaries to be associated with county medical societies which are themselves participating in an active program.

Emergencies, which afford the greatest opportunity for help by the Auxiliary, may arise at any time and this alone justifies the maintenance of a well organized Auxiliary in every county, even though, at present, only routine duties may be assigned to it. By routine duties I refer to such generally accepted functions as:

1st. The support of Hygeia (asked of all Auxiliaries by the House of Delegates of the American Medical Association.)

2nd. The promotion of friendly relations through a better acquaintance among physicians' wives.

3rd. Furtherance of Health Education.

4th. Participation in Health Movements.

5th. A properly directed influence in lay organizations to which members belong.

The wife of the physician, through her daily personal contacts, has it in her power to bring about a better understanding by the public of the work and ideals of the medical profession.

I have no new plan of activities to recommend for the coming year. It must be remembered that we are a developing organization and it would be a mistake to attempt too broad a program at this time.

It is important that organization of Auxiliaries in sections unorganized, continue, and we are fortunate in having Mrs. Eben Carey again in charge of these activities. We are also fortunate in having as Chairman of the Public Relations Committee our President-elect, Mrs. Gregory Connell of Oshkosh; as Chairman of the Hygeia Committee, Mrs. Irwin Schulz of Wauwatosa; as Chairman of the Committee on Publicity, Mrs. Theodore Gunther of Sheboygan; as Chairman of the Program Committee, Mrs. Oscar Friske of Beloit; as Archives Chairman, Mrs. Cornelius A. Harper of Madison and as Parliamentarian, Mrs. Robert Fitzgerald of Wauwatosa.

I wish to express my deep appreciation of the honor in serving as your President. It will be my earnest endeavor to merit the confidence you have shown in me.

* Presented before the sixth annual meeting of the Woman's Auxiliary to the State Medical Society of Wisconsin, Green Bay, September 13, 1934.

Green Bay Meeting Sets New Attendance Record for Auxiliary

MORE than two hundred members and guests of the Auxiliary attended its sixth annual meeting in Green Bay during the week of September 11, 12, and 13.

The members of the Woman's Auxiliary to the Brown-Kewaunee-Door County Medical Society made everyone feel most welcome. The entire program was beautifully planned, and meticulously carried out. The Annual Meeting Chairman and her committees deserve a word of sincere praise. The Hostess, Social, Ticket, and Reception Committees worked hand in hand together with the other committees which were well organized, most efficient and most gracious. Flowers, the beauty of which beggar description, were provided for every occasion during the entire three day program.

The Executive Board dinner was held on Tuesday evening, the 11th. Thirty-seven were present. Honorary guests were Doctors Seeger, O'Leary, Sleyster, Rogers, Harper, Steinnon and Mr. Crownhart. The physicians attested their own interest in the work of the Auxiliary and its value to the Medical Society.

The opening business session on Wednesday morning, September 12, was called to order by the president, Mrs. Eben J. Carey. Following the Invocation, the president of the hostess Auxiliary, Mrs. Donne F. Gosin, Green Bay, gave the address of welcome. The response was made by Mrs. Henry Gramling, past-president of the State Auxiliary. Mrs. Carey extended a welcome to the delegates, alternates, members and guests and introduced Mrs. Arthur J. McCarey, Annual Meeting Chairman, who extended a very cordial invitation to everyone to participate in the program. Following the reading of the minutes the president gave her report. Each of the seventeen county auxiliaries presented a report,—the reports of the following thirteen county auxiliaries were read by the presidents: Brown-Kewaunee-Door, Columbia, Dane, Douglas, Green-Lake-Waushara-Adams, Manitowoc, Marinette-Florence, Milwaukee, Outagamie, Polk, Racine, Rock, and Waukesha. The reports from the following four county auxiliaries were by authorized delegates: Kenosha, Portage, Sheboygan, Winnebago. A telegram from Mrs. James F. Percy, California, past-president of the National Auxiliary, and a message of greetings from Mrs. Arthur B. Mc Glothlan, Missouri, past-president of the National Auxiliary were read.

Following the general business meeting a luncheon with an orchestral program was held at the Palm Garden. This affair was attended by one hundred sixty-two.

The afternoon of the twelfth was given over to a most enjoyable tour of the city to points of historical interest followed by tea at Fort Howard Hospital. The transportation committee provided cars for one hundred and twenty visitors; county and city escorts were provided for the delightful fifty-mile trip. The tea, beautiful in every appointment, gave everyone an opportunity to visit old Fort Howard Hospital.

In the evening the ladies enjoyed a bridge party, tables being arranged in the Crystal Ballroom of the Northland Hotel. Contract and auction were played, and 23 prizes were awarded. Buffet lunch was served. Garden flowers decorated the room as they had every place the ladies assembled. The hostess Auxiliary provided everything for the tea and the bridge party, and no charge was made to the visiting guests. One hundred forty-five attended the tea at Fort Howard and one hundred were at the bridge party.

At the general business meeting on Thursday, the outgoing president, Mrs. Eben J. Carey, Milwaukee, and her successor, were presented with bouquets. Mrs. Rock Sleyster, new president of the State Auxiliary, is a former president of the Woman's Auxiliary to the Medical Society of Milwaukee County. She is serving for a second year as Director of the Woman's Auxiliary to the American Medical Association, and will be remembered as the very able National Convention Chairman at Milwaukee in 1933.

Mrs. George Ewell, Madison, was re-elected as Secretary of the State Auxiliary. Mrs. Donne F. Gosin, president of the Brown-Kewaunee-Door Auxiliary, was elected to the office of Treasurer.

Following the close of the business meeting, the speaker of the session, Dr. F. L. Rector of the American Society for the Control of Cancer, was introduced. He used slides to illustrate his lecture which was highly educational and of particular interest to those present. Immediately following the close of this meeting, members were taken to the Fannie Joannes Memorial Hall for luncheon and a style show, children's dances, a reading, and musical selections. More than 150 attended the delightful luncheon.

Thursday evening the program of the Auxiliary came to a close with the annual dinner for the doctors and their wives at the Northland Hotel. Miss Lucille Meusel of the Chicago Grand Opera Company sang at this dinner. Many remained for dancing.

The Annual Meeting Chairman, Mrs. Arthur J. McCarey, Green Bay, and her executive committee may well be happy in their accomplishments. It was the type of meeting that will be remembered.

AUXILIARY REGISTRATION

Annual Meeting, Green Bay, Wis.

Sept. 12, 13, 1934

	Sept. 12 Wednesday	Sept. 13 Thursday	TOTAL
Executive Board	23	2	25
Delegates	14	2	16
Alternates	9	4	13
Members	74	35	109
Guests	31	17	48
	151	60	211

Executive Board (25)

Andrews, Mrs. M. P. — Manitowoc
Arveson, Mrs. Raymond G. — Frederic
Carey, Mrs. Eben J. — Milwaukee
Ekblad, Mrs. V. E. — Superior
Ewell, Mrs. George H. — Madison
Fazen, Mrs. L. E. — Racine
Fredrick, Mrs. Harry F. — Westfield
Fitzgerald, Mrs. Robert E. — Wauwatosa
Ford, Mrs. W. A. — Sheboygan
Friske, Mrs. O. W. — Beloit
Gosin, Mrs. Donne F. — Green Bay
Gramling, Mrs. Henry — Milwaukee
Hassall, Mrs. James C. — Oconomowoc
Jackson, Mrs. Reginald — Madison
Leighton, Mrs. Fredrick — Sheboygan
McCarey, Mrs. Arthur J. — Green Bay
McGrath, Mrs. E. F. — Appleton
May, Mrs. James V. — Marinette
Munn, Mrs. Wayne — Janesville
Nuzum, Mrs. T. O. — Janesville
Nause, Mrs. Fred, Jr., — Sheboygan
Sargent, Mrs. James C. — Milwaukee
Sleyster, Mrs. Rock — Wauwatosa
Taylor, Mrs. J. Gurney — Milwaukee
Van Zanten, Mrs. Wesley — Sheboygan

Delegates (16)

Bryan, Mrs. Albert — Madison
Donohue, Mrs. Wm. E. — Manitowoc
Fidler, Mrs. Charles — Milwaukee
Gunther, Mrs. T. J. — Sheboygan
Heeb, Mrs. Harry — Milwaukee
Jorgenson, Mrs. Harvey — Marinette
Jermain, Mrs. William — Milwaukee
Mac Gregor, Mrs. James — Portage
Minahan, Mrs. J. R. — Green Bay
Mueller, Mrs. Gustav — Princeton
Nelson, Mrs. A. N. — Clear Lake
O'Leary, Mrs. Thos. J. — Superior
Pfeifer, Mrs. Edward C. — Racine
Rector, Mrs. A. E. — Appleton
Schowalter, Mrs. Raymond — Milwaukee
Wilkinson, Mrs. John D. — Oconomowoc

Alternates (13)

Burdon, Mrs. Reginald — Green Bay
Currer, Mrs. Paul M. — Milwaukee
Flanagan, Mrs. G. J. — Kaukauna
Fuller, Mrs. M. H. — Green Bay
Gregory, Mrs. Lawrence — Manitowoc
Hildebrand, Mrs. G. — Sheboygan
Kidder, Mrs. Earl E. — Portage
Murphy, Mrs. Francis — Milwaukee
Noyes, Mrs. George B. — Centuria
Pope, Mrs. Frank W. — Racine
Schulz, Mrs. Irwin — Wauwatosa
Witte, Mrs. Dexter — Milwaukee
Wilson, Mrs. Russell — Beloit

Members (109)

Archer, Mrs. W. E. — Appleton
Atkinson, Mrs. Henry — Green Bay
Atwood, Mrs. David — Madison
Bellin, Mrs. Julius — Green Bay
Benton, Mrs. J. L. — Appleton
Bird, Mrs. M. D. — Marinette
Bitter, Mrs. R. H. — Oshkosh
Bourne, Mrs. N. W. — Milwaukee
Carter, Mrs. Ralph — Green Bay
Cary, Mrs. E. C. — Reedsville
Coulter, Mrs. G. F. — Marinette
Chloupek, Mrs. C. J. — Green Bay
Colignon, Mrs. J. C. — Green Bay
Clifford, Mrs. Paul M. — Green Bay

Comee, Mrs. Wm. C. ---------- Green Bay
Cooney, Mrs. Edward W. ---------- Appleton
Connell, Mrs. F. G. ---------- Oshkosh
Crikelair, Mrs. F. L. ---------- Green Bay
Crownhart, Mrs. J. G. ---------- Madison
Dana, Mrs. D. B. ---------- Kewaunee
Denys, Mrs. Glen ---------- Green Bay
Duer, Mrs. G. R. ---------- Marinette
De Cock, Mrs. J. H. ---------- Green Bay
Dockry, Mrs. L. E. ---------- Kewaunee
Docter, Mrs. John ---------- Racine
Eastman, Mrs. Verne ---------- Wausau
Ford, Mrs. W. W. ---------- Green Bay
Gebhard, Mrs. Urban E. ---------- Milwaukee
Gosin, Mrs. E. J. ---------- Green Bay
Guy, Mrs. E. F. ---------- Oostburg
Gleason, Mrs. Lan ---------- Manitowoc
Goggins, Mrs. G. F. ---------- De Pere
Gregory, Mrs. D. H. ---------- West De Pere
Gute, Mrs. Edwin B. ---------- Milwaukee
Guy, Mrs. John E. ---------- Milwaukee
Hegner, Mrs. George L. ---------- Appleton
Hittner, Mrs. V. J. ---------- Seymour
Hugo, Mrs. H. G. ---------- Oshkosh
Jackson, Mrs. Edward ---------- Milwaukee
Jamieson, Mrs. R. D. ---------- Racine
Jordan, Mrs. E. M. ---------- Green Bay
Kelly, Mrs. W. W. ---------- Green Bay
Kelley, Mrs. J. M. ---------- Cato
Killins, Mrs. W. A. ---------- Green Bay
Kersten, Mrs. N. M. ---------- De Pere
Kispert, Mrs. R. W. ---------- Green Bay
Knox, Mrs. E. S. ---------- Green Bay
Koch, Mrs. V. W. ---------- Janesville
Kurten, Mrs. R. M. ---------- Racine
Kustermann, Mrs. A. M. ---------- Milwaukee
Laird, Mrs. J. J. ---------- Black Creek
Leaper, Mrs. Warren E. ---------- Green Bay
Lettenberger, Mrs. J. ---------- Milwaukee
Lenz, Mrs. Ralph ---------- De Pere
Levitas, Mrs. I. Edward ---------- Green Bay
Lowe, Mrs. R. C. ---------- Neenah
Linn, Mrs. W. N. ---------- Oshkosh
Lynch, Mrs. G. V. ---------- Oshkosh
Mackoy, Mrs. F. W. ---------- Milwaukee
Marek, Mrs. F. B. ---------- Racine
Martin, Mrs. Richard ---------- Two Rivers
Meyer, Mrs. R. C. ---------- Plymouth
McBeath, Mrs. Norman E. ---------- Milwaukee
McDonald, Mrs. R. E. ---------- Milwaukee
McNevins, Mrs. E. F. ---------- Green Bay
Milson, Mrs. Lewis ---------- Green Bay
Minahan, Mrs. P. R. ---------- Green Bay
Moriarty, Mrs L. J. ---------- Two Rivers
Mueller, Mrs. W. E. ---------- Green Bay
Nadeau, Mrs. A. T. ---------- Marinette
Nadeau, Mrs. E. G. ---------- Green Bay
Northey, Mrs. T. ---------- Racine
Nixon, Mrs. H. G. B. ---------- Hartland
Oliver, Mrs. Thos. J. ---------- Green Bay
Olmsted, Mrs. A. O. ---------- Green Bay
Orchard, Mrs. H. J. ---------- Superior
Patek, Mrs. Arthur J. ---------- Milwaukee
Peterman, Mrs. M. G. ---------- Milwaukee
Podlasky, Mrs. Harry B. ---------- Milwaukee
Quigley, Mrs. L. D. ---------- Green Bay
Radloff, Mrs. A. C. ---------- Plymouth
Redelings, Mrs. T. J. ---------- Marinette
Rice, Mrs. M. G. ---------- Stevens Point
Ross, Mrs. Geo. L. ---------- Racine
Ruehlman, Mrs. D. D. ---------- Monroe
Saunders, Mrs. O. W. ---------- Green Bay
Schmidt, Mrs. E. L. ---------- Green Bay
Scollard, Mrs. M. J. ---------- Milwaukee
Seeger, Mrs. Stanley J. ---------- Milwaukee
Snodgrass, Mrs. T. J. ---------- Janesville
Stiennon, Mrs. O. A. ---------- Green Bay
Stewart, Mrs. W. C. ---------- Kenosha
Shimek, Mrs. A. J. ---------- Manitowoc
Squier, Mrs. L. H. ---------- Milwaukee
Tippet, Mrs. Walter ---------- Green Bay
Thill, Mrs. D. P. ---------- Milwaukee
Truitt, Mrs. John W. ---------- Milwaukee
Troup, Mrs. R. L. ---------- De Pere
Vosburgh, Mrs. W. H. ---------- Denmark
Wagner, Mrs. W. A. ---------- Oshkosh
Warfield, Mrs. Louis N. ---------- Milwaukee
Webb, Mrs. H. E. ---------- Milwaukee
Weisender, Mrs. A. ---------- Berlin
Wiprud, Mrs. Theodore ---------- Milwaukee
Williamson, Mrs. George ---------- Neenah
Williamson, Mrs. C. S. ---------- Green Bay
Wochos, Mrs. Frank ---------- Kewaunee
Wochos, Mrs. W. M. ---------- Kewaunee

Guests (48)

Beck, Miss Ellinore ---------- Madison
Benson, Mrs. G. H. ---------- Richland
Bill, Mrs. B. J. ---------- Genoa City
Boren, Mrs. C. H. ---------- Marinette
Butler, Mrs. F. E. ---------- Menomonie
Cummings, Mrs. E. F. ---------- Oshkosh
Doege, Mrs. Karl H. ---------- Marshfield
Fazen, Miss Constance ---------- Racine
Gairn, Mrs. S. C. ---------- Fond du Lac
Giffin, Mrs. H. Z. ---------- Rochester, Minn.
Glynn, Mrs. James ---------- Lancaster
Goggins, Mrs. R. J. ---------- Oconto Falls
Ghroerer, Mrs. A. C. ---------- Madison
Hall, Mr. DeWinton ---------- Ontario, Canada
Hall, Mrs. DeWinton ---------- Brantford, Ontario
Hayes, Mrs. E. P. ---------- Eau Claire
Hodges, Mrs. F. J. ---------- Ann Arbor, Mich.
Johnson, Mrs. B. W. ---------- Fond du Lac
Krahn, Mrs. G. W. ---------- Oconto Falls
Looze, Mrs. J. A. ---------- New Franken
Ludden, Mrs. R. H. ---------- Viroqua
Monsted, Mrs. J. W. ---------- New London
McCormick, Mrs. Stewart ---------- Madison
McKeough, Miss Ann ---------- Green Bay
McMahon, Mrs. A. E. ---------- Glenwood City
Mitchell, Mrs. R. E. ---------- Eau Claire
Morrison, Mrs. W. W. ---------- Edgerton
Naset, Mrs. Ruth B. ---------- Madison

Oulette, Mrs. C. J. ---------- Oconto
Park, Mrs. George ---------- Viola
Pfeifer, Mrs. Jane ---------- Adell
Potter, Mrs. R. P. ---------- Marshfield
Prentice, Mrs. J. W. ---------- Ashland
Ripley, Miss Florence ---------- Madison
Ross, Mrs. M. E. ---------- Brodhead
Schiek, Mrs. I. E. ---------- Rhinelander
Sexton, Mrs. W. G. ---------- Marshfield
Skinner, Mrs. J. W. ---------- La Crosse
Sharp, Mrs. H. R. ---------- Fond du Lac
Smiles, Mrs. C. J. ---------- Ashland
Somers, Mrs. Arthur J. ---------- Chippewa Falls
Webb, Miss Kathryn ---------- Milwaukee
Welke, Mrs. E. G. ---------- Madison
Werner, Mrs. E. F. ---------- St. Cloud
Williams, Mrs. E. J. ---------- La Crosse
Windesheim, Mrs. G. ---------- Kenosha
Witcpalek, Mrs. W. W. ---------- Algoma
Wheeler, Mrs. W. P. ---------- Oshkosh

COMMITTEE CHAIRMEN

Appointments of committee chairmen, announced by the president, follow:

Public Relations—Mrs. F. Gregory Connell, 420 Washington Blvd., Oshkosh

Program—Mrs. Oscar Friske, 760 W. Grand Ave., Beloit

Organization—Mrs. Eben J. Carey, 2028 N. 51st St., Milwaukee

Hygeia—Mrs. Irwin Schulz, 2013 N. 71st St., Milwaukee

Archives & Historian—Mrs. C. A. Harper, 520 N. Pinckney St., Madison

Press & Publicity—Mrs. Theo. Gunther, 2117 N. 8th St., Sheboygan

Parliamentarian—Mrs. Robert E. Fitzgerald, 1739 N. 69th St., Milwaukee

News Items and Personals

Dr. John L. Garvey, Milwaukee, presented a discussion on "Differential Diagnosis in Common Neurotic Conditions" to the Upper Peninsula Medical Society, Ironwood, Michigan, on August 16th.

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Dr. S. J. A. Francois of New Glarus returned in August from a two months' trip in Europe.

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Dr. Addie M. Schwittay, whose practice is limited to obstetrics and children's diseases, has become associated with the staff of the Jackson Clinic, Madison. Following graduation from the University of Wisconsin Medical School in 1931, Dr. Schwittay interned at the Jersey City Medical Center, where she was resident for one year in special work in children's diseases there, also serving as chief resident in obstetrics at Margaret Hague Maternity Hospital, Jersey City, N. J.

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The Cook County Graduate School of Medicine, 427 South Honore St., Chicago, will offer on October 22nd, a two weeks intensive course in Internal Medicine; a two weeks intensive course in Ear, Nose and Throat; and a ten day intensive course in Fractures and Traumatic Surgery. These courses will be given provided the required number of doctors are registered for the work; also, they will be limited as to the number permitted to take the work. The clinical work will be given in the Cook County Hospital and the didactic work in the School building.

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Results of the primary election in the race for Congress show that in the third congressional district, Dr. Bart E. McGonigle, of Ableman, a member of the State Medical Society, won the Democratic nomination.

In the second congressional district, Dr. C. W. Henney of Portage, a member of Congress during the last session, was again named as the choice of the Democratic party.

In the tenth district, Mr. George F. Meyer, Medford, former business manager of the Medford Clinic-Hospital, won the Democratic nomination.

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The Radiological Society of North America will hold its next annual meeting at the Hotel Peabody, Memphis, Tennessee, December 3–7, 1934. The medical profession is cordially invited to attend. Further information may be obtained by addressing the Secretary-Treasurer, Dr. Donald S. Childs, 607 Medical Arts Building, Syracuse, N. Y.

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Dr. A. G. Kammer of Belleville has become associated with the medical staff of the Montreal Mining Company at Montreal, Wisconsin. His practice at Belleville has been taken over by Dr. William Donlin, formerly of Madison.

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Included among the speakers at the second annual convention of the Wisconsin Society of X-ray Technicians which was held in the lecture room of the University of Wisconsin Medical School were Drs. E. A. Pohle, Robert Montgomery, J. R. Anderson, W. J. Bleckwenn and L. W. Paul of Madison and T. J. Snodgrass of Janesville.

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Dr. J. H. Wallis of Rice Lake was nominated on the Democratic ticket for the state senate.

Physicians who have been licensed by the State Board of Medical Examiners in June and who have opened offices or joined clinic staffs include the following:

Dr. Kenneth C. Kehl, 415 Baker Block, Racine.

Dr. Palmer W. Good, Kenosha Clinic, Kenosha.

Dr. W. G. Huibregtse, Sheboygan Clinic, Sheboygan.

Dr. R. A. Frankow, West Bend.

Dr. J. J. Smullen, Fair Water, Wis.

Dr. M. W. Garry, Sherwood, Wis.

Dr. R. H. Beech, Columbus, Wis.

Dr. W. E. Bray associated with Dr. K. K. Ford, Evansville.

Dr. C. H. Behnke, 515—9th St., Oshkosh, associated with Dr. R. H. Bitter.

Dr. R. J. Dietz, 3803 Center Ave., Milwaukee.

Dr. I. A. Ihrke, First National Bank Bldg., Oshkosh.

Dr. E. T. Hougen, Appleton.

Dr. E. S. Sinaiko, Markesan.

Dr. Ralph B. Lenz, West De Pere.

Dr. Adrian W. Frankow, 805 S. 5th St., Milwaukee.

In addition to the above, the following physicians have recently established practices:

Dr. C. E. Zenner, who interned at Milwaukee County General Hospital, has opened an office for general practice at Cadott, Wisconsin.

Dr. H. A. Barnes' new location is 920 W. North Ave., Milwaukee.

Dr. H. C. Schmallenberg has moved to New London in the offices formerly occupied by Dr. Archie Tax.

Dr. Sidney B. Goff, formerly of Prophetstown, Ill., has accepted a position at Oshkosh State Teachers' College as college physician and teacher.

Dr. William P. Curran, who has recently completed internship at Bellevue Hospital, New York City, has opened an office at Antigo, Wisconsin.

Dr. Lawrence H. Donath has become associated with Dr. Dean H. Jeffers at Lake Geneva. Dr. Donath served at St. Luke's Hospital, Milwaukee; French Hospital in San Francisco, and at Wisconsin General Hospital at Madison.

Dr. R. J. Portman has returned to Antigo, where he had practiced in 1929 and 1930. Following postgraduate work in Europe after leaving Antigo, Dr. Portman moved to Hiawatha, Kansas, where he practiced until September 1934.

Dr. Harry Shapiro has taken over the practice of Dr. M. W. Alcorn of Adams.

Dr. Carlton S. Bolles, who finished internship at Milwaukee Children's Hospital, is now at West De Pere.

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Drs. C. W. Andrews, R. S. Elliott, P. J. Christofferson, L. G. Patterson and Samuel Salan, all of Waupaca, have leased the hospital there and took over its management on October first. The institution is now known as the Waupaca Hospital.

BIRTHS

A daughter to Dr. and Mrs. Francis C. Lane of Merrill, on September 3rd.

A daughter, Letitia Alice, to Dr. and Mrs. T. M. Slemmons of New London, on August 7th.

A son, Carl Burton, to Dr. and Mrs. F. L. Weston of Madison, on August 27th.

A daughter to Dr. and Mrs. Frank J. Kritter, Milwaukee, on August 23rd.

A daughter, Mary Lou, to Dr. and Mrs. E. M. Houghton, Lancaster, on September 13, 1934.

ENGAGEMENTS

The engagement of Miss Claribel Seaman, daughter of Dr. and Mrs. Gilbert E. Seaman, Winnebago, to Daniel Merrick Schuyler of Chicago was announced in September.

MARRIAGES

Dr. C. A. S. Gunderson, Madison, to Miss Modesta Elmer, Argyle at Madison on August 25th.

DEATHS

Dr. H. H. Milbee, Marshfield, died on August 21st of coronary thrombosis.

Dr. Milbee was born at Barrie, Ontario, November 17, 1870. He was educated at Barrie and was graduated from the Collegiate Institute there in 1892. He received his medical training at the University of Toronto from which he was graduated in 1896, and began his practice at Hudson, Wisconsin, where he was married in 1901 to Cornelia Bowron. They moved to Marshfield soon afterward. After the death of Mrs. Milbee he was married to Maude Hubbard Cross in January, 1928, who survives.

Dr. Milbee was one of the founders of the Marshfield Clinic and served as its vice president from 1926 to 1932, when he became president following the death of Dr. K. W. Doege.

He was a member of the Wood County Medical Society, the State Medical Society, and the American Medical Association. He was also a member of the Congress of Internal Medicine.

Survivors are his widow, one daughter and one son; his mother, Mrs. Thomas Milbee of Barrie, Ontario; one brother, Dr. R. S. Milbee of Sullivan, Wisconsin, and one sister, Mrs. Effa Hageman of Chicago.

Dr. J. W. Coon, Stevens Point, died on September 17th at his home in Stevens Point. He had been ill the past year and a half.

Dr. Coon was born in Bloomfield township, Waushara County, Sept. 5, 1860. In 1880 he began his medical education under the direction of Dr. N. M. Dodson of Berlin, Wisconsin, later entering Jefferson Medical College, Philadelphia, from which he received his degree in 1884. Returning to Wisconsin, he practiced at Montello and Tomahawk until

1892 when he moved to Milwaukee to become registrar of vital statistics of the Milwaukee Health Department, where he remained until 1902. He also served as professor of hygiene in the College of Physicians and Surgeons, Milwaukee. From 1906 to 1908 he was superintendent of the Milwaukee County Hospital and from 1909 to 1915 he was in charge of the Wisconsin State Sanatorium at Wales. He was one of the original directors of the Wisconsin Anti-Tuberculosis Association and served on its executive committee until a year ago. From 1915 to 1917 he left Wisconsin to assist in the organization of the Chicago Municipal Tuberculosis Sanatorium. In 1917 he returned to Wisconsin and took over the interests of Dr. Thomas Hay at River Pines, becoming medical director and president and since that time had been connected with the institution until his health forced him to retire.

Dr. Coon was a member of the Portage County Medical Society, the State Medical Society, and the American Medical Association.

He was a former president of the Wisconsin Hospital Association and of the Medical Society of Milwaukee County. He also served one term as president of the Mississippi Valley Tuberculosis Association.

Dr. Coon is survived by his widow, two sons, Dr. H. M. Coon, who has been associated with his father at River Pines Sanatorium; Roy M. Coon of San Francisco, and one daughter, Mrs. Earl Pongratz of Antigo.

Dr. Ida L. Schell, Milwaukee, died at her home on September 21st.

Dr. Schell was born in the year 1862 and was a graduate of Northwestern University Woman's Medical School in 1900. For more than thirty years, Dr. Schell had practiced in Milwaukee and for many years was attending physician at the Wisconsin Industrial School for Girls and medical adviser at Milwaukee State Teachers' College.

Before studying medicine, Dr. Schell taught at Marshalltown, Iowa, high school and was principal of the high school at Fort Dodge, Iowa. She was one of the pioneers in woman's suffrage and served as the first treasurer of the Wisconsin League of Women Voters. In 1931 her name was placed on the roll of honor of the League.

Dr. Schell was a member of the Medical Society of Milwaukee County, the State Medical Society, and the American Medical Association.

She is survived by three sisters.

Dr. F. A. Winneman, Merrill, died on August 25th of coronary occlusion.

Dr. Winneman was born October 10, 1863, in Washington County, Wisconsin. He was a graduate of the Milwaukee Medical College in the year 1897. In 1898 he joined the exodus from the states to Alaska where the gold rush was under way. There he practiced medicine at Dawson City and Circle City, prospecting at the same time. Two years later he returned to the states and opened an office at Milwaukee. He came to Merrill in 1905.

Dr. Winneman was a member of the Lincoln County Medical Society, the State Medical Society, and the American Medical Association.

He is survived by his widow, one daughter, Mrs. H. M. Ryan and two sons, Dr. Walter J. Winneman and Clarence M. Winneman, all of Milwaukee.

Dr. Lawrence W. Pence, Milwaukee, died on September 21st at Milwaukee Veterans' Hospital of heart disease.

He was born in Mason City, Iowa, in the year 1875. He conducted a private practice for many years and during the World War served as first lieutenant in the medical corps in Camp Dodge, Iowa. Several years after the war he went into government service, serving at Fort Thomas, Ky., Sioux Falls, S. D., and Leavenworth, Kansas, before joining the staff of Milwaukee Veterans' Hospital and Home in 1927.

Dr. Pence is survived by his widow, two sons and one daughter.

Dr. F. C. Senn, Oshkosh, died on September 19th at his home.

Dr. Senn was born in Ashford, Fond du Lac County, Aug. 14, 1855. He was a graduate of University of Illinois College of Medicine in the year 1885. For the past forty years, Dr. Senn had practiced in Oshkosh, retiring from active practice in 1931.

He is survived by his widow and two daughters, Mrs. Oscar Walther of Mayville and Mrs. Margueriite Senn of Oshkosh.

SOCIETY RECORDS

New Members

L. C. Pomainville, Wisconsin Rapids.
G. M. Shewalter, 1039 S. Clay St., Green Bay.
R. B. Dryer, Poynette.
D. H. Callaghan, Hayward
S. F. DeFazio, 522–56th St., Kenosha.
Paul E. Pifer, 625–57th St., Kenosha.
W. J. Kleis, 4327 W. North Ave., Milwaukee.
J. M. Molsberry, 208 E. Wisconsin Ave., Milwaukee.
E. A. Clasen, 2408 W. Hopkins St., Milwaukee.
Harvey Guth, Brandon.
Nathan Slutzky, 1347 N. 12th St., Milwaukee.
Louis Dorpat, 2320 W. Mitchell St., Milwaukee.
H. C. Danforth, Chevrolet Motor Co., Janesville.
Leif H. Lokvam, 723—58th St., Kenosha.
Harold L. Rose, 5527—6th Ave., Kenosha.
Floyd A. Wendt, Johnson Creek.
Allan Filek, Muscoda.
H. V. Gibson, Fairchild.
A. M. Schwittay, 16 N. Henry St., Madison.
Howard L. Hauge, Deerfield.
R. W. Lehigh, De Forest.
R. F. Wagner, Howards Grove.
George Senn, Green Bay.

CORRESPONDENCE

FROM DOCTOR WEST

AMERICAN MEDICAL ASSOCIATION
535 North Dearborn St.
Chicago

Sept. 27, 1934.

Mr. J. G. Crownhart,
Madison, Wisconsin.
Dear Mr. Crownhart:

I am sorry that I have not had opportunity until now to express to you my sincere appreciation of the delightful and kindly courtesies that were extended to me by you and other officers of the State Medical Society of Wisconsin at the Green Bay meeting.

I was deeply touched when the seal of the society was presented to me by its Council through the President, Doctor Seeger. I am most grateful for that expression of good will and shall treasure the token, which was so graciously presented, as one of the most precious of my possessions.

Very sincerely yours,
OLIN WEST.

OW:HN

USE OF RADIUM

AMERICAN RADIUM SOCIETY

September 17, 1934.

J. G. Crownhart, Managing Editor
Wisconsin Medical Journal
Madison, Wis.
My dear Editor:

The attached resolutions have been passed by the American Radium Society at the Annual Session in Cleveland upon June 12, 1934. They have also been approved by the Board of Chancellors of the American College of Radiology and the Section of Radiology of the American Medical Association.

We will appreciate your cooperation in using these as news items or in an appropriate column of your journal.

These resolutions are important and worthy of our most serious consideration and publicity.

With appreciation of your interest,

Yours very truly,
E. H. SKINNER, M. D.,
Secretary.

RESOLUTION

The following resolution was presented by the Executive Committee and adopted unanimously by the American Radium Society, Cleveland Session, June 12, 1934.

WHEREAS, It has been proven that radium and x-rays, when used properly, and in sufficient quantity is efficient in the treatment of cancer in certain locations, and

WHEREAS, There is a general fear in the public mind from x-ray or radium burns, which, because of this fear, prevents competent radiologists from using sufficient radium or x-ray to produce the best results.

Be it resolved, That we as radiologists recognize that in the treatment of malignant disease, it is often necessary to carry the treatment on to the extent of producing a violent reaction in the surrounding tissues, which may cause the skin to peel, and blisters to form, in order to give sufficient treatment to overcome the malignant disease. We believe, therefore, that it is justifiable to produce a second degree radiodermatitis when necessary.

RESOLUTIONS ADOPTED BY AMERICAN RADIUM SOCIETY AT ANNUAL MEETING, CLEVELAND, JUNE 12, 1934; ALSO ADOPTED BY AMERICAN COLLEGE OF RADIOLOGY, JUNE 12, 1934

The Indiscriminate Use and Rental of Radium

WHEREAS, It is now recognized that radium has been demonstrated to be of definite value in the treatment of disease, and

WHEREAS, Some States and many communities in the country have little or no radium available, and

WHEREAS, Funds are not always available for the purchase of suitable preparations of radium for use by those physicians who are qualified in radium therapy, and

WHEREAS, We recognize that radium is an agent quite as potent for doing harm as for doing good when used without sufficient skill or training and with the hope of protecting the uninformed public from serious and irreparable injury from improper and insufficient treatment.

Be it resolved, That we consider it improper, unethical and detrimental to the science of Radiology and to the good of suffering humanity for commercial laboratories to attempt to give advice or directions as to the use of radium in the case of a patient whom the person giving that advice has not even had the opportunity to examine. In other words, it is just as difficult to give such advice and directions as it would be for a surgeon to give directions for the use of rented surgical instruments so that an untrained physician might attempt an operation. Various commercial companies advertise both in the Journals and through the mails, medical advice for the purpose of making sales or renting radium or radon. This places these corporations in the field of practicing medicine.

Be it resolved, That the same criticism be applied to institutions which rent or furnish their radium to those members of their staff or outside of the staff who are unskilled in radium application.

Resolved, That the same criticism applies to many individual owners of radium.

Resolved, That we regard the approval of the National Board of Radiological Examiners as the minimum standard for those assuming the responsibility for using radium. We recommend as wide publicity of this Board's existence and approval as is possible to the public, consistent with ethical practices, as the most effective safeguard which can be afforded them.

Resolved, That we recommend the refusal of advertising matter in national and state journals when the companies concerned are advertising a Medical Consulting Service or are advertising such service through the mails in connection with their sale or rental of radium.

Resolved, That we disapprove of any doctor's acting as a consultant to a commercial company carrying on such a campaign of public or private advertising and that we consider such an association sufficient grounds to warrant disbarment from the approval of the National Board of Radiological Examiners.

Resolved, That we recognize the ethical commercial company as a necessity. It is the advertised Consulting Service that is at fault. It is recognized that such restrictions on the advertising of a medical service will in no way hamper properly qualified radium therapists in obtaining adequate supplies of radium or radon for the purposes in which they are qualified to use it.

Resolved, That we approve an informal medical consultant for the guidance of those commercial companies who refrain from advertising such professional service, either publicly or privately and that in such case their informal consultant be one approved by the National Board of Radiological Examiners.

Dr. Ralph M. Carter, Green Bay, Named President-Elect; Attendance at Green Bay Meeting Close to 700

WITH close to 575 members and over 100 physician-guests in attendance at the 93d Annual Meeting at Green Bay September 11–14, a new record was set for meetings outside of Milwaukee and Madison. Dr. Ralph M. Carter, Green Bay, for two years Speaker of the House of Delegates, was named President-Elect of the Society to take office as President in September, 1935.

Total attendance of physicians and their wives, members of the Auxiliary, reached 1000 on the concluding day of the meeting week. The entire scientific program as announced by Dr. Arnold Jackson, Chairman of the Committee on Scientific Work, was presented with the absence of but two Wisconsin speakers due to illness, out of the 130 scheduled addresses. The program throughout the three days never varied over seven minutes from the timed announcement and members of the Society and their wives were unanimous in a generous expression of appreciation for the cordial hospitality and carefully planned entertainment extended by the Brown–Kewaunee–Door County Medical Society and its Auxiliary throughout the meeting week.

The new President-Elect of the Society, Dr. Ralph M. Carter, is a specialist in the field of Orthopedics and is a former president of the Brown–Kewaunee County Medical Society, the Green Bay Academy of Medicine, and the Fox River Valley Medical Society. In addition to his American Medical Association affiliation, Dr. Carter is a member of the Wisconsin Surgical Club, the Clinical Orthopedic Society, the Association of Railway Surgeons, and a Fellow of the American College of Surgeons. He has been practicing continuously in Green Bay since 1910 and is a graduate of Rush Medical College.

With three sessions of the House of Delegates that occupied eight hours of deliberation, the House, in addition to adopting reports of officers and committees as published in the August issue of the Journal, took the following actions:

1. Rejected a proposed amendment to the Constitution providing for the election of councilors in district meetings rather than by nominations as result of the caucus of delegates in the district affected and subsequent election by the House.

2. Approved a recommendation of the Council for the creation of a lay liaison body under direction of the Council as a means of making more effective an active participation of the family physician in the health

and disease prevention program of the State. The full resolution adopted by the House as result of the work of President Seeger will be found elsewhere in this issue.

3. Extended to the American Urological Society an invitation to hold its 1936 Annual Meeting in Milwaukee.

4. Authorized the Council to hold a contest with an award for the best paper dealing with the economics of the life of the general practitioner.

5. Referred to the Committee on Public Policy for study, the question of how to prevent the improper licensure of American born graduates of foreign schools who obtain their education abroad because they are unable to comply with the standards of American colleges.

6. Asked officers to use their best efforts looking towards a better enforcement of acts governing who may treat the sick.

7. Authorized the introduction of legislation to provide that health officers and at least one member of the Board of Health in cities, towns or villages of 3000 or more shall be physicians.

8. Authorized the Committee on Public Policy to take steps looking towards the provision by the State for the proper care, treatment and education of epileptics.

9. Authorized introduction of legislation to make a further appropriation to the State Board of Health for the purpose of perfecting a better contact service between the profession and the Board so as to make more effective the whole-hearted cooperation of the physicians of the State in carrying out approved health measures of the Board.

10. Referred to the Committee on Public Policy for further study a resolution pertaining to physical and mental examination of parties desiring to contract marriage.

11. Heard the position of the Society on the subject of social security outlined by the Secretary in a supplemental report and accepted that position as governing future activities of the Society.

12. Continued dues for 1935 at $12.00, urging the Council to call the House into special session to consider the matter of further appropriations in event of emergency.

Complete elections by the House follow:

1. *President-elect to take office one year hence as President*
   Dr. Ralph M. Carter, Green Bay
2. *Speaker of the House of Delegates*
   Dr. Gunnar Gundersen, La Crosse
3. *Vice-Speaker of the House of Delegates*
   Dr. James C. Sargent, Milwaukee
4. *Councilors*
   3rd District—Dr. Joseph Dean, Madison
   4th District—Dr. Wilson Cunningham, Platteville
   5th District—Dr. C. M. Gleason, Manitowoc
   6th District—Dr. S. E. Gavin, Fond du Lac
5. *Delegates to the American Medical Association*
   Dr. J. Gurney Taylor, Milwaukee
   Dr. W. E. Bannen, La Crosse
6. *Alternate Delegates, American Medical Association*
   Dr. S. J. Seeger, Milwaukee
   Dr. Stephen E. Gavin, Fond du Lac

Culminating the entertainment of the week, nearly 400 members and their wives were in attendance at the Annual Dinner to hear Dr. Dean Lewis, immediate Past-President of the American Medical Association, and Dr. Olin West, its Secretary and General Manager. While the addresses of the speakers will be presented in full in subsequent issues of the Journal, Dr. Dean Lewis emphasized the importance at this time, above all others, of a closely united membership in the one organization that seeks to protect the physician from imposition as well as to advance his scientific attainments. Dr. West outlined the position of the American Medical Association in the field of medical economics and prefaced his address by commending the Wisconsin Society.

Council Award

THE Council Award of the Society given in previous years to six of its members, was presented at the Annual Dinner to Dr. Arthur W. Rogers, Chairman of the Council, Dr. Rock Sleyster, Treasurer and Vice-Chairman of the Board of Trustees of the A. M. A., and to Dr. Olin West, Secretary and General Manager of the American Medical Association. The statement of President Seeger in announcing the Award and the citations for each Award follow:

"The success that has crowned so many of the public spirited projects of our State Medical Society of Wisconsin since its organization in 1841, and the strong position that we occupy today, has been the result of the work of no one man, nor the efforts of a few.

"From as far back in the history of our Society as I can recall I am impressed by the responsiveness of members and officers alike to their individual duties and needs of their State Society.

"It is true, of course, that certain men, by virtue of the responsibilities vested in them by their fellow members, have had larger opportunities for service. Thus a secretary of a county medical society, a councilor or a president may, by his untiring work, leave behind him outstanding accomplishments. We, in Wisconsin, have had large numbers of such men, and as President of the Society I wish to pay to them the respect and appreciation that will ever be theirs from a grateful Society.

"Among this host of contributors to our achievements there stands out, from time to time, one or two who have not only rendered long and exceptional services and discharged their duties faithfully, but have actually given of themselves far beyond the call of office because of the love of the work and the feeling of satisfaction in doing something more than that required, for their Society, for their brethren in medicine, and for the people of this state.

"The Council of this Society has taken recognition of these members and from time to time wishes to bestow upon them a little token as small in intrinsic value as it is large as an emblem of the faith, high regard and affection of their fellow members.

"To Doctors John M. Dodd, Cornelius A. Harper, John J. McGovern, Louis M. Jermain, Edward Evans, and Mina B. Glasier, have we given the award,—the gold seal of our Society. Tonight I stand to give three more.

ARTHUR W. ROGERS

born in London, England, an orphan at eight, ten years Associate Physician of Milwaukee Sanitarium, creator and twenty-seven years Physician-in-Charge of Oconomowoc Health Resort, President of the Waukesha County Medical Society, President of the Milwaukee Academy of Medicine, ten years a Councilor of the State Medical Society of Wisconsin, its President and for six years Chairman of its Council,—for your perseverance in times of adversity, for your creative efforts within your profession in caring for the mentally ill, and for your long and devoted service to your fellow members in which you have given so unsparingly of your time and energy and so unselfishly of your discerning guidance, we, your fellow members, give you this seal of our Society as a token of your achievements and our esteem and affection."

ROCK SLEYSTER

a son of Wisconsin, five years Secretary of the Calumet County Medical Society, Assistant Secretary, then fifteen years Secretary of the State Medical Society of Wisconsin, five years editor of its Journal, later President and now twelve years Treasurer, eleven years a delegate to the American Medical Association, nine years a trustee and now Vice-Chairman of the Board of Trustees of the American Medical Association and Medical Director of Milwaukee Sanitarium since 1919,—for your devotion to the individual needs of the mentally sick, for service to your state in time of peace and war, and for your applied capacity erecting within your profession the foundation of a Society that cements men of common calling on the basis of the highest and finest values in human relations, we, your fellow members, give you this seal of our Society as a token of your achievements and our esteem and affection."

OLIN WEST

a son of Alabama, a family physician in Tennessee, many years its Health Officer and Secretary of its State Medical Society, a teacher, for two years field secretary, ten years secretary and general manager of the great American Medical Association,—for your inspiring assistance to the profession of this and every state, for your devotion to the highest ideals of medicine at a time when emotionalism and commercialism are attempting to crush the humanities, and for your unswerving allegiance to the constants in the cherished relationship of physician and patient, we, your fellow members, give you this seal of our Society as a token of your achievements and our esteem and affection."

The Council Award is a small gold replica of the seal of the Society and a leather bound copy of the address of the President and the actual citation for the member receiving the honor.

House Perfects Plans For Public Health Participation

SEEKING the actual accomplishment of the gains to be had as visualized by President Seeger and presented by him during the last nine months in office, the House of Delegates adopted a resolution introduced by the Council in its possibly most significant action of the meeting. The report of the Secretary on the Council action and the resolution as adopted by the House of Delegates follow:

You have heard your President outline to you on this and other occasions the work in the field of public health which demands the attention of the physician in so-called private practice and which may be accomplished by such physician with joint profit to the public and the physician.

As in all other fields of organization effort, if this project meets with your approval, it will require the services of a well-equipped physician to present to the membership in the several component societies concrete plans for translating into action on a broad scale the project here so ably presented in its broad aspects. Such organization effort in turn requires of funds.

Your Council has given hours of consideration to this subject matter and today determined to recommend to your body that it authorize the formation of an auxiliary unit of interested laity whose interest, influence, and membership fees will combine to be of material assistance to the organized profession in making actually effective this public health project.

Recognizing that medical direction is now and will be in the future essential, your Council has formulated a resolution for your consideration, which I shall now read:

WHEREAS, It is the considered opinion of the Council and officers of the State Medical Society of Wisconsin that a more active participation of the membership of the Society in the field of disease prevention will be to the outstanding and mutual advantage of the people of this State and the physicians who serve them, and

WHEREAS, The accomplishment of this project requires not only the determination of the organized profession, but, as important, the cooperation of interested and influential laymen throughout the State.

Therefore, It is the recommendation of the Council that the House give its most serious consideration to the following suggested resolution:

Resolved, That the House of Delegates in the interest of disease prevention in this State, does hereby authorize the Council to create a liaison body of laymen whose function it shall be to work with the organized profession in furthering the application of well-known principles of preventive medicine throughout this State.

For the purpose of perfecting such an organization the Council is authorized to proceed as, in its judgment it may seem wise, having in mind the following recommendations of this House:

1. That the Council of the State Medical Society of Wisconsin remain in perpetuity the governing body of the liaison association.

2. That officers of the liaison group shall be selected by the Council.

3. That the membership fee of the group shall be that as determined by the Council, as well as its Constitution, By-Laws, and specific objectives.

4. The Council is authorized by this House to appropriate from the general fund or surplus of the Society such an amount as in its judgment shall be considered necessary in bringing about the establishment of the original membership to the liaison group.

5. Membership within the group shall at all times depend upon election by the Council.

Committee Appointments Announced by Pres. O'Leary

COMMITTEE appointments of Dr. T. J. O'Leary, incoming president of the Society, were made to the House of Delegates on Tuesday evening, September 11th, and immediately confirmed by the House. Under the established precedent, the committee appointees of the President will become chairmen of the respective committees during the current year. The appointments follow:

The Committee on Scientific Work:

John O. Dieterle, Milwaukee, to succeed T. L. Squier, Milwaukee.

The Committee on Public Policy:

R. H. Jackson, Madison, to succeed himself.

The Editorial Board:

F. Gregory Connell, Oshkosh, to succeed H. P. Greeley, Madison.

The Committee on Medical Defense:

H. P. Bowen, Watertown, to succeed A. G. Sullivan, Madison.

The Committee on Medical Education and Hospitals:

J. W. Prentice, Ashland, to succeed J. W. Lambert, Antigo.

The Committee on Medical Economics:
P. A. Fox, Beloit, to succeed V. F. Marshall, Appleton.

The Committee on Health and Public Instruction:
C. H. Christiansen, Superior, to succeed H. M. Stang, Eau Claire.

The Career Committee:
W. D. Stovall, Madison, to succeed himself.
F. Eigenberger, Sheboygan, to succeed himself.
Paul Doege, Marshfield, to succeed himself.
F. B. McMahon, Milwaukee, to succeed S. J. Seeger, Milwaukee.

The Committee on Coordination of Medical Services:
F. E. Butler, Menomonie, to succeed J. G. Crownhart, Secretary, who retires to become ex-officio member of the Committee.

President O'Leary continued for his term of office the three special committees on Child Health and Protection, Medical Care of Veterans, and Medical History, with their memberships intact. These committees follow:

The Special Committee on Child Health and Protection:
R. W. Blumenthal, Milwaukee.
A. B. Schwartz, Milwaukee.
F. E. Drew, Milwaukee.
J. B. Vedder, Marshfield.
F. G. Anderson, Eau Claire.
H. A. Sincock, Superior.

The Committee on Medical Care for Veterans:
C. A. Dawson, River Falls.
Otho A. Fiedler, Sheboygan.
E. J. Barrett, Sheboygan.

The Committee on Medical History:
F. Gregory Connell, Oshkosh, Chairman.

Golf Tournament Won by Doctors Love and McGrath

SHOOTING a medal score of seventy-five on the difficult Oneida Golf and Riding Club, Dr. G. R. Love of Oconomowoc won the President's Cup in the annual golf tournament of the State Medical Society of Wisconsin held on the opening day of the 93rd anniversary meeting. Second place in the President's Cup competition was won by Dr. J. E. Rueth of Milwaukee, who scored an eighty-two.

The Secretary's Cup played for by members using their own club handicaps was won by Dr. E. F. McGrath of Appleton who shot an eighty-eight, handicap nineteen, net sixty-nine. Second place in this event went to Dr. E. W. Miller of Milwaukee and Dr. G. R. Love of Oconomowoc who tied with seventy-twos. Dr. Miller scored eighty-three, handicap, eleven, net seventy-two, and Dr. Love scored seventy-five, handicap 3, net seventy-two.

Dr. Gilbert J. Thomas, guest speaker from Minneapolis, won one of two blind bogey contests while other awards went to Dr. N. E. McBeath of Milwaukee and to Dr. J. M. Hayes of Minneapolis. Despite a rainy forenoon, a large group of members were on hand for the opening of the tournament in the afternoon and for the golf supper at the Club at the conclusion of the play. The golf tournament was in charge of a committee headed by Dr. W. P. Tippet, secretary of the Brown–Kewaunee–Door County Medical Society.

Registrants at Green Bay Sessions

Abelman, T. C. H. — Watertown
Ackerman, E. T. — Gays Mills
Adams, G. F. — Kenosha
Adams, R. W. — Chetek
Altenhofen, A. R. — Milwaukee
Anderson, N. P. — La Crosse
Andrew, C. H. — Platteville
Archer, W. E. — Dale
Armstrong, C. A. — Prairie du Chien
Arveson, R. G. — Frederic
Atkinson, H. S. — Green Bay
Atwood, David — Madison
Auld, Irving — Clintonville
Bachhuber, A. E. Jr. — Kaukauna
Bachhuber, H. A. — Sauk City
Baker, J. C. — Hawkins
Baker, R. G. — Tomahawk
Baldwin, F. H. — Bloomington
Baldwin, G. E. — Green Lake
Ball, Elmer J. — Manitowoc
Bannen, W. E. — La Crosse
Bardeen, C. R. — Madison
Bartran, W. H. — Green Bay
Bauer, K. T. — West Bend
Bear, N. E. — Monroe
Beebe, S. D. — Sparta

Belson, H. J. — St. Nazianz
Benton, J. L. — Appleton
Berg, W. R. — Gillett
Bill, B. J. — Genoa City
Binnie, H. A. — Kenosha
Bird, M. D. — Marinette
Bleckwenn, Wm. J. — Madison
Blount, W. P. — Milwaukee
Blumenthal, R. W. — Milwaukee
Bolton, E. L. — Appleton
Boren, C. H. — Marinette
Boren, J. W. — Marinette
Borsack, K. K. — Fond du Lac
Boudry, M. O. — Fond du Lac
Bourne, N. W. — Milwaukee
Bowen, H. P. — Watertown
Boyd, C. D. — Kaukauna
Brehm, H. G. — Racine
Brickbauer, A. J. — Plymouth
Briggs, S. J. — Madison
Brooks, E. H. — Appleton
Brunckhorst, F. O. — Neenah
Brusky, A. H. — Seymour
Bryan, A. W. — Madison
Buerki, R. C. — Madison
Burdon, T. S. — Green Bay
Burns, Robert — Green Bay
Butler, F. E. — Menomonie

Caldwell, Ruth — Madison
Callahan, H. T. — Spencer
Cantwell, R. C. — Shawano
Carlson, G. W. — Appleton
Carlsson, E. S. — La Crosse
Carns, Marie L. — Madison
Carson, W. J. — Milwaukee
Carter, H. M. — Madison
Carter, R. M. — Green Bay
Cary, E. C. — Reedsville
Charbonneau, A. — Green Bay
Chloupek, C. J. — Green Bay
Christensen, F. C. — Racine
Christiansen, C. H. — Superior
Christofferson, H. H. — Colby
Christofferson, P. J. — Waupaca
Clark, Burton Jr. — Oshkosh
Clark, W. T. — Janesville
Cline, F. A. — Madison
Clothier, E. F. — Westfield
Colignon, J. C. — Green Bay
Coluccy, M. J. J. — Madison
Comee, W. C. — Green Bay
Cooksey, R. T. — Madison
Coon, H. M. — Stevens Point
Cooney, E. W. — Appleton
Conley, J. M. — Oshkosh
Connell, F. G. — Oshkosh
Cowan, W. F. — Stevens Point
Cowles, R. L. — Green Bay
Crikelair, F. L. — Green Bay
Cron, R. S. — Milwaukee
Crosby, E. P. — Stevens Point
Cummings, E. F. — Oshkosh
Cunningham, Wilson — Platteville
Currer, P. M. — Milwaukee
Cushing-Lippitt, E. — Milwaukee

Dana, D. B. — Kewaunee
Davis, C. H. — Milwaukee
Dawson, D. L. — Rice Lake
Dean, J. P. — Madison
Dean, Joseph — Madison
Dean, J. C. — Madison
Dearholt, H. E. — Milwaukee
Decker, W. J. — Green Bay
Denys, G. F. — Green Bay
DeSalvo, Francis — Niagara
Devine, G. C. — Ontario
Devine, H. A. — Fond du Lac
Dickelmann, L. E. — Oshkosh
Dieterle, J. O. — Milwaukee
Dietrich, Carlisle — Red Granite
Docter, John — Racine
Dockry, L. E. — Kewaunee
Doege, K. H. — Marshfield
Dorr, A. M. — Milwaukee
Dougherty, J. S. — Suring
Doyle, J. N. — Wausau
Drew, F. E. — Milwaukee
Duer, G. R. — Marinette
Dupont, A. J. — Pulaski

Eastman, V. E. — Wausau
Echols, C. M. — Milwaukee
Edmondson, C. C. — Waukesha
Eigenberger, F. — Sheboygan
Ekblad, V. E. — Superior
Ellis, I. G. — Madison
Evans, J. A. — La Crosse
Ewell, G. H. — Madison

Farrell, H. J. — Milwaukee
Faulds, R. C. — Abrams
Fencil, Y. J. — Casco
Festerling, E. G. — Milwaukee
Fidler, Charles — Milwaukee
Fiebiger, G. J. — Waterloo
Fiedler, O. A. — Sheboygan
Finn, W. C. — Fond du Lac
Fitzgerald, R. E. — Milwaukee
Flarity, T. H. — Beloit
Flemming, E. E. — Wausau
Fletcher, W. T. — Salem
Florin, A. C. — Fond du Lac
Flynn, R. E. — La Crosse
Foerster, H. R. — Milwaukee
Foerster, O. H. — Milwaukee
Ford, W. A. — Sheboygan
Ford, Wm. W. — Green Bay
Forkin, G. E. — Menasha
Fortner, W. H. — Bloomer
Foshion, H. V. — Algoma
Fox, Paul A. — Beloit
Francois, S. J. — New Glarus

Fredrick, H. H. F. — Westfield
Fredrick, H. Y. — Westfield
Freeman, J. M. — Wausau
Frey, F. H. — Wausau
Frick, Lewis — Athens
Frisbie, R. L. — Rhinelander
Friske, O. W. — Beloit
Fuller, M. H. — Green Bay

Gallaher, D. M. — Appleton
Garvey, J. L. — Milwaukee
Gates, A. J. — Tigerton
Gavin, S. E. — Fond du Lac
Gebhard, U. E. — Milwaukee
Gibson, H. V. — Fairchild
Giesen, C. W. — Superior
Gleason, C. M. — Manitowoc
Glynn, J. D. — Lancaster
Goggins, J. W. — Chilton
Goggins, R. J. — Oconto Falls
Gosin, D. F. — Green Bay
Gosin, F. J. — Green Bay
Gramling, H. J. — Milwaukee
Greene, H. L. — Madison
Greenwood, S. D. — Neenah
Gregory, L. W. — Manitowoc
Grill, John — Milwaukee
Grinde, G. A. — Cumberland
Gudex, V. A. — Milwaukee
Guenther, O. F. — Campbellsport
Gundersen, A. H. — La Crosse
Gundersen, Gunnar — La Crosse
Gute, E. B. — Milwaukee
Guth, H. K. — Brandon

Haasl, H. W. — Peshtigo
Habbe, J. E. — Milwaukee
Hager, F. J. — Denmark
Hagerty, W. T. — Green Bay
Hahn, P. R. — Racine
Haines, M. C. — Oshkosh
Hammond, F. W. — Manitowoc
Hammond, R. W. — Manitowoc
Hankwitz, A. W. — Milwaukee
Hansen, John — Glenbeulah
Hargarten, L. J. — Milwaukee
Harmon, J. C. — La Crosse
Harper, C. A. — Madison
Harper, C. S. — Madison
Harris, J. W. — Madison
Hassall, J. C. — Oconomowoc
Haubrick, H. J. — Oshkosh
Hayes, E. P. — Eau Claire
Hefke, H. W. — Milwaukee
Hegner, G. T. — Appleton
Heidner, A. H. — West Bend
Hemmingsen, T. C. — Racine
Hendrickson, H. — Green Bay
Henken, J. F. — Racine
Henske, W. C. — Chippewa Falls
Heraty, J. E. — La Crosse
Hermann, W. C. — Milwaukee

Herner, W. L. — Milwaukee
Hildebrand, G. J. — Sheboygan
Hipke, L. W. — Milwaukee
Hirschboeck, J. C. — Forestville
Hogan, J. M. — Oshkosh
Holz, A. P. — Seymour
Hood, A. J. — Milwaukee
Hosmer, M. S. — Ashland
Houck, M. P. — La Crosse
Hougen, Edw. — Wisconsin Rapids
Huberty, F. J. — Appleton
Huff, F. C. — Sturgeon Bay
Hughes, B. J. — Winnebago
Hughes, J. R. — Milwaukee
Hugo, D. G. — Oshkosh
Hull, H. H. — Brandon
Hurlbut, J. A. — Madison
Huston, John — Milwaukee
Huth, E. W. — Crandon
Hutter, A. M. — Fond du Lac

Icks, Karl — Green Bay
Irwin, H. J. — Baraboo
Irwin, R. S. — Wauwatosa

Jackson, A. S. — Madison
Jackson, Edw. — Milwaukee
Jackson, J. A. — Madison
Jackson, R. H. — Madison
Jacobson, E. B. — Milwaukee
Jamieson, G. H. — Racine
Jamieson, R. D. — Racine
Jensen, F. G. — Menasha
Jermain, W. M. — Milwaukee
Johnson, F. G. — Iron River
Jones, D. T. — Wausau
Jones, L. E. — Prescott
Jones, M. L. — Wausau
Jordon, E. M. — Green Bay
Jorgenson, H. L. — Marinette

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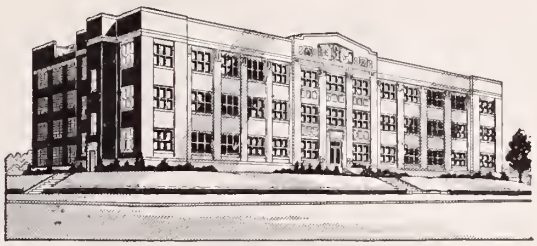

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* *Eusterman, George B. and Wilbur, Dwight L.: Clinical Features of Vitamin A Deficiency (further reference, same as in other copy).*

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Interstate Assembly to Meet at Philadelphia

THE first international assembly of the Inter-State Postgraduate Medical Association of North America to be held east of the Alleghenies is to take place in the public auditorium of Philadelphia, Pennsylvania, November 5th, 6th, 7th, 8th, and 9th, 1934, with pre-assembly clinics on November 3rd and post-assembly clinics on November 10th in the Philadelphia hospitals. The public auditorium is located in the University area and across the street from the Philadelphia General Hospital thus assuring the Assembly close access to an abundance of clinical material.

"The aim of the program committee with Dr. George W. Crile, as chairman," said Dr. W. B. Peck, Director, "is to provide for the medical profession of North America an intensive postgraduate course covering the various branches of medical science. The program has been carefully arranged to meet the demands of the general practitioner, as well as the specialist. Extreme care has been given in the selection of the contributors and the subjects of their contributions."

The Philadelphia County Medical Society will be host to the Assembly. A most hearty invitation is extended to all members of the profession who are in good standing in their state or provincial societies, to be present.

RUPTURE OF SIGMOID

(Continued from page 761)

2. Behrend, Moses, and Herrman, Clinton S.: Traumatic Perforation of the Sigmoid Colon. J. A. M. A. 101:1226 (Oct. 14) 1933.
3. Block, F. B., and Weissman, M. I.: Pneumatic Rupture of the Sigmoid, J. A. M. A. 86:1597 (May 22) 1926.
4. Burt, C. V.: Pneumatic Rupture of the Intestinal Canal. Arch. Surg. 22:875 (June) 1931.
5. Cooke, H. Hamilton: Traumatic Rupture of the Intestines Caused by Automobile Accidents. Ann. Surg. 96:321 (Sept.) 1932.

PHYSICIANS' EXCHANGE

Advertisements for this column must be received by the 25th of the month preceding month of issue. A charge is made of $2.00 for the first appearance of copy occupying 1 inch or less of space and $1.00 for each succeeding insertion of the same copy. Kindly accompany copy with remittance to cover number of insertions desired. Advertisements from members of the State Medical Society will be accepted without charge. Such copy will be taken out after its second publication unless otherwise requested. Where numbers follow advertisements replies should be addressed care Wisconsin Medical Journal.

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tics nor our impression gained from recent literature on the subject.

The discerning physiologist will find the book interesting, the anesthetist will not find it of distinct value, and to the medical student it may prove dangerous. E. A. R.

Industrial Toxicology: By Alice Hamilton, M. D. Price $3.00. Harper & Brothers Publishers, New York.

The contents and general tone of the book follow in the main the author's earlier work "Industrial Poisons in the United States." The subject matter is revised by omitting the material of a historical character and including recent clinical observations and experimental work. A new chapter on the toxicity of radioactive substances is included.

The book is especially adapted as a reference for practicing physicians. F. L. K.

A Primer For Diabetic Patients. By Russell M. Wilder, M. D., professor and chief of the department of medicine of The Mayo Foundation, University of Minnesota; head of section on general metabolism, Division of Medicine, The Mayo Clinic. Fifth Edition, Reset. Cloth $1.75 net. W. B. Saunders Co., Philadelphia.

This is one of the best manuals for the mutual guidance of diabetic patients and for physicians in general practice. The revisions as compared with the previous editions of this book include somewhat more detail about substitutions of one food for another and further hints to the physician in the management of emergencies. There is an interesting section which provides 120 questions and answers for the patient. There are page references to help him find the answer. In other words the book is designed for study by the patient rather than for casual reading. E. L. S.

The Collected Papers of the Mayo Clinic and the Mayo Foundation. Volume XXV (Papers of 1933—Published 1934). Edited by Mrs. Maud H. Mellish-Wilson and Richard M. Hewitt, B.A., M.A., M.D. Cloth $11.50 net. W. B. Saunders Company, Philadelphia.

The yearly volume of the Collected Papers of the Mayo Clinic is as usual a gold mine of information, giving the results of the clinical and experimental work done there. It also announces the death of Mrs. Wilson who edited the volumes each year for twenty-two consecutive years and pays fitting tribute to her. This book is a boon to the medical profession just because it assembles this information into one volume, making a ready and easy book for reference and study. E. R. S.

The Management of Fractures, Dislocations, and Sprains. By John A. Key, B. S., M. D., clinical professor of orthopedic surgery, Washington University School of Medicine; Associate Surgeon, Barnes, Children's, and Jewish Hospitals, St. Louis, and H. Earle Conwell, M. D., F. A. C. S., Orthopedic Surgeon for the Tennessee Coal, Iron and Railroad Co., Birmingham; orthopedic chief of the Traumatic and Orthopedic Services of the Employees' Hospital, Fairfield, Alabama. The C. V. Mosby Co., St. Louis, Mo. Price $15.00.

The 1935 edition is one of the best books of its kind and would be extremely valuable in any library.

R. P. M.

The Essentials of Physical Diagnosis. By Robert W. Buck, M. D., assistant professor of preventive medicine and instructor in physical diagnosis, Tufts College Medical School; physician to Boston Dispensary. Price $3.00 net. W. B. Saunders Company, Philadelphia, 1934.

The purposes which Dr. Buck has particularly stressed in the preface of this book have been admirably achieved. He has compressed the principles of physical examination into a manual and has omitted the description of disease entities which lie more properly within the province of a textbook of clinical medicine. The emphasis placed upon physical constitution, personality, and posture are commendable, and the illustrations of his constitutional and postural types are well chosen. Examination of the heart and lungs, which often receives a disproportionate amount of space in the usual book on physical diagnosis, here receives well proportioned emphasis, and the chapters on examination of the abdomen, extremities, and spinal column are more complete than those usually found. The author is to be particularly commended on the descriptions of classical signs, such as the Romberg, Kernig, Litten, etc., which have been quoted from the original accounts by their discoverers, and which are clearer and more concise than the usual paraphrases. For those who wish more detailed information on any of the topics mentioned, a list of references for supplementary reading has been included at the close of each section. These are mainly from American and English sources with a few from the German and French. The book is to be highly recommended to students, and in addition, to many practitioners who may find a concise review of important principles of physical examination well worth while. M. C.

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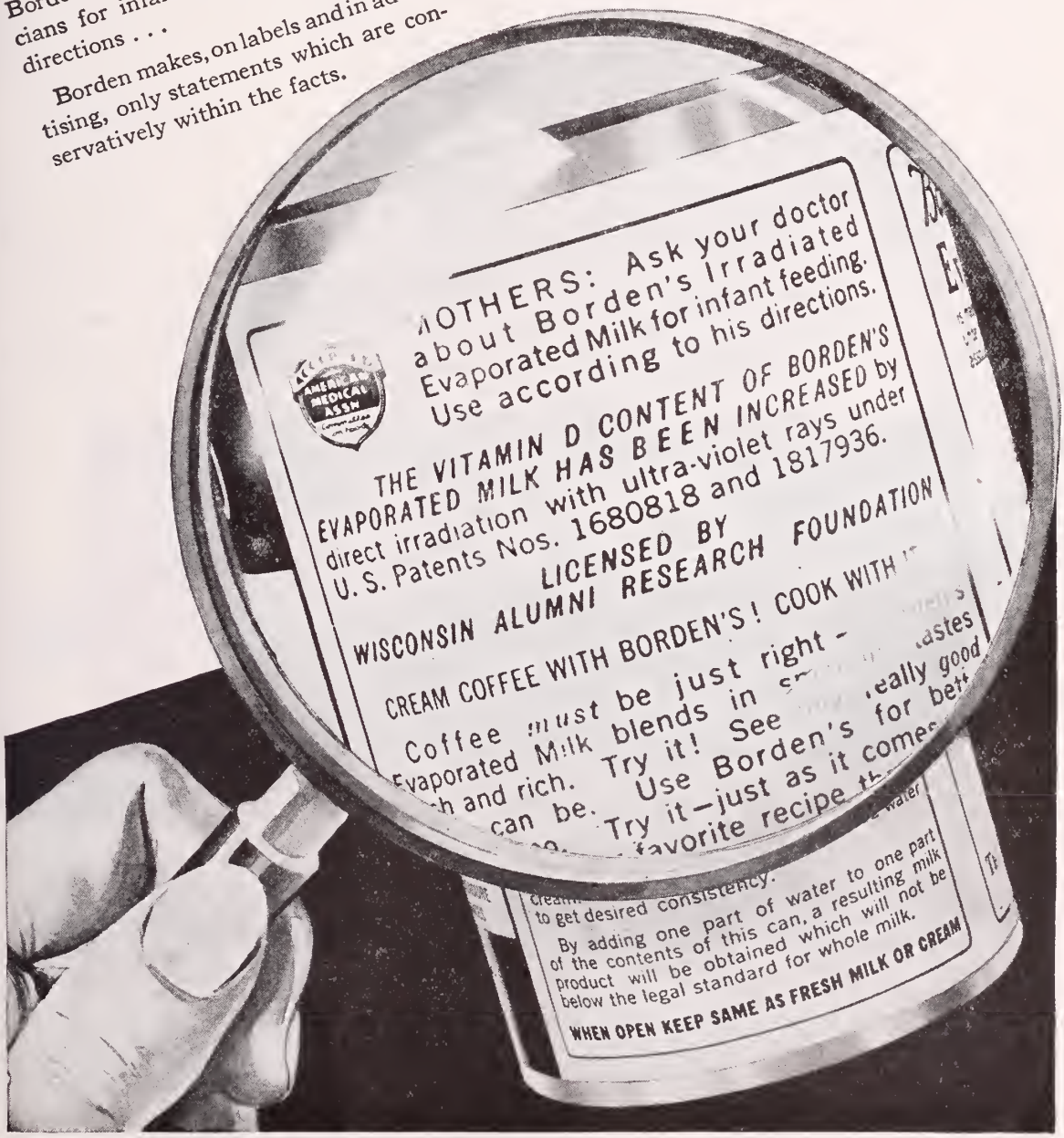

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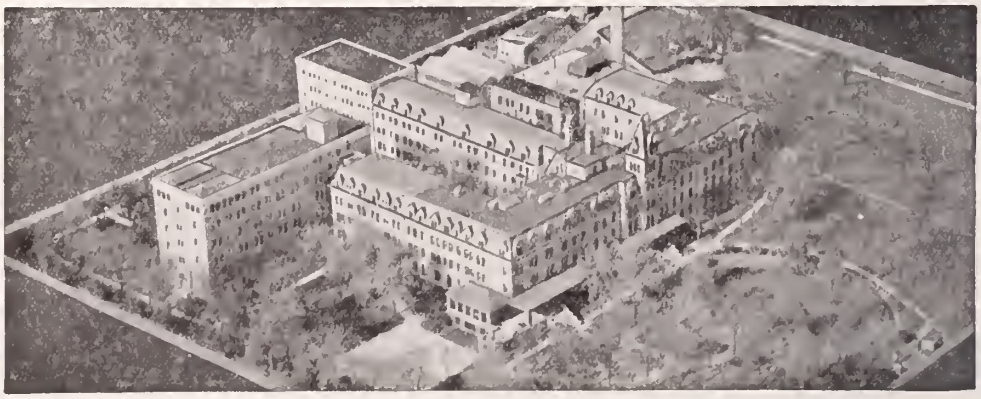

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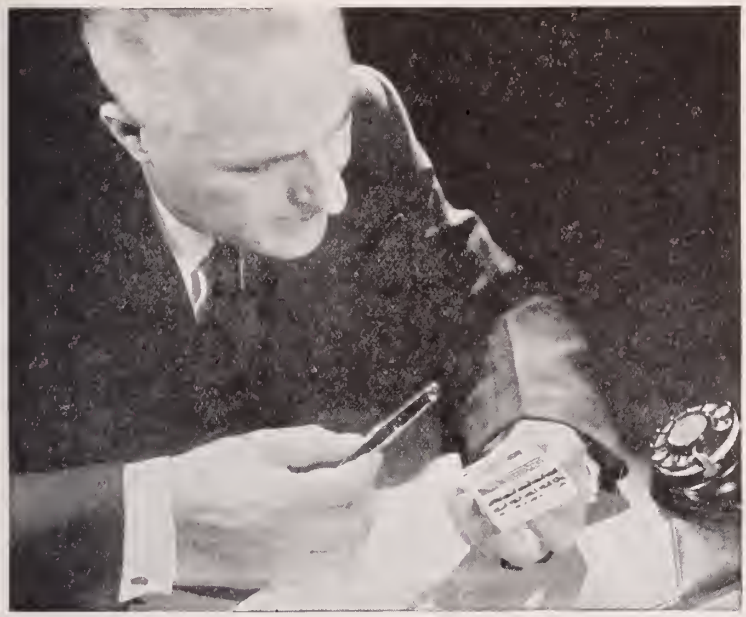

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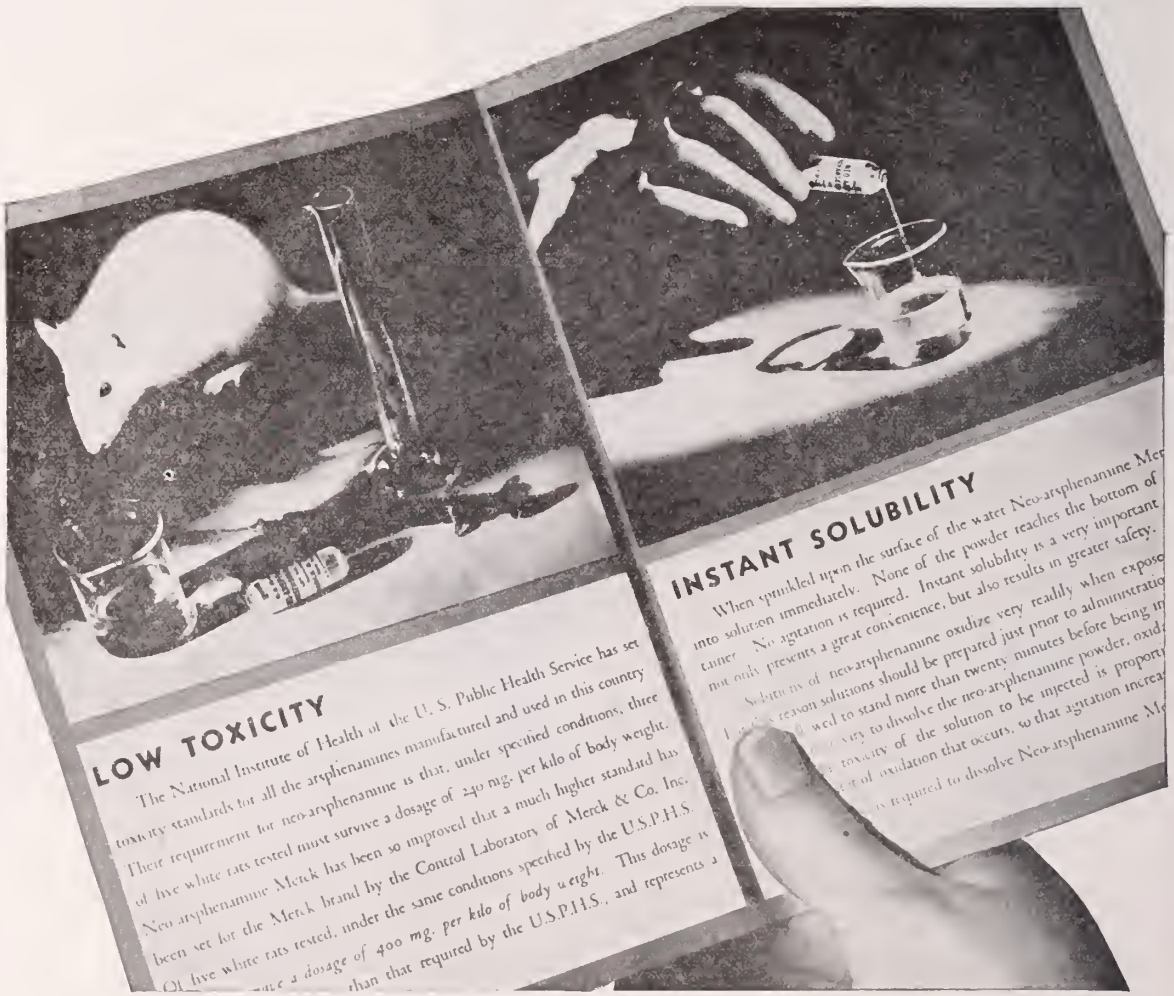

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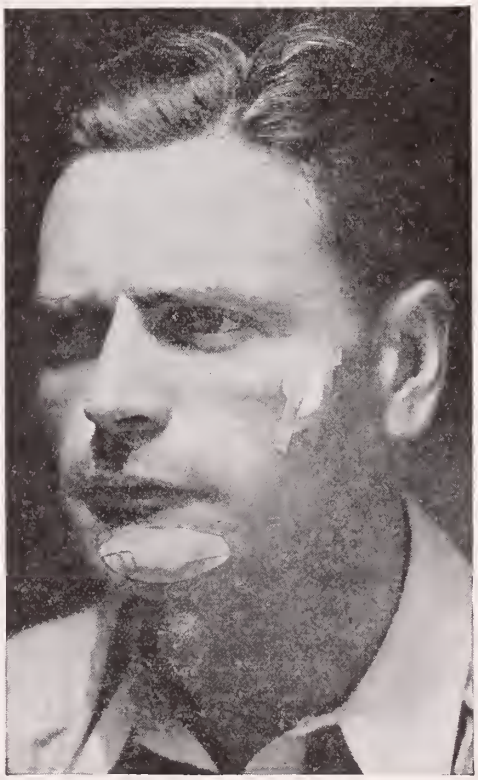

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Reducing the Hazards in the Treatment of Intestinal Obstruction

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THE "forbidding mortality" of intestinal obstruction warrants continued study and discussion; therein lies our hope of being able to materially reduce the death rate. One of the most important factors affecting the treatment and the mortality rate in intestinal obstruction, namely early diagnosis, will not be discussed in this paper.

When it is recalled that most of the deaths that follow the surgical treatment of intestinal obstruction are due to a peritonitis that resulted from soiling of the peritoneum, the importance of recognizing that certain types of intestinal obstruction need not be subjected to surgery and the importance of avoiding any procedure that might contaminate the peritoneum in cases where surgery is performed, need hardly be stressed.

Only in recent years have we recognized the fact that a large group of cases of intestinal obstruction respond to non-surgical treatment.

Non-surgical treatment encompasses a number of procedures, the most important being deflation of the small bowel by duodenal tube suction siphonage, deflation of the colon by means of suction applied to a rectal tube passed beyond the recto-sigmoid juncture, liberal use of morphine and pitressin, and intravenous injections of hypertonic saline solution. These various measures are also valuable in the pre and postoperative treatment of cases requiring surgical intervention.

Indications for non-surgical treatment:

(a) Paralytic ileus.
(b) Postoperative adhesive obstruction.
(c) Partial mechanical obstructions of the small bowel.

Indications for surgical treatment:

(a) Complete mechanical obstructions of the small bowel.
(b) Partial mechanical obstructions of the small bowel that do not respond to non-surgical treatment.
(c) Strangulation.
(d) Obstructions of the large bowel.

PRINCIPLES OF SURGICAL TREATMENT

Certain physiologic facts should be kept in mind when operating upon a patient suffering from intestinal obstruction:

(a) There occurs in intestinal obstruction a diminution in the margin of safety of operation due to such factors as disturbances in the water and acid-base balances, changes in the intra-abdominal pressure, disturbances of the splanchnic circulation and the production of powerful reflexes.[2]

(b) Operation for intestinal obstruction results in added reflex splanchnic nerve inhibition of bowel activity, the degree depending upon the anaesthesia and the amount of bowel manipulation.

(c) Sudden relief of considerably distended bowel in a laparotomized patient is apt to result in a marked fall in the intra-abdominal pressure, a pressure that is essential in maintaining the venous-volume return of blood to the right side of the heart.

Importance of treating the distention of the obstructed bowel: Cases of non-strangulating intestinal obstruction that are treated before considerable distention has occurred almost invariably recover. If distention has occurred and if it responds readily to either surgical or non-surgical treatment, or both, the outlook for recovery is usually good.

Distention of the bowel produces such *reflex effects* as nausea, anorexia, general depression, reversal or flattening of the intestinal gradients, increased intestinal secretion and a marked lessening of absorption of intra-intestinal liquids and gases.

Important in restoring the circulating blood volume is the improvement that occurs in the splanchnic circulation when the stretching of the gut and the increased intra-intestinal pressure of distention are relieved by decompressive measures. The return of intestinal motility following decompression restores the function of the "peripheral heart" (contracting intestine) i. e., it aids the venous return from the intestine to the second set of capillaries in the liver.

When the bowel wall is stretched beyond a certain degree it frequently fails to regain its tone because of the local circulatory damage that results from the excessive stretching of the intestinal musculature.

The great desideratum then is an early attack upon the distended bowel in order to avoid the degree of distention that is apt to permanently paralyze the intestinal musculature.

To sum up, decompression of the distended bowel that has not been stretched beyond its capacity to recover, results in the following physiological effects: (a) Improvement in the splanchnic circulation and increase in the circulating blood volume (b) Restoration of intestinal tone, motility and gradients (c) Acceleration of absorption of intra-intestinal gases (d) Acceleration of absorption of intestinal fluids (e) Cessation of the excessive "paralytic secretion" of intestinal juices (f) Diminution in the amount of oedema and spasm at the site of the obstruction.

DEFLATION BY DUODENAL TUBE SUCTION SIPHONAGE

Besides being indicated in the large group of cases that never require operative interference, duodenal tube suction siphonage is a valuable preliminary measure in those cases of obstruction demanding surgery, in that it lessens distention so that operation becomes safer and easier. In order to avoid the dangers of pulmonary aspiration the suction siphonage should be continued while the patient is being operated.

Duodenal tube deflation when applied early is often very effective in the treatment of the paralytic ileus of peritonitis.

Following operation for relief of a mechanical or strangulating obstruction, duodenal tube suction siphonage usually obviates the necessity of performing an enterostomy.*

Wangensteen has demonstrated that duodenal tube suction siphonage is of particular value in cases of *postoperative adhesive obstruction of the small bowel.* The deflation of the small bowel frequently suffices to overcome the obstructive effects of recent adhesions which ultimately absorb. Experience has shown that operation for the removal of recent, multiple adhesions is difficult and hazardous.[8]

Duodenal tube decompression often obviates surgical treatment in cases of kinking or localized inhibition of function of the bowel due to a postoperative inflammatory accumulation, abscess or patch of plastic exudate.

Non-surgical decompression of the small bowel should not be continued too long before resorting to surgery in cases of complete mechanical obstruction of the small bowel, especially when the x-ray continues to show gas shadows in the small bowel and no return of gas in the colon. The danger of mistaking a strangulating obstruction for a mechanical obstruction or the possibility of a mechanical obstruction becoming strangulated should be borne in mind; for these very cogent reasons non-surgical deflation of the small bowel should be considered only an adjunct to the surgical treatment when dealing with an acute complete mechanical obstruction.

Whenever deflation of the small bowel is attempted by means of duodenal tube suction siphonage (and this applies to low enterostomy as well) one must check results by means of frequent x-ray films. Furthermore one must, in order to obtain the best results from our efforts at deflation, frequently change the position of our patient in order

* Very often, while operating for the relief of a mechanical or strangulating obstruction, the surgeon can, by means of his hand in the abdomen, guide the duodenal tube through the pylorus.

to permit the accumulations of gas to shift to a position where the suction may be more readily effective. A most effective measure is to turn the patient on his right side and then ask him to drink a tumbler of warm water. Frequently there will follow almost immediately a gush of gas and fluid.

Suction siphonage, unless accompanied by the performance of a laparotomy, apparently does not materially lower the intra-abdominal pressure even though it deflates the small bowel because the tone of the diaphragm and abdominal muscles compensates for diminution in the size of the intestine.

Occasionally duodenal tube suction siphonage fails to deflate the small bowel satisfactorily. One of the most common causes of failure is plugging of the tube by food or mucus. Occasionally the tube curls up so that the distal end lies in the region of the cardia. Multiple gas traps*, each acting as a separate obstruction may interfere with deflation of the distended proximal bowel. Probably another cause of failure is the kinking in the fixed part of the duodenum and jejunum caused by distended loops of intestine with long mesenteries rising high in the abdomen.

DEFLATION BY ENTEROSTOMY

The condition of the bowel after the release of a mechanical or strangulating obstruction is often a determining factor in our decision to perform an enterostomy. If after the removal of a mechanical obstruction under spinal anaesthesia the proximal gut remains distended, if it remains markedly hyperaemic or blanched, if it shows no return of peristaltic activity and if the collapsed gut below the obstruction does not fill out, an enterostomy in the most distended loop is indicated. Under these conditions one must assume that the intestine has been paralyzed from excessive distention and that it has failed to respond to the stimulating effect of the spinal anaesthetic upon gut motility.

* Multiple gas traps, or the interposition of gas between areas of liquid intestinal contents, are variously explained. It is possible that they may result from the kinking of loops of bowel containing gas rising higher than loops containing liquid contents. Also, it is more than probable that the gut lengthens as a result of distention, and occurring as it does in a closed cavity, it is apt to cause multiple kinks, with gas collecting at these points.

Enterostomy is never indicated in the treatment of paralytic ileus of general peritonitis. It is occasionally of use in cases of localized peritonitis where a mechanical element such as kinking of a loop of bowel by an inflammatory mass complicates the picture.

One of the most important indications for enterostomy is a persistent postoperative mechanical obstruction that has failed to respond to non-surgical treatment. In many of these cases the separation of many densely adherent loops of bowel is impossible of accomplishment. The danger of soiling from the performance of an enterostomy in this type of case has been minimized, because the peritoneum has, as the result of previous infection and operation developed an increased resistance.

Since duodenal tube suction siphonage ordinarily accomplishes everything that a high enterostomy does, this latter procedure is rarely indicated. A low enterostomy in turn may not successfully decompress the upper small intestine and for that reason duodenal tube suction siphonage should always accompany the performance of a low enterostomy.

An enterostomy should be performed only under the most imperative indications because the contents of the obstructed bowel contain enormous numbers of highly virulent organisms, and the slightest soiling that may result from the performance of an enterostomy is apt to produce a fatal peritonitis. In order to avoid soiling when performing a Witzel enterostomy, the loop of bowel to be enterostomized is first aspirated between clamps. Allis clamps may be used for this purpose instead of the conventional rubber-covered intestinal clamps because they cause little damage to the oedematous bowel wall.

A sudden release of distention by means of an enterostomy in a widely opened abdomen is apt to cause a marked diminution in both the intra-intestinal and the intra-abdominal pressures*. Veins which were compressed are suddenly opened up as a result of the drop in pressure, and the patient is liable to "bleed to death in his own splanchnic

* Physiologists have long known that changes in the intra-abdominal pressure greatly alter the emptying of the great venous reservoirs into the right side of the heart.

system". (Cases of peritonitis that rapidly get worse after a simple laparotomy are probably due to a similar cause.)

Failure to decompress the bowel by means of an enterostomy is a not infrequent experience. The most common causes of failure are: (a) The over-distended bowel has failed to regain its tone and motility; (b) Paralytic ileus caused by the peritonitis that resulted from soiling during the performance of the enterostomy; (c) Mechanical obstruction at the site of an improperly performed enterostomy; (d) Multiple gas-traps proximal to the enterostomy; (e) An obstruction proximal to the enterostomy overlooked at the time of operation.

Advantages of the two-stage enterostomy. Many times a two-stage operation is preferable because it eliminates the danger of peritoneal soiling; the loop of bowel that is to be opened becomes extra-peritonealized in about seven hours.** A two-stage caecostomy is particularly valuable in cases of obstruction of the descending colon due to malignancy, because peritonitis frequently results from immediate drainage of the caecum, despite every precaution to avoid gross soiling.

LESSENING THE RISKS IN MECHANICAL OBSTRUCTIONS

As stated previously, incomplete mechanical obstructions may frequently be successfully treated by non-surgical means, thus avoiding the disadvantages of an anaesthesia and the dangers of precipitating a fatal peritonitis.

Surgical treatment of mechanical obstructions encompasses the following procedures:

(a) Removal of the mechanical block, with or without enterostomy. The usual object of the operation is the removal of the mechanical block, but many times the nature of the obstruction or the patient's condition do not warrant such a procedure.

(b) Enterostomy. If the obstruction is such that there is grave danger of producing a tear in the bowel we may have to confine our efforts to a one or two stage enterostomy depending upon the exigency of the case.

(c) Entero-Anastomosis. Occasionally in obstructions that cannot be removed surgically, especially when the obstruction is due to inoperable growths or to a severe inflammatory reaction, a short circuiting of the involved loop by means of an entero-anastomosis may be attempted.

(d) Multiple Aseptic Aspirations. A direct surgical attack or multiple enterostomies are usually out of the question when treating multiple partial obstructions that have not responded to non-surgical deflation. Under these conditions aspiration of each available loop of intestine is sometimes feasible. A purse-string is applied before the needle is inserted into a loop of gut and suction is obtained from a water faucet or tonsillectomy suction apparatus. In order to avoid contamination the purse-string suture is tied as the needle is withdrawn. Frequently the entire small bowel can be most satisfactorily decompressed by this method of multiple aseptic aspirations.[4]

(e) Exteriorization of the Blocked Loop of Bowel. Occasionally a gall stone is the cause of an obturation obstruction and its removal by means of incision of the gut has been associated with a very high mortality, due usually to the resulting peritonitis. In order to avoid this danger one may under certain conditions, especially in the early cases exteriorize the blocked loop of bowel and twelve hours later remove the stone.

(f) "Blind" Enterostomy. The so-called "blind" enterostomy should not be performed routinely in the treatment of mechanical obstructions. Its only indication is the seriously ill patient with marked distention. A "blind" caecostomy is particularly valuable in obstruction of the distal colon due to malignancy. Since this condition is often recognized by the flat x-ray film an exploration to determine the cause of the obstruction is usually not necessary at this time. Fig. 3.

POSTOPERATIVE OBSTRUCTION

Postoperative ileus rarely complicates abdominal operations when the peritoneum and abdominal viscera are handled gently, when

** During the performance of the first stage of a two-stage enterostomy one may introduce a large, dull beveled needle into the exteriorized loop of bowel and by means of the Wangensteen apparatus we may apply continuous suction until the second stage of the enterostomy is performed.

Fig. 3. Shows the value of the flat x-ray film in diagnosing an acute obstruction in the large bowel. This is a case of acute obstruction of the descending colon due to malignancy. The diagnosis and location of the obstruction were made from this film within a half hour after the patient's admission to the hospital. Thirty minutes after the diagnosis had been made the first stage of a two-stage "blind" caecostomy was being performed under local anaesthesia.

all raw surfaces are properly covered, when drains are so placed that they do not cross or lie between loops of small bowel and when peritoneal soiling has been avoided.

It is important to differentiate the various types of postoperative obstruction because the treatment of postoperative paralytic ileus and incomplete mechanical obstruction is essentially non-surgical, while that of postoperative complete mechanical and strangulating obstructions is surgical. For convenience, they may be divided into: (a) Paralytic ileus of operative trauma; (b) Paralytic ileus of peritonitis; (c) Adhesive obstruction; (d) Mechanical obstruction; (e) Strangulation.

(a) *Paralytic Ileus of Operative Trauma.* It occurs very soon after operation and it is due to the reflex splanchnic nerve inhibition of intestinal motility that results from anaesthesia, laparotomy and manipulation of the bowel, complicated by the swallowing of considerable amounts of air. Duodenal intubation with suction, repeated doses of morphine and pitressin and hypertonic salt solution intravenously usually suffice to restore the intestinal tone and motility.

(b) *Paralytic-Ileus of Postoperative Peritonitis.* It is characterized by inactivity of intestinal motility, resulting ultimately in the production of a "silent" abdomen. It usually occurs from the third to the fifth day after peritoneal soiling has occurred or after the removal of a septic focus. The paralytic ileus of peritonitis may be local or more or less generalized. Sometimes a single loop of gut lying next to a septic focus may be paralyzed or excessively inhibited, and the effect is the same as if a mechanical obstruction had occurred at this point.

(c) *Postoperative Adhesive Obstruction.* It usually occurs after the fifth day and is due to matting of loops of small intestine by a fibrinous exudate and it is usually associated with inhibited propulsive motility of one or several loops of small bowel. The treatment consists of non-surgical decompression of the small bowel by means of the duodenal tube and by repeated doses of morphine and pitressin. Rarely do these cases require a subsequent operation, such as an enterostomy or multiple aseptic aspirations, because as the distention subsides and the exudate yields or absorbs, the symptoms of obstruction disappear.

(d) *Postoperative Mechanical Obstructions.* They may result from kinking of a loop of bowel around a post-inflammatory accumulation or abscess. The obstructive symptoms often subside as the inflammatory mass resorbs or when the abscess is drained. Since exploration of an inflammatory accumulation is a hazardous procedure, it is advisable to treat this type of obstruction conservatively. Surgical treatment is occasionaly indicated in those cases where obstructive symptoms persist despite the conservative treatment.

Mechanical obstructions may occur soon after operation as the result of kinking of loops of bowel by patches of plastic exudate on the serous coat of the bowel or upon the parietal peritoneum. The obstruction is usu-

ally incomplete and since strangulation from disturbance of the mesenteric circulation rarely occurs in these cases, non-surgical means of decompression of the bowel may frequently be reasonably persisted in with the hope of overcoming the oedema at the site of obstruction. The patches of exudate frequently yield or become absorbed after non-surgical deflation of the bowel has been obtained.

(e) *Postoperative Strangulation.* It is usually due to a band across the mesentery or to a band encircling the gut. Occasionally a volvulus results from the action of a contracting band. Internal hernia-form strangulations may occur soon after a laparotomy and are usually due to the entrance of a loop of gut into a false pocket. Strangulation, with the exception of the internal hernias, is comparatively rare after recent abdominal operations, but occurs more frequently weeks, months or years after a laparotomy.

GANGRENE OF THE BOWEL

Gangrene of the bowel, the result of obstruction, may be grouped into (a) Localized pressure necrosis (b) Ischaemic necrosis of closed loop obstruction (c) Strangulation.

(a) *Localized pressure necrosis* occurs not infrequently as the result of a tight band or constriction by the tense neck of a hernial sac. Great care must be exercised when delivering the distended gut from a constriction of this kind because of the ease with which perforation occurs. The area of pressure necrosis may frequently be treated by covering it with a series of Lembert stitches.

(b) *Ischaemic Necrosis in the Closed Loop Obstruction.* Gaseous distention can, when the intra-intestinal pressure exceeds the capillary pressure in a closed loop of bowel, produce areas of ischaemic necrosis at the antimesenteric border. A typical example is the gangrene of the caecum that occurs with obstructions of the distal colon, in the presence of a competent ileocaecal valve. According to Wilkie, gangrene is apt to occur earlier when fecal matter is present in the closed loop.*

* According to Wilkie, most cases of gangrenous appendicitis must be considered cases of a closed loop obstruction, with the fecalith forming the proximal obstruction and the tip of the appendix forming the other end of a closed loop.

A small localized area of necrosis may frequently be infolded by means of a purse-string suture. Larger areas of necrosis occasionally demand the same surgical treatment as the non-viable gut of strangulations.

When necrosis occurs in the caecum in cases of obstruction of the distal colon, the gangrenous patch should be included in the portion of the caecum that is exteriorized for the first stage of a two stage caecostomy.

(c) *Strangulation.* Massive gangrene of the bowel is usually due to gross interference with the mesenteric circulation, although in the occasional case it is due to the increased intra-intestinal pressure of a closed loop obstruction, with partial interference with the mesenteric venous return playing a secondary role.

These are several ways of treating the non-viable gut of strangulation, the method depending upon various factors, such as age and condition of the patient. Resection of the gangrenous segment of gut, followed by an immediate anastomosis is accompanied by a high mortality because peritonitis frequently results from this procedure. To obviate these dangers exteriorization of the gangrenous loop and its aseptic removal by the Rankin obstructive type of Mikulicz resection is indicated in the majority of cases of massive gangrene of the bowel in adults. Children, especially infants, do not tolerate exteriorization of the gangrenous bowel as well as immediate resection with anastomosis.

At times, when the bowel proximal to a strangulation is not too distended and oedematous and the distal bowel is not too collapsed, one may try resection with immediate anastomosis by means of the aseptic, basting stitch method of Parker–Kerr. This method is useful in cases where the large bowel does not permit of exteriorization because of a short, fixed mesentery; occasionally it is indicated in cases of external strangulated hernia.

Strangulation Hernia: The treatment of strangulated inguinal hernia ordinarily offers no technical difficulties other than those that occur with any strangulation.

In strangulated femoral hernia an incision over the femoral canal is often inadequate,

making reduction difficult. The frequency of a strangulated Richter's Hernia or a "ring" necrosis due to a tight neck, makes reduction hazardous because of the danger of producing a perforation. Eliason recommends combining an incision over the inguinal canal with a second incision over the sac. By extending the inguinal incision through the transversalis fascia and Poupart's ligament one is able to easily expose the intra-abdominal neck of the sac, thus lessening the dangers of rupture of the bowel.

LOWERING THE MORTALITY

Irreducible Intussusception: The occasional difficulty in reducing the last few inches of intussuscepted bowel is well known. When the intussusception is irreducible, any operation that involves opening the affected portion of bowel, or any short circuiting operation that leaves the unreduced intussusception in the abdomen is definitely contraindicated. Incision of a tight neck or resection are liable to result in a fatal peritonitis, and most operations such as enterostomy or ileocolostomy, that do not attack the unreduced bowel, invite the danger of gangrene of the bowel.

Since most cases of intussusception occur in very young children, resection with immediate anastomosis, even though it be attended by a high mortality is indicated in the irreducible cases in preference to any exteriorization method. The method sometimes used by nature to cure cases of irreducible intussusception, namely glueing about the neck and spontaneous extrusion of the gangrenous bowel, serves as the principle of the operation advocated by Montgomery. He fixes the irreducible part with a row of silk sutures about the neck and then short circuits the entire area by means of an ileocolostomy.[5]

Volvulus: After reduction of a volvulus of the sigmoid, a caecostomy preferably of the two-stage type is usually indicated. After reduction of the volvulus all raw surfaces are covered to prevent a recurrence and a tube is passed into the rectum and manipulated by the operator so as to pass the rectosigmoid juncture. If the sigmoid is non-

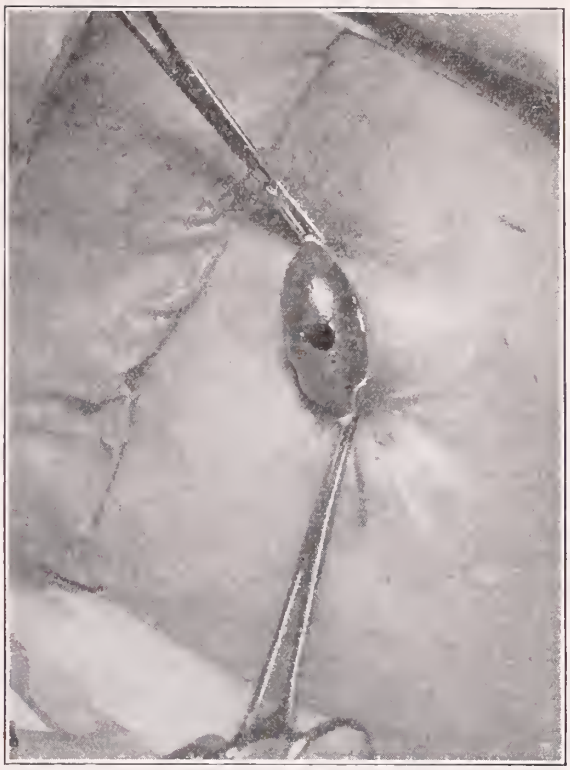

Fig. 4. "Blind" Caecostomy for acute obstruction of the distal colon may be performed without the introduction of any stitches. The above is a photograph of the case described in illustration No. 3 where a two-stage caecostomy had been performed. The caecum was enormously distended and thinned out, and the introduction of stitches to hold the caecum in place would have resulted in leakage. The caecum was held in place by means of Allis clamps which were applied in such a way that the skin and subcutaneous fat were interposed between the bite of the clamps and the frail wall of the caecum. Eight hours later the caecum was opened by means of a cautery puncture.

viable a Rankin "obstructive" resection combined with a two-stage caecostomy is frequently the most satisfactory surgical procedure. A volvulus of any other portion of the intestinal tract is to be treated upon the same general principles as has been outlined for the surgical treatment of volvulus of the sigmoid.

Carcinoma of Colon: The "ring" carcinoma of the distal colon is a frequent cause of intestinal obstruction in adults. In the presence of a competent ileocaecal valve there results considerable distention of the colon proximal to the obstruction, the most marked distention usually occurring in the caecum. If the obstruction does not respond to a saline enema administered in a knee-chest position, decompression by means of a two-

stage caecostomy is to be performed, to be followed in two weeks by a Rankin–Mikulicz resection of the involved portion of bowel. Fig. 4.

Paralytic Ileus: The paralytic ileus that almost immediately follows a laparotomy is due to reflex splanchnic nerve inhibition of intestinal motility. The paralytic ileus that is secondary to a mechanical obstruction is usually due to excessive stretching of the intestinal musculature. The cause of the paralytic ileus of peritonitis is apparently quite complex and such factors as reflex splanchnic nerve inhibition, distention, plastic exudate between the loops of bowel, dysfunction of the myenteric plexus, and toxic paralysis of the splanchnic vasoconstrictor fibers seem to enter into its production.

The treatment of all three forms of paralytic ileus is essentially non-surgical and consists not only in the treatment of distention and its secondary effects but also in the prophylaxis of distention. The most important measures are: withholding all food, deflation of the small bowel by duodenal intubation with suction, deflation of the colon, morphine and pitressin to increase the intestinal tone, heat to the abdomen and replacement therapy. Intravenous injections of hypertonic saline solution and intra-dural injections of novocaine are often indicated in the non-peritonitic types of paralytic ileus (paralytic ileus of surgical trauma and the paralytic ileus of advanced mechanical obstructions) because they are quite effective in stimulating the propulsive motility of the intestine.

In the paralytic ileus of peritonitis there occurs an unusually resistant "paralysis" of the small bowel, and one should try to take the load off of the gut by decreasing in every way its need for transporting fluids and gases. This is accomplished by immediate avoidance of all food, by *early* duodenal and colonic intubation and the *early* administration of morphine. Once excessive distention has occurred in peritonitis, nothing apparently seems to be able to overcome it. Under these conditions attempts to stimulate the propulsive motility of the intestine by means of cathartics, enemas, pituitrin, eserine, hypertonic saline solution and spinal anaesthesia are futile and undoubtedly harmful. The successful treatment of the paralytic ileus of peritonitis then resolves itself into an early avoidance of the generalized, excessive distention that usually presages a fatal outcome.[3]

Since most cases of peritonitis start in the pelvis, there occurs early an "ileus duplex" due to a localized inhibition of function of the pelvic colon and of one or several loops of ileum lying in the pelvis. Hence it is that early deflation of the colon by means of colon tube suction siphonage as well as early deflation of the small bowel by duodenal tube suction siphonage are so often effective in the treatment of a beginning peritonitis.[1]

SUPPORTIVE THERAPY

So much has been written about the specific value of sodium chloride solutions in overcoming the effects of dehydration and dechlorination in certain cases of intestinal obstruction, especially the higher obstructions, that a detailed discussion of this phase of treatment will be dispensed with. Some points about the use of saline solutions should however be emphasized. The first is the recognition of the importance of the stimulating effect of the normal blood chloride content upon the intestinal musculature. A quantitative reduction in the sodium chloride content of the blood lessens the tone and motility of the intestine.

Excessive amounts of saline solutions should not be administered after the urinary output has been brought up to 1500 cc in twenty-four hours, because they are liable to cause a reduction in the colloid osmotic tension of the blood plasma with a resulting depletion of the blood.

Enterostomy, duodenal intubation and the second stage of the Mikulicz operation often cause a considerable loss of intestinal juices, a loss which must be compensated by the subcutaneous or intravenous introduction of Hartman's solution.

When operating for intestinal obstruction under spinal anaesthesia one should counteract the fall in blood pressure that results from the use of this anaesthetic by employing, during the operation, a continuous venoclysis of normal saline solution. Ephedrine should not be used to counteract the

drop in blood pressure, because of its inhibitory effect upon bowel motility.

The importance of immediately withholding all food when a case is suspected of being an intestinal obstruction, is probably not sufficiently recognized.

Hot applications to the abdomen alleviate the symptoms of distention and in all probability they improve the splanchnic circulation*.

Morphine is of value in the treatment of distention because it increases principally the intestinal tonus and rythmic movements, two types of intestinal contractions that are first affected by the local circulatory damage resulting from increased intra-intestinal pressure**. Morphine is of further value in the treatment of distention because it apparently diminishes the secretion of digestive juices. This decrease in the amount of intestinal secretion is most likely due to an inhibitory action of morphine upon the secretory glands as well as to its stimulating action upon the tonus and segmentation movements, an effect which favors the re-absorption of secreted fluids. Any deleterious effect that might result from the tendency of morphine to produce hypertonus of the gastrointestinal sphincters should be effectively overcome by means of duodenal and colonic tube deflations**. Atropine should not be added to the morphine because it depresses the accelerator vagus and pelvic nerves.

The colon may be decompressed by passing a rectal tube through a proctoscope or by passing during operation a tube into the rectum which is to be manipulated by means of the hand in the abdomen beyond "O'Beirne's Physiological Sphincter" at the recto-sigmoid juncture. Suction is applied to the tube after it has been introduced. Fig. 2.

Hypertonic saline solution is particularly valuable in stimulating the propulsive motility of the bowel following operation for the relief of a mechanical obstruction. Because of its effect upon the motility of the bowel hypertonic salt solution should not be used in treating the early stages of the paralytic ileus of peritonitis because inhibition of intestinal function apparently is a defensive mechanism during this stage. In the later stages of peritonitis, hypertonic saline solution does not have any effect upon the propulsive motility of the bowel, and its use is probably contraindicated.[3]

The use of pituitrin and eserine to stimulate propulsive motility of the intestine after operation for intestinal obstruction has been questioned. These drugs are quite uncertain in their action on the bowel, and frequently the increased motility that results from their use is followed by greater relaxation of the bowel. According to Alton Ochsner the occasional brilliant results reported from the

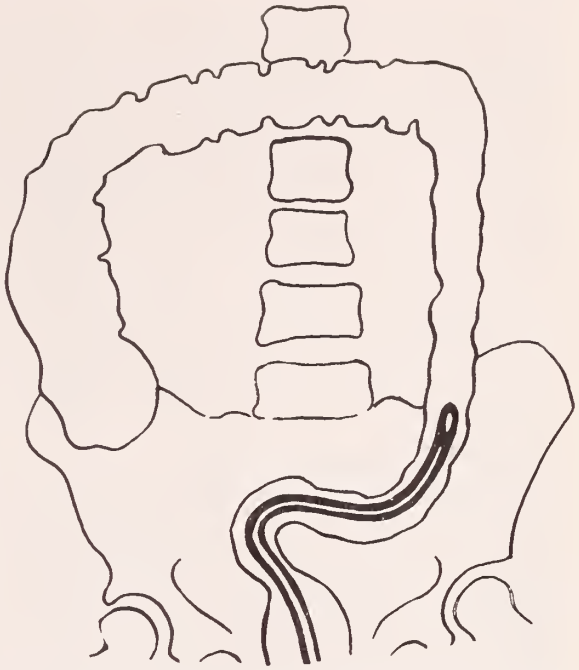

Fig. 2. To show the value of colon decompression as part of the treatment of "ileus duplex", which is a not infrequent complication in certain cases of ruptured gangrenous appendicitis. The introduction of a rectal tube beyond the recto-sigmoid is also valuable in cases of reducible volvulus of the sigmoid with viable gut.

In the cases of ileus duplex the localized inhibition of function of the pelvic colon results in a localized obstruction which can be overcome by passing a small colon tube through a proctoscope well into the sigmoid. The inhibited coils of ileum lying in the pelvis in these cases can often be satisfactorily decompressed by duodenal tube suction siphonage.

* According to Muller and Kast, the application of heat to the abdomen produces a peripheral vasodilatation and a splanchnic vasoconstriction, which they call the "splanchoperipheral balance."

** "As an aid in treatment and prognosis, frequent auscultation of the abdomen is recommended during the morphine treatment of abdominal distention. The presence of gas and liquid in a distended bowel gives a characteristic tinkling sound during bowel activity which is totally different from the more muffled sounds of the normally functioning gut." (Thos. G. Orr.)

use of pituitrin were probably due to its stimulating action on the large bowel in cases of ordinary gaseous distention of the colon. Pitressin apparently is of greater value in that its action does not seem to be followed by any relaxation of the bowel. The anti-diuretic effect of pitressin favors the retention of fluids, particularly when they are administered by the intravenous route. Pituitrin and eserine are probably contraindicated in the treatment of the paralytic ileus of peritonitis because of their uncertain action and because frequently they seem to aggravate the distention.

Repeated irritating enemas are to be avoided before a mechanical obstruction has been released, because, by initiating various entero-colic reflexes and reversed intestinal gradients, they are apt to aggravate the oedema and spasm at the site of the obstruction. Enemas are often ineffectual in the treatment of various forms of paralytic ileus and often they seem to aggravate the distention.

The administration of fluids per rectum is to be avoided especially in the obstructions of the lower ileum and colon and in the various forms of paralytic ileus. By introducing fluids into the caecum and ascending colon where normally the intestinal contents are being dehydrated, one is encouraging fermentation, with the result that there occurs besides an increased production of gas, a flattening or reversal of the intestinal gradient of forces.

Blood transfusions are of value in cases of strangulation that are associated with the loss of considerable amounts of blood into the bowel and peritoneal cavity.

The administration of dextrose is particularly useful in combating starvation effects of the more advanced stages of intestinal obstruction. According to Quigley dextrose apparently does not exert an inhibitory effect upon bowel motility.

FLAT X-RAY FILMS

Flat x-ray films are of value not only in the diagnosis of intestinal obstruction, but also frequently they aid in determining the location of the obstruction; furthermore they are of great usefulness in deciding whether the obstruction is complete or incomplete. In cases of doubt about a gas shadow being due to distended large or small bowel, one will frequently find the barium enema of great value. These various diagnostic aids of the x-ray are well recognized but their use in determining the progress of treatment has not been sufficiently stressed.

Fig. 1. Value of the flat film to show the occasional failure of the duodenal tube to properly deflate the small bowel. This film was taken after the onset of an acute obstruction in a primipara. Besides showing the characteristic step-ladder arrangement of the distended small bowel, it shows an improper position of the indwelling Levine tube. A tube in this position cannot be expected to deflate the small bowel.

The demonstration by means of the x-ray of gas in the colon that was shown to be previously empty or that had been emptied by means of an enema, indicates not only that a mechanical obstruction of the small bowel is not complete but it may indicate that our treatment of a complete obstruction is progressing satisfactorily.

Herring bone shadows or ribbed effects in a flat film that previously showed none, indicate that an obstruction in the small intestine has been at least partially overcome, for they are evidence of a return of intestinal tone to a dilated jejunum or upper ileum.

Frequently in delayed cases of complete mechanical obstruction of the small bowel the intestine becomes paralyzed from overdistention and it produces abdominal tenderness and auscultatory findings that simulate the "silent" abdomen of the paralytic ileus of peritonitis. The demonstration of gas in the colon by means of the x-ray is of aid in the differential diagnosis because gas is usually present in the colon in general peritonitis and it is absent in complete mechanical obstruction of the small bowel especially after the administration of an enema.

Whenever duodenal tube suction siphonage does not appear to be decompressing the small bowel satisfactorily, an x-ray examination should be made to determine the location of the tube. Not infrequently the tube will be found curled up in the stomach, with the end pointing toward the cardia. (See Fig. 1.)

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Common Duct Obstruction; With Case Report

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THE pathology of common duct obstruction is of the outmost importance due to the location of the common duct and its physiological and anatomical relation to the liver. Whether the cause of obstruction is stone, stricture, neoplasm, or what not, it interferes with the essential functions of a vital organ, the liver, and as such should receive the most painstaking and thorough consideration.

As to the causes of common duct obstruction they may best be classified as follows:

I. Obstruction inside of duct.
   - A. Gallstones—inspissated bile
   - B. Parasites
     - (a) Hydrated cysts
     - (b) Distomata
     - (c) Ascarides
   - C. Blood clots

II. Obstruction outside of duct.
   - A. Neoplasms of the head of pancreas
   - B. Chronic pancreatitis
   - C. Tumors of any of adjacent organs
     - (a) Liver
     - (b) Pancreas
     - (c) Duodenum, etc.
   - D. Movable tumor of right kidney
   - E. Enlarged portal lymph glands
   - F. Peritoneal adhesions
   - G. Anomalous vessel crossing common duct
   - H. Aneurysm of hepatic artery

III. Obstruction in wall of duct.
   - A. Carcinoma of bile ducts
   - B. Kinking of ducts
   - C. Cholangitis
   - D. Catarrhal inflammation of mucous membrane of pancreas or duodenum and extending to or involving ampulla of Vater.
   - E. Stricture of ducts.
     - (a) Operative trauma
     - (b) Cholangitis obliterans.
   - F. Congenital obliteration of ducts.

In the diagnosis of common duct obstruction a thorough history still offers a most im-

portant clue in spite of recent laboratory aids and diagnostic refinements.

Common duct obstruction, according to Deaver, if fairly complete is always accompanied by jaundice, which may easily be differentiated from intrahepatic and hemolytic jaundice, acute yellow atrophy of the liver, cirrhosis and other diffuse diseases of the liver as well as other conditions accompanied by jaundice like syphillis and progressive pernicious anemia, by van den Bergh test direct and clay colored stools or rather acholic stools, as demonstrated by negative stercobilin, as clay colored stools significant of high fat content may also be present in other conditions, such as pancreatic insufficiency.

Diagnosis of the cause of common duct obstruction on the other hand is often difficult, especially in cases of silent stone, and at times first made on the operating table. Even then microscopical section may be the only certain method of differentiation between some causes of obstruction such as chronic pancreatitis and beginning carcinoma of the head of the pancreas. However, here differentiation is only important from a prognostic standpoint and is rarely resorted to due to risk of hemorrhage from the pancreas and to the fact that the treatment is generally the same in both cases.

Pain and jaundice are characteristic symptoms of common duct obstruction. The pain, colicky in character, is in the region of the liver, often accompanied by acute gastric disturbance at the time of the paroxysm and preceded by years of indigestion and vague dyspeptic symptoms such as belching, gas, nausea, vomiting, etc.

The jaundice of common duct obstruction is of two types. First, there is the jaundice ushered in by colic.

This type of jaundice is intermittent, fluctuating in type and is generally indicative of intermittent obstruction to the passage of bile from the liver to the intestine and its two principal causes, according to Deaver, are: common duct stone and chronic pancreatitis. This may or may not be associated with ague-like paroxysms of chills, fever and sweating (so-called Charcot's syndrome) according to the amount of infection present in the liver and bile passages.

This syndrome is generally characteristic of ball valve stone in the ampulla of Vater or sometime in common duct proper.

According to Cook, jaundice which appears suddenly after an attack of abdominal pain and disappears rapidly is characteristic of stone in the common duct. All common duct stones are most always gallbladder stones.

The clinical findings in this type of jaundice are positive duodenal drainage, the excess of urobilin in the urine, continuous or occasional stercobilin in the feces, normal or only slight enlargement of the liver, occasional enlargement of the spleen, absence of distention of the gallbladder and absence of ascites.

TYPE II

The second type of jaundice is more gradual in onset and is generally caused by carcinoma of the pancreas or bile ducts. This type of jaundice is painless and progressive, advancing in almost imperceptible degrees. It is often accompanied by severe, almost unbearable general pruritus and diarrhea, and followed by ascites and loss of weight and strength.

The clinical findings are enlarged palpable gallbladder (Courvoisier's law (true in 90 to 95% of cases) acholic stools, urine loaded with bile and an ascending icteric curve as shown by repeated van den Bergh tests.

Prognosis is good in non-malignant cases if obstruction can be removed and continuity of biliary tract established, otherwise often hopeless.

The treatment of common duct obstruction is with few exceptions surgical. Medical and palliative treatment may be used in cases of advanced malignancy, or when operation is refused or contraindicated by other conditions.

In the treatment of obstruction of the common duct the first consideration must be given to the altered physiology accompanying the lesion. This implies careful management of possible renal and hepatic insufficiency, and of alterations in the coagulation ability of the blood before any surgery can be undertaken to correct the condition. By means of studies of the blood, renal and hepatic function, the patient's condition may be

so indexed that the time and extent of safe surgical procedure may be accurately determined.

The van den Bergh test enables one to observe the quantity of bile circulating in the blood from day to day and thus to delay operative measures when in the face of an ascending icteric curve, due to the risk of postoperative bleeding or hepatic dysfunction.

Preoperative preparations include high carbohydrate diet, forced fluids, blood transfusions, intravenous glucose, and calcium if needed for improved coagulation of the blood.

It has been shown that in certain cases with an abnormally long coagulation time, this could be reduced to normal for a period of eight hours by coagulants or blood transfusions. Such patients have been operated on successfully by studying their coagulation time at different times of the day and operating at the opportune moment.

The surgical treatment will vary in accordance with the pathology causing the obstruction and its ideal is an uninterrupted passage of bile from the liver to the intestine. The operative procedures necessary to accomplish this are often varied and ingenious, and those dealing with the restoration of the continuity of the main bile channels following stricture often tax the resourcefulness of the most tried of surgeons.

In case of dilated common duct, incision, exploration of duct, removal of cause of obstruction and drainage by T tube of Kehr is the usual procedure.

In ruling out common duct stone when stone is not palpable, the duct should be incised and if possible digitally explored, in the presence of convincing clinical evidence of obstruction by stone, such as intermittent attacks of chills, fever and jaundice, dilated duct or much thickening of the head of the pancreas. The removal of stones lodged in the ampulla of Vater is often difficult and at times the operation of hepaticolithotripsy (crushing of stone by forceps inside of ampulla) may have to be used or only as a last resort transduodenal choledochostomy.

Reconstruction of duct following stricture is often quite difficult and at times impossible.

In dealing with a long narrow stricture of the duct it is often possible to incise the duct longitudinally and suture it transversely after the Mikulicz's operation on the pylorus. This is drained by a T tube or L-shaped tube as recommended by Horgan, inserted either above or below point of suture. In some cases where good mucous membranes is available direct end-to-end anastomosis over a T tube may give good results; in others the anastomosis of the upper wide portion of the injured duct to the duodenum or stomach by end-to-side junction may be preferable.

In the presence of irreparable injury of ducts or irremovable obstruction such as by carcinoma of the head of the pancreas, one of the short circuiting operations may be used such as cholecystogastrostomy, cholesytoduodenostomy, choledochogastrostomy, or choledochoduodenostomy. This is a palliative procedure designed to carry the bile into the upper gastrointestinal tract and often giving permanent results.

In cases of extensive obliteration of common duct frequently following traumatic stricture, the establishment of a complete external biliary fistula and its later (three or four months) transplantation into duodenum or stomach is the only procedure of choice.

The T tube draining the common duct following removal of stone is generally, first, clamped at the end of the second week when considerable bile is usually entering the duodenum.

The clamping time is gradually increased each day until by the end of the fourth week the tube can be clamped all the time with perfect comfort to the patient. The tube is then removed, except in cases of deep jaundice or severe infection of liver and bile ducts when prolonged drainage for months or even a year may be indicated.

POSTOPERATIVE COMPLICATIONS

The most frequent complications are hemorrhage, hepatic and renal insufficiency, peritonitis and pneumonia.

Of these hepatic insufficiency or so-called liver "shock" is probably the least understood. Ravdin explains it by the fact that there is an increase in the vasodepressor substance in the liver following common duct obstruction, as shown experimentally by an

Fig. 1. X-ray taken by injection of sodium iodide in drainage tube showing fluorescent media in common and hepatic ducts and drainage tube in stump of cystic duct.

increase in both histamine and choline over that found in normal liver substance. This in addition to cirrhosis of the liver produced by prolonged obstruction and stasis of bile will result in serious impairment of liver function. Most of the complications can be minimized by thorough pre- and postoperative study and care.

The case reported below is of interest as a unique case of common duct obstruction relieved by a choledocho-gastric fistula of spontaneous origin caused by drainage tube perforating through walls of stump of cystic duct into adjacent part of stomach. Figures 1, 2, and 3.

Fig. 2. X-ray taken after barium meal showing spontaneous anastomosis between biliary tract and pyloric portion of stomach.

Fig. 3. X-ray after barium meal showing location of anastomosis.

Biliary fistulas of spontaneous origin between biliary tract and parts of gastrointestinal tract are relatively rare.

Cases have been reported in the literature by Mayo, Robson, Rankin, Judd, and others. Diagnosis in most cases has been made either postmortem or on the operating table and occasionally by x-ray revealing barium in bile ducts. According to Judd, internal biliary fistulas are rarely diagnosed during clinical examination and are usually an accidental finding at the operating table.

Jopson reported a case of cholecystoduodenal fistula, diagnosis made evident by patient's vomiting up of gallstones after an attack of cholecystitis.

As a rule fistulas have been caused by a biliary concrement eroding wall of duct and forcing its way into adjacent part of gastrointestinal tract.

Occasionally fistulas have come about by peptic ulcer perforating into biliary tract and more rarely by carcinoma of either tract.

CASE REPORT

In January, 1931, a young man, aged 31, came up to the office complaining of attacks of upper abdominal pain accompanied by jaundice, chills and fever.

Onset of present complaint is dated back to August, 1919. At that time patient was apparently in good health until one Friday night in the latter part of August when he suddenly developed an attack of sharp colicky pain over upper abdomen radiating to right shoulder blade and followed by jaundice, chills and fever. The attending physician gave him a hypodermic for relief and when attack recurred next day he was ordered to the hospital and operated on the following Tuesday. Following this operation, cholecystostomy, he immediately felt better. He drained bile for two weeks and was then in good health until 1927. He then again began to have attacks of upper abdominal pain accompanied by jaundice, chills and fever. Attacks at first mild, gradually became quite severe and more frequent.

In 1928 he was operated on again and cholecystectomy was done with no change in his symptoms.

Past history and family history were otherwise negative.

Physical examination revealed adult male, aged 31, well developed and somewhat undernourished, but not otherwise acutely ill. The skin and sclerae were definitely jaundiced.

Temperature 98, pulse 90, Res. 18, blood pressure 120/80. Examination of heart and lungs was negative. Examination of abdomen revealed operative scars over right upper quadrant. There was no rigidity but distinct tenderness was elicited over right upper abdomen. There was no apparent enlargement of liver or spleen and there were no other tumors palpable. Reflexes were normal. The stools were clay colored and urine was negative except for the presence of bile.

Red blood count 3,550,000 and white blood count 6,600. Van den Bergh test was direct. It was quite evident that we were dealing with a case of common duct obstruction caused most probably by a stone or stricture, and an exploratory was indicated.

After preoperative preparation and repeated icteric index tests showed icteren curve on the down grade, exploratory was performed February 26. This revealed numerous dense adhesions binding down all structures and making it very difficult to isolate common duct. Dilated stump of cystic duct was finally located and drained.

Following this, the general condition of patient began to improve and jaundice began to clear up promptly.

During the four weeks of drainage, the effects of different cholagogues on the secretion of bile was observed and found that bile reinjected through duodenal tube was the most efficient cholagogue.

The second attempt on March 26 to get at the cause of the obstruction was cut short by encountering a perihepatic abscess recently formed at the site of the drainage tube. Abscess was drained and cleared up satisfactorily in the course of two weeks.

The third and last attempt to get at the common duct on June 10, 1931, was also futile due to density of adhesion plastering down colon, liver and other structures in one mass. Drainage tube was then allowed to remain in cystic duct and abdomen closed with drainage. Patient had a stormy convalescence with a complicating fecal fistula which finally cleared up.

The only course left was to allow the formation of an external biliary fistula and try and transplant it later into the upper gastro-intestinal tract. However, some weeks after last operation, x-rays confirmed what was becoming quite evident, patient was passing stomach contents through drainage tube, namely the formation of a spontaneous choledochogastrostomy. Nature did for the patient what surgery failed to do. The tube was then clamped a few minutes each day, gradually increasing the clamping time so that after a while the tube was clamped all the time with no discomfort to patient. The tube was then removed and wound allowed to close.

The Roentgenological Diagnosis of Congenital Dislocation of the Hip*

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CONGENITAL dislocation of the hip is an important problem for the orthopedic surgeon and for the radiologist. There is considerable controversy regarding the etiology of this condition and regarding its treatment. There should be definite criteria established, however, to aid in the diagnosis. It used to be taught that it was best to wait until the child was three to five years old before commencing treatment either by open reduction or by manipulative measures. One reason for this was the difficulty in keeping a young child clean in retentive apparatus and another, that diagnosis before the child walked was diffi-

* Read before the Radiological Section of the State Medical Society of Wisconsin, Madison, Wisconsin.

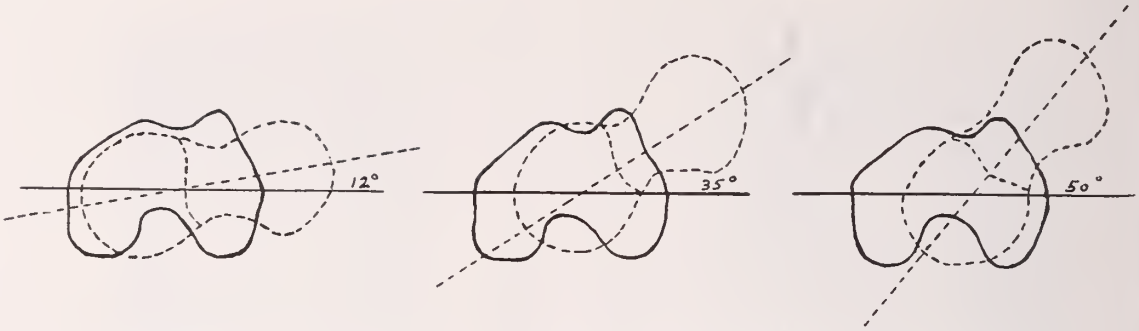

Fig. 1. Diagrammatic representation of the average anterior inclination of the femoral neck; 12° in the normal adult; 35° in the normal child; 50° in some cases of congenital dislocation.

cult. But now the orthopedic surgeon is recognizing the deformity and instituting treatment earlier, and he is looking to the radiologist to confirm his early diagnosis.

ANATOMY

In the infant the osseous portions of the three component parts of the innominate bone are distinct and widely separated. The acetabulum is just forming and the osseous center for the head of the femur has not yet appeared. The latter can be recognized at about six to nine months and forms an important landmark in locating the position of the head. Normally a line drawn through the center of the two acetabula should pass above the femoral neck and after the epiphysis appears its center should be below this line.

There is a point regarding the anatomy of the femur that is of considerable x-ray interest and that is the angle that the neck of the femur makes with the coronal plane of the body, in other words, the angle of forward inclination of the femoral neck. Everybody is familiar with the angle that the neck of the femur makes with the shaft, the angle that is decreased in coxa vara, but is apt to forget that the neck of the femur runs in a forward direction as well as upwards and inwards. Normally in the adult this angle is about twelve degrees, in the normal child it may be as much as thirty-five degrees. (Fig. 1) As the child grows older this angle diminishes. In some congenitally dislocated femora, fifty, sixty, or more degrees of "anterior tortion" may occur. The tortion component of the deformity has long been recognized and corrected by Lorenz[1], Hibbs[2], and numerous others. The operation of derotation has had waves of popularity at various times. The recent articles by Krida [3,4] have renewed the interest in tortion and derotation. We know that some properly reduced hips redislocate within two years, usually into the anterior position. Analysis of these cases shows an increase in the angle of anterior inclination, sometimes to an extreme degree. Some of these hips which have been again reduced have stayed in, when the angle has been changed to approximately the normal. Simple manual osteoclasis of the atrophic bone is all that is necessary. This is easily accomplished at the time of changing the first or second cast. Published results after derotation are too recent to be conclusive, but there is a growing feeling that the manouver is justified in many cases.

When a plate of a hip of a young child is taken with the leg in a true AP position with the patella directed forwards, the neck of the femur is directed mesially and quite a bit anteriorly. The roentgenogram of the hip taken in this position, due to the superimposition of the anteriorly directed neck on the part beneath gives the impression of a short distorted neck. A roentgenogram of the same hip taken with the leg in inward rotation reveals the true form of the neck.

In a congenitally dislocated hip some increase of the normal amount of anterior tortion is usually present so that the neck and the head of the femur appear to be much more underdeveloped than they really are. Therefore, in examination of the hips of young children it is a good plan to get one plate with the legs in an anteroposterior position and another plate with them in in-

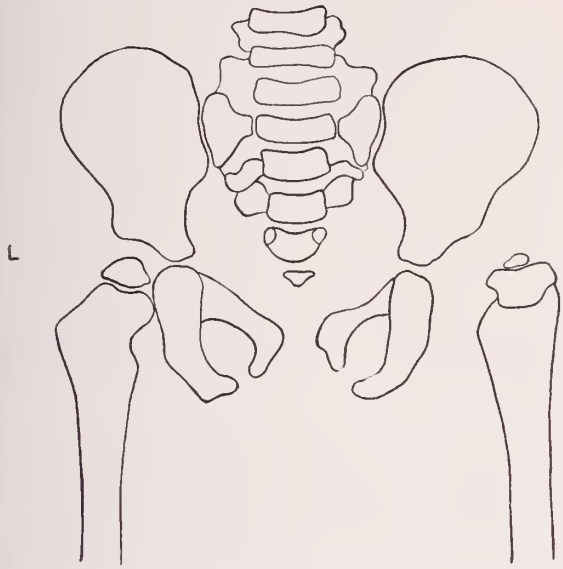

Fig. 2. Tracing of a congenitally dislocated hip taken with the legs in an anterior position, showing:
1. Upward and outward displacement of the femur.
2. Increased obliquity of the roof of the acetabulum.
3. Lack of development of the head.
4. Break in Shenton's line.

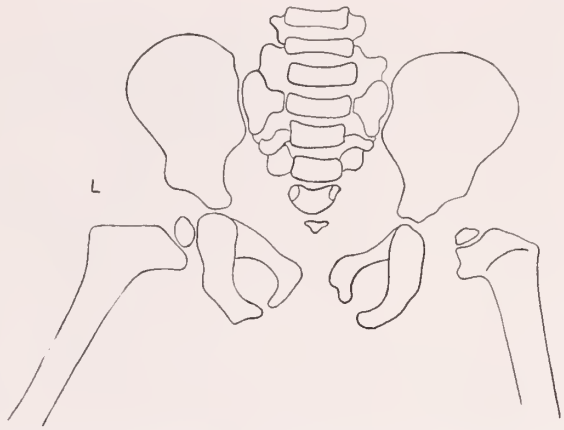

Fig. 3. Tracing of the same hip taken with the legs inwardly rotated. A more correct representation of the contour of the neck is obtained in this position. The neck of the dislocated right femur does not appear as long as the normal on the left. This is due both to lack of development and to the increased anterior inclination of the neck.

ternal rotation. The greater the discrepancy in the length of the femoral neck in these two plates, the greater is the amount of anterior tortion.

Fluoroscopy is really the best method for determining the amount of anterior tortion. With the plates taken in two positions as described, one can tell only whether or not anterior tortion is present and whether the amount is little or great. The fluoroscopic method was described by Stewart and Karshner[5] and later by Rogers[6]. The patient is placed on the table face down and the screen centered over the affected hip. The leg is bent to a right angle at the knee and is then externally rotated by turning it towards the other leg. This rotation is continued until the shadow of the head falls directly in line with the shaft. With a slight correction for the laxity of the knee joint, the angle made by the table and the leg represents the amount of anterior tortion present. The method is simple and can be done quickly.

DIAGNOSIS

The mother is often the first to notice that something is wrong with a child's hip. The doctor to whom she goes should not dismiss her fears as groundless and assure her that the asymmetry will be outgrown, unless he is certain that there is not a congenital dislocation of the hip present. It is possible to make a diagnosis of this condition on clinical evidence in early cases. In the unilateral case one leg is shorter and smaller than the other and lies in external rotation. The trochanter is more prominent on the affected side. The gluteal and inguinal folds and the gluteal cleft are asymmetrical. Palpation shows the head to be absent from its normal position under the femoral artery. The joint feels abnormally loose, with increased mobility in adduction and external rotation. These findings demand an x-ray for verification. Experience is required in reading the plates.

Routine plates of infants would be desirable if they could be obtained. X-rays should certainly be taken of all babies in families in which congenital deformities have occurred, for the hereditary nature of such anomalies is generally recognized. The plate of a small infant is sometimes difficult to interpret.

Roentgen Findings: The x-ray signs which are characteristic of congenital dislocation are as follows: (See Figs. 2 and 3.)

1. The upper portion of the femur is higher than the normal in relation to the acetabulum. The position of the femur may be difficult to estimate particularly if the condition is bilateral but the highest portion of the femoral neck should be be-

low a line drawn through the centers of the acetabula. When the head is formed, the central portion of the acetabulum should be about opposite the middle portion of the upper half of the developing head.

2. The distance from the femur to its socket is increased. This is best seen after the center for the head appears. There is a measurement that is helpful in following the effect of treatment. The distance from the lower inner portion of the iliac bone to the nearest portion of the head is normally less than twenty millimeters, usually it is in the neighborhood of fifteen to seventeen millimeters. This distance does not change very much as the joint develops and stays about the same both in young and older children. If the distance be over twenty millimeters, the hip is usually dislocated.

3. There is a change in the obliquity of the roof of the acetabulum. Normally where the descending edge of the ileum meets the acetabulum there is a well defined lip overhanging the head of the femur. From this lip the roof of the acetabulum slopes downwards and inwards. In congenitally dislocated hips there is considerable increase in the obliquity of the upper surface of the joint and a flattening of the lip previously mentioned. In addition to the increased obliquity the roof of the acetabulum on the dislocated side often shows a peculiarly wavy, serrated appearance due to its slow development.

4. There is a lack of normal development of the femur and innominate bone on the affected side. This sign is best seen after the sixth or eighth month when the head of the femur appears. The osseous center for the head on the affected side is much less developed than the normal one and is late in appearing. Sometimes one can see that the gap between the pubis and the ischium is greater on the dislocated side. These signs may be seen before the child has done very much walking. In older cases all bony structures of the affected leg are smaller.

5. There is an increase in the normal amount of anterior inclination of the neck of the femur. This is demonstrated, as mentioned before, by noting an abnormal amount of difference in the length of the femoral neck in plates taken in the antero-posterior position and in inward rotation, and also by the use of the fluoroscope. The fluoroscopic method is most satisfactory and it is possible to measure the amount of tortion with a fair degree of accuracy.

6. There is the familiar Shenton's line. The upper margin of the obturator foramen and the lower margin of the neck of the femur should be in the same curved line when the hip is inwardly rotated. In dislocated hips there is a lack of continuity of this curve.

Technique: In taking the plates, do not use too high a voltage on these cases. For an infant a voltage of forty-five P. K. V. and for a child from four to five years about fifty P. K. V. is sufficient. The use of high milliamperage will permit of a short exposure and thus avoid movement In getting roentgenograms through a cast there is a tendency to over penetrate. The technician steps up the voltage too much to allow for the cast. Better plates will result if the voltage is stepped up four to five kilovolts and the time increased about fifty to seventy-five per cent. The cast will keep the child quiet so that movement will not occur.

The differential diagnosis of this condition is usually not difficult. However, a young child will sometimes have an effusion into the joint which is extensive enough to dislocate the head. But to distinguish this from a congenital case, the development of the two sides is the same and there is no increased obliquity of the roof of the acetabulum. The condition is frequently present as a subluxation or partial dislocation at birth, the actual dislocation being completed during the first year of life as the result of musuclar action. A hip at birth may appear perfectly normal and yet dislocate more or less spontaneously before the child walks. On the other hand a hip may be dislocated and go back into the joint without active treatment.

As the treatment progresses the patient often comes back to you for re-examination. The orthopedist wants to know about the position of the head; is it well in its socket or is it riding up. The measurements men-

tioned previously come in useful as a comparison with the good side and with measurements previously made in the dislocated side. The center of the head should not be above a line drawn through the acetabulum nor the distance from the head to the acetabulum too great. The appearance after reduction and application of the cast varies according to whether the child was put up in the Lorenz position of external rotation, the so-called frog position, or in the position of internal rotation. The externally rotated femurs seem to be higher than those put up in internal rotation. Even when the hip is perfectly reduced clinically, the head will often seem to be out from its socket but should not be above it by the roentgenogram. After reduction it takes several years of normal functioning for the previously dislocated hip to approach the normal in its appearance.

SUMMARY

In taking roentgenograms of children with suspected congenital dislocation, get plates with the legs both in the anteroposterior position and in the position of internal rotation. Do not use too high a voltage. The fluoroscope is of value in determining the degree of anterior tortion. The characteristic x-ray signs of congenital dislocation are:

1. Upward displacement of the femur.
2. Outward displacement of the femur.
3. Increased obliquity of the roof of the acetabulum.
4. Retardation of the development of the affected side.
5. Increase in the anterior tortion of the femoral neck.
6. A break in Shenton's line.

In following the course of treatment, the head of the femur should maintain its proper relationship to the acetabulum.

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Bilateral Paralysis of the Recurrent Laryngeal Nerve Following Thyroidectomy*

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THIS condition is fortunately rare, but its rarity is more than compensated for by the severity of symptoms. Dyspnea on the slightest exertion, inability to sleep for more than a few minutes at a time due to attacks of suffocation, and a hoarse, unpleasant, raucous voice are only some of the results. To have seen just one case is enough to justify in one's mind all the time and labor that has been spent in attempting to prevent and correct this condition.

A brief review of the anatomy and physiology of the larynx will aid in understanding the development of this condition. We are concerned only with the intrinsic musculature, i. e., that controlling the respiratory space and phonation. The rough diagram of the larynx is shown in Figure 1. The arytenoid cartilages act on a pivot at A. Rotation inward causing adduction of the cords and rotation outward causing abduction. The following muscles act on the arytenoids: the abductors consisting of one paired muscle, the posterior crico-arytenoids. Their

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Fig I

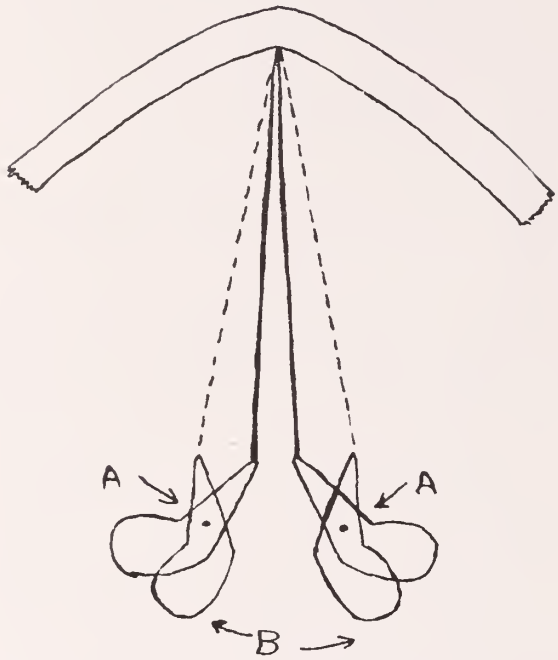
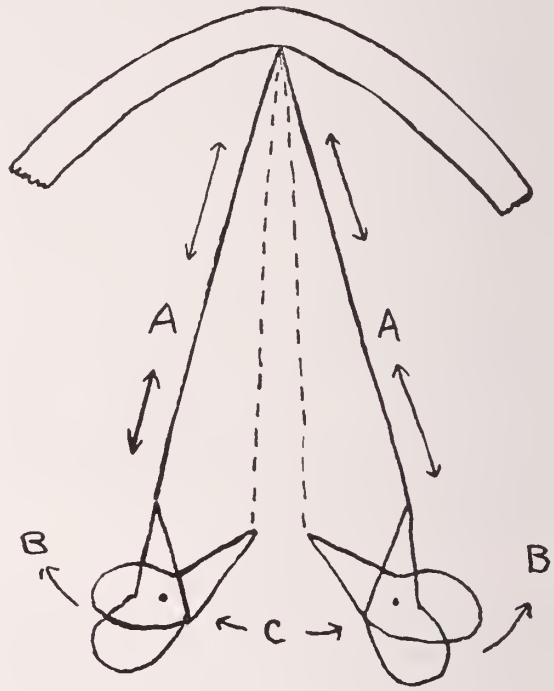


Fig II



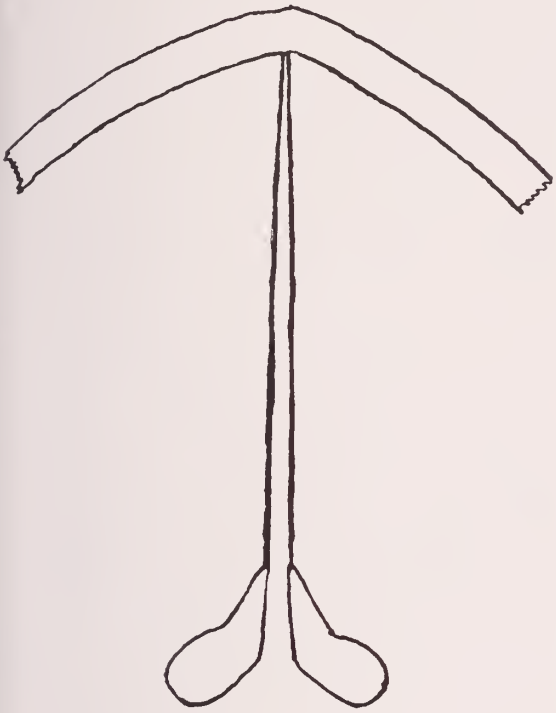
origin is on the posterior surface of the cricoid plate. The muscle extends upward and outward to insert on the posterior surface of the muscular process of the arytenoid. The action of this muscle is shown in B, Figure 1. The following muscles act as adductors: the thyro-arytenoids. These paired muscles are the actual vocal cords. Their origin is on the lower part of the inner surface of the thyroid alae near the midline. The insertion is on the tip of the vocal process of the arytenoid. Overlying this muscle is the white fibro-elastic band which is seen on direct or indirect examination as the vocal cord. Their action is to tense the vocal bands, see Fig. 2A.

The lateral crico-arytenoid has its origin on the superior border and outer part of the cricoid membrane. It extends upward and backward to insert on the outer surface of the muscular process of the arytenoid as in Figure 2B. The inter-arytenoid lies in the posterior commissure and is attached to the posterior surface of both muscular processes. See Fig. 2C

The action of these latter two muscles is to bring the cords into close approximation. These muscles are all innervated by the recurrent laryngeal nerve with the exception of the inter-arytenoids, which, according to Norland and Berlin, and Lahey, are innervated by the internal branch of the superior laryngeal with an occasional branch from the recurrent. There is another so-called intrinsic muscle, the crico-thyroid which is a paired muscle, its origin being in the superior surface and superior border of the cricoid ring. The insertion on the inner surface and inferior border of the alae and inferior cornu of the thyroid cartilage. Its action is to draw the anterior parts of the cricoid and thyroid toward one another. Since the arytenoids are attached to the cricoid ring this action lengthens and tenses the cords. This muscle is innervated by the external branch of the superior laryngeal and is not concerned in the recurrent laryngeal paralysis.

Dr. Felix Semon in 1881 stated that in all organic injuries to the recurrent laryngeal nerves in their central or peripheral fibers, the abductor fibers are first attacked. This is the so-called Semon's law and it is apparently an accurate observation concerning

Fig III



peripheral fibres but has not been substantiated concerning injuries or diseases of the medullary centers. In other words, any injury to the recurrent nerve will cause an abductor paralysis and the vocal cord will take up its position in the midline. A bilateral injury will cause both cords to assume a midline position as is illustrated in Figure 3. It has been believed that this midline position was primarily the result of an incomplete paralysis and that complete destruction or division of this nerve would cause the cord to fall in the so-called cadaveric position or midway between the abductor and the adductor positions. Recent investigation, such as the case report by Berlin and Lahey in which midline paralysis was present after the nerve had been completely severed; and also the fact that the inter-arytenoideus, a powerful adductor is innervated by the superior laryngeal nerve, has tended to throw doubt on the cadaveric position as the one of complete recurrent paralysis.

THEORIES OF CAUSATION

Theories of causation of midline paralysis are many, but essentially fall within three groups.

I. The demonstrated greater and muscular and nervous strength of the adductors subscribed to by Grabauer, Rosenbach, Dupuy, Krause and others.

II. The more primitive action of the adductors, (i. e., their action is more important to life in lower animals, keeping water and foreign bodies out of air passages during deglutition.) This hypothesis has been propounded by Negus and Hooper.

III. The separate innervation of inter-arytenoideus muscle. This innervation has only recently been demonstrated by Berlin and Lahey, and Nordland independently.

Whatever the etiology, it has been demonstrated clinically in hundreds of cases that interference with the recurrent laryngeal nerve function, whether due to trauma or organic disease, causes a paralysis of the abductor type and the cord takes a midline position, and that in bilateral paralysis both cords are approximated in the midline.

No accurate statistics have been found on the incidence of bilateral paralysis following thyroidectomy. Judd saw 12 cases in approximately 25,000 postoperative thyroidectomies. Statistics regarding postoperative unilateral paralysis are plentiful and varied, ranging from 1 to 35%. Judd stated approximately 5%, Kopp 1.7%. These last are the lowest figures that were found in the literature. The higher statistics of 28 to 35% are, of course, the results of old types of operation such as ligations and complete extirpation of lobes.

The theories as to the cause of injury to the nerves in operative work are as many as there are statistics of incidence. One fact, however, is practically unanimously agreed upon by writers on the subject and that is the importance of preexistent paralysis. Again, however, a wide range of statistics. Waugh stated 14%, Holt 6%, Reinhoff 5 to 10% of preoperative recurrent disorders in benign goitre. Mullen states that benign goitre never causes recurrent paralysis but admits that paralysis may be co-existent

with this condition. Of course, the incidence of paralysis in malignant diseases of the thyroid is higher. Obviously, with the frequency of preoperative involvement as high as these figures indicate, one of the most important methods of prevention of bilateral paralysis is the preoperative recognition of these lesions and the subsequent care in avoiding the functioning nerve. It is important to remember that unilateral paralysis is more often symptomless than not (i. e., due to the compensatory action of the functioning cord, the voice is normal) and that the condition can only be recognized by laryngeal examination.

There has been a good deal of anatomical work done recently on the accurate course of the recurrent nerve in relationship to the thyroid, the trachea and the inferior thyroid arteries. The most important findings have been:

I. The relation of the nerve to the inferior thyroid artery is irregular, being sometimes anterior and sometimes posterior and often branches of the nerve interwoven among larger branches of the artery.

II. Recurrent laryngeal nerve lies more lateral to the tracheoesophageal groove than was previously believed.

III. The posterior capsule of the thyroid gland is often poorly developed and in many dissections the nerve was found to have pierced the capsule and to be lying anterior to it.

The best experimental work on the cause of operative injury was done by Judd, New and Mann in 1918. Their work on dogs brought forth the following conclusions:

I. Section of the recurrent nerve causes permanent and complete paralysis of the cord.

II. Ligation with linen, chromic or plain cat gut causes permanent complete paralysis to the cord.

III. Stretching of longer duration and greater tension than occurring at operation causes no impairment of the cord function.

IV. Pinching the nerve with a hemostat causes temporary paralysis, the function being restored in 30 to 60 days.

V. Exploration causes paralysis in proportion to the amount of direct trauma to the nerve.

Other opinions of the causation of paralysis are as follows: Holt believed it due primarily to pressure and stretching of the nerve, late paralysis being caused by adhesions. Schneider feels that contusion and division are the important factors. Dixon, Kelly and Wippern believe that late paralysis is due to endoneural hemorrhage or perineural infection. Berrard feels that pulling on the inferior pole of the thyroid in delivery or rough separation of tissues before ligating the inferior artery were the causes in most of his cases. He also feels that cicatrical contraction is responsible for cases of late paralysis. Crile states that pulling on the superior pole and scarring are the most important factors.

Severe symptoms of bilateral paralysis usually come on rather gradually after operation reaching the height of severity several months later. The usual symptoms are severe respiratory stridor both on inspiration and expiration. This is often so marked that the patient is unable to walk more than a few steps or speak a complete sentence without serious embarrassment to breathing. Sleep in a flat position is usually impossible, and often quite irregular and intermittent in a sitting position. In fact, the usual picture is a severe type of chronic invalid resembling somewhat the advanced chronic asthmatic. The voice is usually hoarse but of good volume. Often a mild upper respiratory infection in these cases will precipitate a complete closure of the larynx, ending in death or emergency tracheotomy. Other sequelae are malnutrition, heart disease and other conditions secondary to a chronic severe anoxemia.

TREATMENT

Treatment of bilateral abductor paralysis is far from satisfactory as yet. The methods in use at present are:

I. Those making a new opening in the air tract.

II. Attempts at complete restoration of structure and function by nerve anastomosis.

III. Operative procedures aimed at restoring normal air passage with sacrifice of the voice.

In the first group of course tracheotomy is of primary importance. This operation is often necessary as an emergency procedure, and by some surgeons is felt to be the most satisfactory, although it necessitates the discomfort and inconvenience of wearing a tube throughout life. Tubes have been devised with a valve attachment which opens on inspiration and closes on expiration enabling the patient to talk quite satisfactorily. Mackenty suggests doing a permanent tracheostomy. By suturing the tracheal mucous membrane to the skin he leaves a fistula one-half to three-fourths of an inch in diameter, which is sufficient for breathing. He presents no case reports.

Extensive study has been made in the last decade of operative procedures on the nerve itself in an attempt to restore function of the cords. On the theory that sectioning the nerve would cause complete paralysis and hence cause the cord to fall in the mid-abduction or cadaveric position, Chevalier Jackson operated on one case with poor results. In 1926 Blalock and Crowe published the results of nerve anastomosis on dogs and proved return of function by observation of movements in the cords and histologic study of the nerves themselves. They used the upper roots of the phrenic, the trunk of the phrenic, the trunk of the vagus and the descendens noni, joining them with the distal portion of the injured recurrent in all cases. They recommend the descendens noni or upper root of the phrenic for trial in man. At about the same time Colledge and Ballance did extensive research on this same subject. Their conclusions are that end to side phrenic anastomosis is successful in dogs, was successful in one monkey and partially in one human case. A bilateral operation on the human subject having given one-third unilateral abduction after one year.

C. H. Frazier has felt that the descendens noni in man is the better choice for anastomosis due to the close physiologic action and anatomic proximity. Frazier and Mosser in 1926 reported 12 operations on 10 patients. In two operations the nerve could not be found. In ten operations they had 1 recovery, 5 improvements, and 4 failures. In 2 of the 4 failures the duration of the paralysis was 11 years and in one 9 years. Their contraindications to this operation are as follows:

(1) Atrophy of the thyro-arytenoid muscles. (2) Fixation of the crico-arytenoid joint. (3) Tracheal stenosis. (4) Destruction of the nerve due to previous avulsion.

The commonest approach to the problem has been by operative measures designed to increase the air passages within the larynx.

(1) Cordectomy has been tried but failed due to the formation of excess granulation tissue.

(2) Arytenoidectomy has been attempted with no success.

(3) Ventriculectomy—an operation successful in roaring horses, has been found technically impossible in man because of the inability to evert the ventricle.

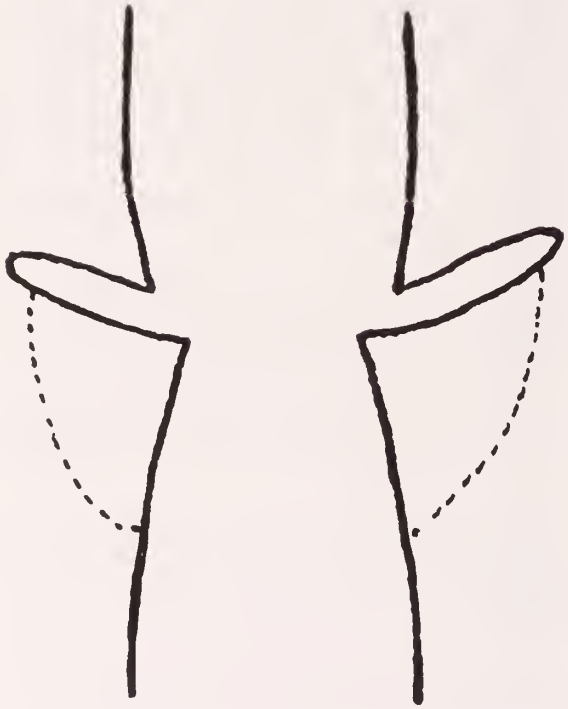
(4) Evisceration of the vocal cord and false cords via laryngo fissure was developed by Chevalier Jackson. He operated 2 cases with good results.

(5) Endoscopic ventriculocordectomy—an operation also devised by Jackson—is the method most widely used at present. It consists of biting off the vocal cord and underlying muscle with a specially devised ring forcep through the direct laryngoscope as in Figure 4. The immediate results have all been good but the reformation of the scar bands simulating the cord is quite common. Jackson reports 11 failures, 7 successful operations. Howarth reports 2 failures.

In spite of the low percentage of successes the operation has been popular because it is simple, not hard on the patient, can be repeated if necessary and does not interfere with further operative work of another sort. Molinié attempted an anteroposterior displacement of the cords by fracturing the anterior portions of the thyroid alae. Irwin Moore devised an operation called cordopexy in which he displaces the cords with their anterior cartilaginous attachment lateralward. Musgrove Woodman operated one case with success. This operation, however, is technically difficult and requires a good deal of study and practice to perfect the technique.

Rethé in 1927 devised an intralaryngeal operation in which he does a laryngo fissure,

Fig IV



incises the mucous membrance of the posterior lateral wall of the larynx and cuts the arytenoid attachments of the inter-arytenoideus and lateral crico-thyroid muscles on one side. He claims to have excellent results. In two cases not only restored adequate breathing space but due to the action of the intact abductors on the unoperated side there is a compensation of the unoperated cord and a good voice results.

Hoover of the Lahey Clinic recommends a laryngo fissure followed by submucous resection of the muscular part of the cord and tip of the arytenoid. He has had one good result.

Our own experience has corroborated fairly well the above figures. Two cases of endoscopic ventriculocordectomy of Dr. Henry B. Hitz showed excellent primary results but later closed down due to scar band formation. One case of resection of the cord and muscle via the laryngo fissure route gave good results. This man was a patient of Dr. Gordon's.

Another case of particular interest is a woman aged 35. She had a thyroidectomy performed in 1925, following which she had hoarseness and difficulty in swallowing. For five years she was unable to sleep for more than an hour at a time and she could not walk for more than one-half block without resting. She was seen by Dr. Gordon in March 1931. At this time she showed a bilateral abductor paralysis with a glottic chink about 1/16 of an inch at it widest point. It was decided to attempt a section of the recurrent nerve in the hope of getting a complete paralysis and consequent mid abduction position of one cord. On April 27, 1931, a thorough dissection of right side of neck was performed by Dr. Charles Fidler. The nerve was not definitely located but in view of the complete dissection it was felt that it must have been severed at some time during the procedure.

The patient noticed almost immediate relief after operation. In the past nine months she has been able to resume all her former habits. She can walk a mile without fatigue and is able to sleep flat in bed for eight or nine hours without waking, and she has gained eight or nine pounds.

Examination of the larynx shows the glottic chink increased to ⅛ inch and the right cord definitely lower than the left. No explanation is offered for the result in this case, except that possibly the theory that complete paralysis causing the cord to fall in the mid abduction position is at least partially correct. Further investigation would be worth while.

CONCLUSIONS

The operative treatment of bilateral abductor paralysis is as yet far from satisfactory. The following methods would seem to be worthy of consideration and further study.

I. Tracheotomy—often necessary in emergency and quite satisfactory to some patients as a permanent procedure. It has, however, the disadvantage of a permanent tracheotomy tube.

II. Cord and muscle resection via laryngo fissure. This operation, although a major procedure, is not a particularly dangerous one and so far has given the highest percentage of successful results.

III. Endoscopic ventricular cordectomy. Although there are a high percentage of failures this procedure is simple, safe and can be repeated.

IV. Nerve anastomosis. This operation is still to be considered because when it is successful it gives the ideal result. It can be used if the patient is willing to assume the great risk of failure, on the chance of regaining a good voice and ample respiratory space.

V. Rethé's section of the interarytenoid and lateral crico-thyroid muscle and Hoover's submucous resection of the thyro-arytenoid muscle are both worthy of further study.

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Splenomegaly and Anemia—A Diagnostic Problem*

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A GIRL 6 years of age was admitted to the Wisconsin General Hospital on November 7, 1933, with a chief complaint of abdominal pain. Her illness had begun insidiously in the late summer of 1932, the first symptoms noticed by the parents being those of loss of appetite, disturbed sleep, and infrequent attacks of abdominal pain. As time went on the abdominal pain, which was colicky in nature, became increasingly frequent and severe but throughout the course of the disease remained short in duration, lasting minutes only in each attack. The pain was referred to the umbilical region and was unattended with other symptoms referable to the alimentary tract. Eventually frequent epistaxis and ease of bruising of the skin appeared, and in the spring of 1933 yellowish discoloration of the skin developed. There was never any vomiting of blood. In July, 1933, she was taken to Dr. S. W. Murphy of Kenosha who found her to have a slightly enlarged spleen and hypertrophied and diseased tonsils. An operation for removal of the tonsils and adenoids was performed in August, 1933, without the occurrence of any undue bleeding. When seen again by Dr. Murphy in October, 1933, the girl's spleen was found

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to have enlarged enormously since her original visit to him in July. At the time of this latter visit Dr. Murphy found her blood to show a red cell count of 4,450,000 and a white blood count of 2,450 per cubic millimeter. He then recommended her admission to the hospital for further study.

Both parents and one sister, aged 14 months, were living and well. The maternal grandmother had died of tuberculosis. There was no history of diseases associated with splenomegaly in the other members of the family.

She was born at full term after a normal delivery and weighed 7 pounds. She was breast fed for nine months and additional foods were added to her diet after the agé of 5 months. She received no cod liver oil during infancy. At the age of 8 months she weighed 18 pounds. Dentition began at 8 months. She walked at 15 months. During her third year she had measles and mumps, there being nothing unusual about the course of these diseases. Her tonsils and adenoids were removed in August, 1933.

Physical examination revealed a well developed and fairly well nourished white girl, not acutely ill. Her weight was 44½ pounds, and her height 45 inches. Her temperature, pulse and respirations were normal. Her skin had a sallow yellow color and her facial expression was somewhat mongoloid but not outspokenly so. The pupils were equal and reacted to light and accommodation. The fundi were normal. No icterus of the sclerae was present. The nose contained a few crusts of dried blood on the septum. The teeth were in good condition and the gums healthy in appearance. Her tonsils were out. The cervical, axillary and inguinal lymph nodes were generally palpable but small except in the left submaxillary region where there were several lymph nodes the size of a lima bean which were soft, discrete and freely movable. The heart and lungs were negative. Blood pressure was 100/60. The abdomen was large and rounded. The spleen was greatly enlarged, extending 1 cm. below the umbilicus. It was firm, smooth and not tender. The splenic notch was readily palpable. The edge of the liver could not be felt. There was no ascites. The extremities were negative. The skin showed no purpuric spots.

On admission examination of the blood revealed: hemoglobin 58%, red blood cells 3,560,000, white blood cells 3,450 with a differential count of 72% polymorphonuclears, 2% eosinophiles, 17% small lymphocytes, 4% large lymphocytes, 3% large mononuclears and 2% metamyelocytes; reticulocytes 0.1%, slight anisocytosis; platelets 120,000; bleeding time one minute; clotting time two minutes. Hemolysis of the red cells began at .47% saline and was complete .38%. The blood chemistry figures were sugar 94; nonprotein nitrogen 32; cholesterol 176; icteric index 6. The Wassermann test was negative and the intradermal tuberculin test (0.1 mg.) was negative. The urine contained no excess of urobilin and showed a specific gravity of 1.024, no albumen, glucose or acetone. X-ray examination of the chest, long bones and skull were all negative. Histologic examination of one of the enlarged cervical lymph nodes was reported by Dr. Wm. D. Stovall as follows: "The sections show a lymph node in which the architecture is intact. There is an active hyperplastic reaction; in the follicles there are many mitotic figures. The pulp shows some endothelial proliferation with numerous polymorphonuclear neutrophiles and occasional eosinophiles. Diagnosis: hyperplastic lymphadenitis."

During the next six weeks of observation in the hospital the child showed a persistent leukopenia of 3,500 to 5,500, except for a temporary rise in the white blood count to 10,000 attendant with the development of infection in the biopsy wound, and a thrombocytopenia of 120,000 to 160,000. For the most part she appeared comfortable and cheerful and on only one occasion did she complain of abdominal pain. This was epigastric in location and was associated with a single spell of vomiting, the vomitus consisting of undigested food which was streaked with bright red blood. Neither at this nor any other time did the vomiting of actual blood occur. The spleen did not vary in size. The color of the skin remained unchanged.

DIFFERENTIAL DIAGNOSIS

The occurrence of splenomegaly, hypochromic anemia, leukopenia and yellowish discoloration of the skin in a six year old child suggested several interesting possibilities in the way of diagnosis. Of the diseases characterized by splenomegaly associated with anemia, age alone permitted the immediate elimination of such diseases as Nieman–Pick's disease, von Jaksch's anemia and Cooley's erythroblastic anemia, because these diseases occur in acute form in infancy. In addition they present other characteristic features which were entirely absent in this case. The negative Wassermann, absence of bone changes to x-ray examination, etc., permitted the dismissal of the likelihood of syphilis; the negative intradermal tuberculin test, of tuberculosis; the normal bleeding and coagulation times and absence of external evidence of purpura, of the so-called hemorrhagic disease; the absence of prolonged superative condition, of amyloid disease. Cirrho-

sis of the liver was excluded by its extreme rarity in early life, and by absence of any symptoms of digestive disturbance, of enlargement of the liver, of urobilin in the urine and of ascites. The leukemias, especially aleukemia leukemia, were also eliminated by reason of the absence of all the characteristic clinical features and blood changes of these diseases. So too was congenital hemolytic icterus ruled out by the normal fragility of the red blood cells, the absence of reticulated red cells, and by the absence of increased amounts of urobilin in the urine. Hodgkin's disease did not seem likely in the absence of generalized adenopathy and was definitely excluded by the histological examination of the cervical lymph nodes.

After elimination of the above mentioned diseases it seemed to us that the diagnosis lay among Gaucher's disease, Banti's disease, and thrombosis of the splenic vein. Clinically the picture in these diseases is much the same, splenomegaly, moderate anemia of the simple secondary type and leukopenia being common to all three. The resemblance between Gaucher's and Banti's disease is so striking that it is sometimes impossible to differentiate the two except by microscopic examination of splenic, bone marrow or other tissue.

Gaucher's disease is twice as common in girls as in boys and is congenital and familial but not hereditary in occurrence. An enlarged spleen and liver may be noticed in the first few months of life and at this age active manifestations of the disease, especially nervous symptoms, are apt to be acute with a rapidly fatal outcome. Generally, however, the large spleen is discovered accidentally in childhood and the disease runs a clinical course extending over many years. The first symptom is progressive enlargement of the spleen which eventually becomes enormous. In time the liver also becomes enlarged but ascites is not apt to develop. The superficial lymph nodes may occasionally become involved but usually do not take part in the changes and consequently on histologic examination in the average case cannot be depended on to show the typical Gaucher's cells. As early signs are to be noted the characteristic pigmentation of the skin and definite blood changes. In about half the cases there is a brownish yellow to bronze discoloration of the skin on the exposed surface; and less frequently a yellowish wedge-shaped thickening of the sclerae, the base of the wedge lying toward the margin of the cornea. Blood changes are uniformly present and consist in leukopenia, hypochromic anemia and thrombocytopenia. Gaucher's cells are not found in the blood stream. Submucous and subcutaneous hemorrhages may occur especially in the late stages of the disease but the gastric hemorrhage so characteristic of Banti's disease and of thrombosis of the splenic vein is absent. Roentgenograms sometimes show a mottled worm-eaten appearance of the long bones. The exact diagnosis is made by microscopic examination of the spleen, liver, adrenals and bone marrow. The lymph cells in the spleen are almost completely replaced by large pale mononuclear cells. These are oval in shape with a pale granular vacuolated cytoplasm and quite frequently show two nuclei. Similar cells are to be seen in the liver, bone marrow and adrenals. There is no specific treatment and splenectomy does not effect cure.

Although enough splenic tissue for histological examination may be readily obtained by splenic puncture such a procedure in this child was considered too dangerous. In case the actual pathological condition was that of thrombosis of the splenic vein the insertion of a trocar into a dilated sinus or lake of blood in the spleen might result in a serious or even fatal hemorrhage. Neither did we like the idea of osteotomy for diagnostic purposes. And in as much as Gaucher's disease could not be eliminated as a possibility in any other way we decided upon laparotomy and immediate microscopic examination of the splenic tissue obtained by the surgeon. Should the examination reveal Gaucher's cells the abdomen could be closed; if no Gaucher's cells were present splenectomy could be performed provided there were no local contraindications to it.

BANTI'S DISEASE

Banti's disease, according to the views of the past, consists in primary enlargement of the spleen associated with simple secondary

anemia and leukopenia. Having its onset in youth or early adult years it runs a chronic course of months to years. Eventually there develops enlargement of the liver with subsequently such evidences of cirrhosis as jaundice, ascites and hematemesis from esophageal varices. This syndrome, as Banti first described it in 1894, was believed by him to represent a clinical and pathological entity of an idiopathic nature. He also believed splenic anemia to be merely the first stage of the disease and that cirrhosis invariably followed if the patient survived. Although there are many physicians who believe that splenic anemia without advance to secondary portal cirrhosis does occur as an entity, Banti's belief in the invariable progress to cirrhosis still has many supporters. Fox,[2] writing about the difficulty or impossibility of distinguishing between "splenic anemia" and "Banti's disease", says "It cannot be stated that any considerable number of the cases with splenomegaly and anemia, in which splenectomy was done, may not have terminated with hepatic disease. These studies include one complete record of Banti's disease diagnosed before splenectomy, when there was nothing to suggest hepatic disease by observations at laparotomy, that died from pneumonia 2 years later and showed a cirrhosis and ascites." On the other hand, Johnston[1] feels that as a result of biliary tract infection, etc., early changes in the liver may result in narrowing of the vascular bed to such an extent as to cause enlargement of the spleen by passive congestion and consequently the cirrhosis of the liver be the primary cause of the disease. Banti's idea of the idiopathic nature of the disease, named after him of course, has been repeatedly questioned and in explanation of the cause of the disease different investigators from time to time have suggested a number of etiologic factors. Among the most important of these are infection, intoxication and mechanical disturbance of the portal circulation and splenic venous flow.

Beginning with Warthin[3] in 1910 there have been numerous expressions of opinion to the effect that the syndrome of splenic anemia and Banti's disease may result from interference with the portal or splenic venous flow. According to this opinion obstruction of the splenic vein produces chronic passive congestion of the spleen and distention of the gastric and esophageal veins, and in the veins in the adhesions between the spleen and the stomach or diaphragm. Warthin believed the vascular change to be primary and proposed the term "Banti's complex" instead of "Banti's disease", but he was unable to produce the characteristic changes in the spleen by experimental ligature of the vein. Neither have later investigators been able to do so. However, numerous case reports in the past 20 years leave no doubt that a clinical picture similar to Banti's disease occurs in cases having some interference with circulation of the portal or splenic vein such as thrombosis[4] or thickening[5] of the splenic or portal vein, obliteration[6,7] of a portion of the portal vein with cavernous malformation about it, thrombosis of the portal vein from umbilical infection or infection in some other part of the body,[8,9] pressure on the portal or splenic vein from without by tumors or gall stones, adhesions[7] constricting veins from without, etc. As a matter of fact, Banti himself mentions calcification and endophlebitis of the splenic vein (sometimes extending into the portal vein) as a frequent but not constant pathological finding in his disease. Nevertheless, the repeated postmorten and operative discovery of definite evidences of obstruction of the portal or splenic vein in cases diagnosed during life as Banti's disease at least suggests that "Banti's disease" is only a symptom-complex produced by several other diseases and especially by thrombophlebitis of the portal and splenic veins.

At the present time many clinicians, especially among German physicians, regard thrombosis of the splenic vein as a clear cut though rare clinical entity in spite of the etiology not being clear. The symptoms of the disease are hematemesis, anemia, leukopenia, thrombocytopenia, splenomegaly and a temporary reduction in the size of the spleen following hematemesis. This latter finding, according to Nobel and Wagner,[10] is absolutely characteristic of the disease. A febrile illness with pain in the upper left quadrant of the abdomen early in the course

or at the onset of the disease is regarded by Blumer[11] as being of particular diagnostic significance. In addition to the above mentioned symptoms ascites is not uncommon but is more apt to occur when the thrombosis of the splenic vein also affects the portal vein.

Regardless of the etiology of Banti's syndrome the most generally accepted method of treatment is splenectomy. At least so in children. While in older individuals the danger of a fatal postoperative thrombosis is a very real one, this tendency for some reason is much less marked in childhood and young adult years. For example, Nobel and Wagner[10] state that if the thrombosis is limited to the splenic veins complete recovery is to be expected. Smith and Howard[12] of Boston are of the opinion that in children presenting the clinical picture of splenomegaly, gastric hemorrhage and variation in size of the spleen following such hemorrhage, "splenectomy offers a means of controlling the hemorrhage and, so far as our observations go, of effecting a cure of the disease." (These latter authors it should be said parenthetically recognize Banti's disease and thrombosis of the splenic vein as two distinct disease entities.) However, agreement on the safety of the operation even in childhood is not universal. Van Creveld and Levy[7] agree with Wallgren in that they "dare not make a too favorable prognosis for these children", and in that "new thromboses may occur and cause death of the patient". Certainly in adults serious sequelae are fairly common. Severe and even fatal hemorrhages have been reported as occurring months or years following a seemingly successful operation,[13,14,15] and Mayo[16] states that 10% of patients who survive the operation die within 10 years of gastric hemorrhage. Mesenteric thrombosis and gangrene of the intestine also have been reported as not uncommon sequelae. It is thought by Rosenthal[17] and Evans[18] that the preoperative blood platelet count may be used as a guide in determining whether or not thrombosis is apt to occur after removal of the spleen. In their cases having a thrombocytopenia splenectomy was followed by good results; in those having a normal or only slightly reduced platelet count postoperative thromboses were the rule. Bryce's[19] experience with two cases does not coincide with this hypothesis.

In the case under discussion examination of the splenic tissue obtained at the time of operation (which was done by Dr. E. R. Schmidt) failed to show any Gaucher's cells. The spleen was easily delivered through the abdominal opening and was free from vascular adhesions between it and surrounding organs. No anomaly or thrombosis of the portal or splenic vein could be demonstrated. The spleen was tremendous in size, firm in consistency; its capsule was smooth, glistening and free from irregularities which might indicate an underlying thrombosis. The liver was normal in size, color and consistency. Consequently the spleen was removed.

POSTOPERATIVE COURSE

The child's postoperative course was entirely satisfactory as far as her general health was concerned but was complicated by infection of the wound which drained for twelve weeks before finally healing. The occurrence of infection in both the wound in the neck and in the abdomen may have been of significance as an indication of lowered resistance to infection.

Immediately following operation the blood platelets became increased reaching the highest count of 560,000 on the tenth postoperative day. They then gradually fell to 200,000 to 250,000 and remained at that level as long as the child remained in the hospital. Attendant with the infection in the wound the white cell count rose to 20,000 to 25,000 and after healing of the wound varied between 10,000 and 14,000. During the three months postoperative period in the hospital the hemoglobin gradually rose to 70% and the red cell count to around 5,000,000. The yellowish discoloration of the skin remained unchanged. After the operation the child's weight fell off to 40½ pounds and in the following three months gradually increased to 46½ pounds. At the time of discharge from the hospital on March 23, 1934, her general health was excellent.

The spleen was described by Dr. Wm. D.

Stovall: "The sections show a spleen in which the chief characteristics are: fibrosis, destruction of follicles, and leukocytic infiltration. The capsule is thickened and the trabeculae are heavily fibrosed, showing thick bands of fibrous tissue penetrating the pulp. The pulp is relatively acellular and the stroma is composed of heavy strands of fibrous tissue. This reaction is uniform throughout the sections, giving a diffuse fibrosis. The follicles are few in number some of which show no germinal centers. In such follicles the germinal areas are replaced by fibrous tissue and the central arterioles are occluded by fibrosis. All of the vessels show a great fibrosis and this is accompanied by an increase in the density of fibrous tissue immediately around them. The venules are widely separated and the endothelial cells lining them are clearly outlined. Throughout this tissue there are many neutrophilic and eosinophilic leukocytes."

From what has been said above it may be readily appreciated that this case must be one of either Banti's disease or thrombosis of the splenic vein but from the information at hand it is impossible to make a final disposition of the diagnosis. The microscopic examination reveals a reaction which has been described as being characteristic of Banti's disease but since so-called Banti's disease has no peculiar histological reaction which would separate it from chronic passive congestion, chronic inflammation or chronic intoxication, even this examination does not satisfy the issue between Banti's disease and splenic thrombosis. However, it may be said that the case does seem to represent one of the type in which splenectomy is indicated and offers considerable hope for permanent cure.

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Lateral Sinus Thrombosis Complicating Acute Mastoiditis

By AUSTIN G. DUNN, M. D., and WAYNE F. COWAN, M. D.
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HOPPIS[1], in 1826, was the first to point out the relationship between suppurative mastoiditis and sinus thrombosis. In 1880, Zaufal[2] was the first to describe the treatment of evacuating a lateral sinus and tying the jugular vein. In 1886, Horsely[3] independently described and advised the same operation. Since that time otologic literature and medical journals have given a great deal of attention to this.

Thrombosis of the lateral sinus complicating suppurative mastoiditis is not uncommon and when it occurs, it is most unpleasant to the attending surgeon and carries with it a high mortality rate. Alexander[4] claims a mortality rate of 22% in 155 cases; Haymann's[5] figures show that he lost 27%; Boies[6], in a study of 184 cases, reports a rate of 25%; Potts[7] reports losing 14% in a series of 63 cases. Parker[8] believes that the mortality rate in private practice is much lower than the above due to the fact that cases are seen earlier and their physical condition

much better than those cases selected from large charity hospitals.

ETIOLOGY

The disease is more common in males than in females—2 to 1. It occurs more commonly in children than in adults—ratio 3 to 1. In acute ear suppuration and acute exacerbation of chronic mastoiditis, it occurs more frequently on the right than on the left, due undoubtedly to the greater volume of venous blood returning through the right jugular from the brain cavity.

Bacteriologically, the streptococcus is usually the offending organism, the hemolytic and mucosus types being the most common and virulent.

Trauma is another factor—occurring at operation, accidentally or with instrument, from bone spicules or puncturing for diagnostic purposes.

SYMPTOMS

The salient symptoms can be classified under local and general. Generally speaking, the patient usually feels very well in the early stage. The chill is stressed by the European authorities as the "clue symptom" in the early diagnosis of sinus thrombosis. The severity of the chill varies and often in the beginning is usually slight and overlooked by both patient and attendants. The temperature is usually high and drops to normal in from four to eight hours—("Picket Fence Type"). Later on in the course of the disease evidence of toxemia and metastasis manifest themselves and are easily recognized.

Locally: Headache behind the mastoid bone with tenderness extending down the anterior border of the sternocleidomastoid muscle is typical of all posterior fossa complications. Passive hyperemia of veins of fundus, choked disk, and optic neuritis are occasionally demonstrated and when found the dura should be exposed.

TREATMENT

The treatment is always surgical. There seems to be a divided opinion among otologic surgeons as to the type of surgical interference. Rott[9] contends that it is sufficient to open the sinus and remove the infected area and that ligating the jugular vein is not necessary and does not prevent toxemia or bacteriemia. His viewpoint is supported by Shambaugh, Kopetsky, Haymann, and others. There are dangers accompanying ligation of the jugular vein, i.e., an injury to the vagus nerve, carotid artery, and local sepsis. There is also a possibility of a reaction from lack of collateral circulation. (Linser[10]).

On the other hand, Jackson–Coates[11] state, "that it is not justifiable to carry on any manipulation around the bulb with an open jugular vein." Their viewpoint is supported by Alexander, Ruttin, Neumann and others. As to ligation or resection, both methods have their supporters; the former procedure is more easily performed. Seydell[12] points out that if the jugular ligation is carried out, the sigmoid sinus must be obliterated, for if a mural thrombosis is present an obturating thrombosis might ensue and extend into the cavernous sinus via the inferior petrosal.

Personally, we feel that it is safer to ligate as it blocks off the main portal of circulation from the infected area preventing to a large extent minute thrombi, toxemia, and bacteria from entering into the circulation.

In addition to the aforementioned surgical treatment, it might be well to mention the repeated injection of whole blood, particularly in cases where toxemia is marked, blood culture is positive, and red blood count low. Cook of Eau Claire[13], in a recent paper, stressed the fact that certain donors' blood seemed more effective than others, possibly due to a more potent antibody content. In this case the same observation was made that one of the three (3) donors' blood was particularly beneficial; the patient seemed to react splendidly after the first injection.

REPORT OF CASE

Our patient was a nine year old girl, the eldest of a family of four children. Her maternal grandmother and her mother have a distinct rheumatic diathesis. A younger brother also has a damaged heart from an attack of acute rheumatic fever.

She was a healthy infant until an attack of glandular fever intervened and left her subject to upper respiratory tract infections. To obviate this, her tonsils and adenoids were removed when about three and one-half years old. From that time un-

til past seven years of age, her progress was uneventful and satisfactory until she contracted another throat infection that was followed by an acute otitis media, (left), severe enough to keep her in a hospital for one week in anticipation of a mastoiditis. Again she enjoyed good health until March 26, 1933, when she complained of a severe headache. The following two days she attended school and on Wednesday, March 29, 1933, she suffered a severe earache which underwent spontaneous rupture and since discharged profusely. On March 31st she developed pain and swelling over the zygomatic region. As it was no better Saturday morning April first, she was removed to the hospital for observation.

Examination at this time revealed the external auditory canal filled with a purulent discharge and a slight swelling and tenderness over the zygomatic root. The cervical glands on the left side were enlarged. The laboratory tests showed a negative urine and a leuococyte count of 16,600. On the morning of April second the patient seemed better. Her temperature was normal and the pain about the ear was not so severe. By 5:00 P. M. she was not so comfortable and the swelling over the zygoma was increased. By 8:00 P. M. the rectal temperature reached 104.4; she was nauseated, vomited and the zygomatic swelling and tenderness were markedly increased. A radical mastoidectomy was advised and accepted.

Upon operating the findings were: Mastoid bone sclerotic in type. A large pocket of pus was opened near the proximal end of the incision. The pus, (thin), was superficial to the bone and extended well forward over the zygomatic root. Cell development was found only in the tip and zygomatic regions. The lateral sinus was exposed and found to be normal in appearance.

She ran the usual postoperative course until the ninth of April when she complained of stiffness of the neck muscles and swelling on the left side of the neck. On April tenth, the above was more marked and a severe chill occurred. As no improvement was experienced, a diagnosis of sinus thrombosis was made on April eleventh and second operation was performed.

The left internal jugular was ligated, the mastoid wound re-opened, and the lateral sinus exposed for one and one-half inches. The sinus was opened without bleeding and a mural thrombus about an inch long was removed, whereupon free bleeding occurred from both ends. The wound was packed with iodoform gauze and the usual dressings applied. Her general condition was good postoperatively, but her pulse ranged from 140 to 150. The following day (April 12, 1933) her general condition was fair. Her temperature ranged from 101.6 to 104; while the pulse was 104 to 120. She had absorbed quantities of saline and glucose.

On April thirteenth the packs were removed without bleeding and replaced loosely. As she was beginning to look anemic and show the pastiness of a septic infection, whole blood transfusions were instigated. The improvement was marked, so transfusions were repeated at two to three day intervals until seven in all were given. On the tenth of April the blood culture had shown a non-hemolytic streptococcus and a Gram-negative bacillus.

After all the sepsis, she left the hospital on May fifth, afebrile and with a blood picture of 4,040,000 red cells, a white count of 8,000 and 66% polymorphs, 20% small lymphocytes, and 14% large lymphocytes. Her subsequent convalescense was rapid.

CONCLUSION

(1) The history of a chill is very important in the diagnosis of lateral sinus thrombosis.

(2) The treatment of these cases is always operative.

(3) Whole blood transfusions are beneficial in combating the sepsis.

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SCARLET FEVER ANTITOXIN

Of 5,377 cases of scarlet fever studied, Pascal F. Lucchesi and James E. Bowman, Philadelphia (Journal A. M. A., Oct. 6, 1934), administered scarlet fever antitoxin in 3,045 and not in 2,332. In a comparison of the serum with the nonserum treated cases, a slight decrease in the number of febrile days in the mild and moderate groups was noted, and a substantial reduction in the severe group. The incidence of complications was definitely less in the serum treated cases in comparison with those not so treated. This effect was most prominent in the severe group. Serum reactions occurred in 36.3 per cent of the patients treated with antitoxin. The use of ephedrine compounds had a slight effect on the prevention of serum disease.

Biliary Peritonitis Without Apparent Perforation

By ALBERT R. TORMEY, M. D.
Madison

CASE No. 75,537 was admitted to the Madison General Hospital on the afternoon of January 17, 1933, complaining of pain in the abdomen, nausea and constipation. The above symptoms were first noticed two days previous to admission. The pain started in the lumbar region and radiated to the lower right quadrant and right groin. Forty-eight hours after the onset the pain localized in the right upper quadrant and was so severe that morphine, grs. ½, gave but little relief. A tentative diagnosis of intestinal obstruction had been made and the patient was given numerous enemas without relief. He was nauseated but did not vomit.

Past history was negative except for some mild gastric distress after meals which was generally relieved by soda or cathartics. He had some acute pain in his upper abdomen about two months before admission which was relieved by a cathartic.

Physical examination: Well developed and well nourished man of fifty-one years of age who is in pain.

Head, neck and chest are negative.

The abdomen is distended and tympanitic throughout, with considerable muscle spasm on the right side. There was no localized tenderness. No masses are palpable. He has a large right inguinal hernia for which he has worn a truss for several years.

Temperature 100.4; white blood count 11,500 with 87 per cent neutrophiles.

A diagnosis of acute cholecystitis complicated by peritonitis was made and operation advised. Spinal anesthesia was given. A right rectus incision was made and immediately on opening the peritoneum a large amount of free bile escaped. The bowel was distended and the omentum was adhered to the gallbladder. The gallbladder was slightly distended and the wall showed moderate inflammatory thickening. There were two stones in the gallbladder about the size of filberts and one was wedged into the neck of the gallbladder. No perforation could be demonstrated in the wall of the gallbladder or in the bile ducts. The ducts were free from calculi.

Cholecystostomy was performed, with removal of the calculi.

Progress: Patient started to hiccough eighteen hours after operation and continued to do so for nine days in spite of various treatments. Inhalations of carbon dioxide gave most relief.

He developed a laryngitis and a mild bronchitis on the fourth postoperative day which persisted for ten days with temperature ranging from one to two degrees. Bowels started to function on the third postoperative day and the abdominal distention decreased rapidly. He had a large amount of bile drainage for two weeks which gradually decreased and stopped entirely on the twentieth day. He was discharged on the twenty-fourth postoperative day and returned to his home. Two weeks after arrival at home he suffered from acute rheumatic fever and was confined to bed for ten days.

DISCUSSION

Clairmont and Haberer, in 1911, were the first to call attention to the occurrence of a biliary peritonitis without demonstrable perforation. They claim that an infected gallbladder containing stones, will cause inflammatory changes in the bladder wall and that this is followed by an abnormal permeability of the gallbladder or the bile ducts.

Nanwirck and Labke claim that macroscopic examination is not sufficient to determine a very fine opening in the gallbladder and that a histological examination is necessary in order to determine positively if there is a tear or a pin point opening in the bladder or ducts. In other cases where a postmortem has been done—no evidence of perforation could be found even after a microscopic examination.

Although the question whether a biliary peritonitis without perforation of the bile ducts occurs has not yet been incontestably decided, this question is of subordinary significance for practical purposes in view of the indisputable fact that the surgeon occasionally finds a free biliary effusion into the abdominal cavity without being able to discover its source in a perforation.

Most of these cases are diagnosed as acute appendicitis or acute cholecystitis and the surgeon is generally surprised to find a large amount of free bile upon opening the peritoneum. If the patient's condition will permit, cholecystectomy is the operation advised, if not, cholecystostomy.

Prognosis is favorable and early operation is advised.

Treatment of Tetanus; With Case Report

By MILTON TRAUTMANN, M. D.
Prairie du Sac

C. T., eleven years, white, female, came into my office May 14, 1934, with a complaint of backache and inability to open her mouth. On May 4, 1934, she slipped on a board which was lying in the garden, and cut her right leg. The wound healed poorly. On May 11, 1934, she noticed a little stiffness of her jaws. This increased until on May 14, 1934, she came home from school unable to open her mouth and with backache. On examination she had a severe trismus, and moderate stiffness of the back. The temperature was 98.4 by mouth, pulse 82. A diagnosis of acute tetanus was made. On the lateral aspect of the right leg there was a wound, an inch long, apparently healing, with a scab on the surface. Immediate exploration of the wound was done and two slivers of wood, one inch and one-quarter inches in length respectively, were removed and a dressing of 1 1000 potassium permanganate solution applied. Sixty-five hundred American units of tetanus antitoxin were given into the right gluteal mass.

On May 15, 1934, the patient had developed an opisthotonos. She was hospitalized at St. Mary's Ringling Hospital, Baraboo, that day, and twenty thousand American units of tetanus antitoxin given —five thousand intraspinally and fifteen thousand intravenously. Shortly thereafter the temperature rose to 102° F. and continued high during the acute stage of her illness. In addition, on this same day the wound was completely excised with an area of flesh a half inch on each side of it. Permanganate dressings were continuously applied.

On May 16, 1934, she was given ten thousand units of antitoxin intravenously.

On May 18, 1934, she was given ten thousand units of antitoxin into the right gluteal mass. Until this day the patient had rested in severe opisthotonos, with frequent spasms of the spinal muscles, and a few spasms affecting the muscles of respiration and deglutition. Luminal and morphine were given as sedatives.

In view of the fact that the patient showed no severe spasms of the muscles of respiration or deglutition serum was withheld from May 18th, and as time went on and improvement continued, no more was given. She went through the usual serum sickness which began on May 22, 1934, with a generalized urticaria, followed by an arthritis on May 24th which lasted about thirty-six hours. By May 25th the opisthotonos was relieved; by June 2, 1934, the trismus had disappeared and the patient had made a complete clinical recovery except for the wound which was granulating normally.

TREATING THE WOUND

I report this case to emphasize one point in the treatment of tetanus which is undoubtedly of the utmost importance, namely, the treatment of the wound. Knowing, as we do, that tetanus toxin is being continually elaborated in the infected wound, it would seem that the first, and most urgent, consideration is its complete removal. After that we can think of antitoxin. In a very excellent study of acute tetanus by F. W. Taylor[1] it is written:

"Much has been written about treatment of the local lesion in tetanus. Thorough, careful debridement has universally been advocated. Yet, in our experience, this phase has received but little consideration compared with that directed toward the administration of antitoxin. At least this would seem to be true in the present series. In twenty-three of the thirty-seven cases, adequate exploration was not done on admission to the hospital. In these there were sixteen deaths (69.6%)."

Doctor Taylor stresses the frequency and the importance of foreign bodies in these wounds as adding to the danger. In this particular case they were not suspected of being present. They may be present even in "healed" wounds and form the nidus of infection that endangers life.

No one can say that this patient's life was saved by excising her wound. There undoubtedly were other factors that favored her recovery, yet I am sure that not the least of these was thorough debridement of her wound. This is a procedure that I feel should have the first consideration whenever a case of tetanus presents itself to us.

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Primary Carcinoma of the Liver Clinically Simulating Empyema of the Gallbladder; With Report of a Case*

By BENJ. H. SCHLOMOVITZ, M. D., and L. GRANT GLICKMAN, M. D.
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THIS case is reported because of the repeated change in clinical attitude as the case unfolded itself preoperatively, postoperatively, and at postmortem examination. Even after the inspection of the gross pathological tissues at autopsy the ultimate diagnosis still depended on the microscopic examination.

A man, age 40, entered the hospital on March 8, 1934, with the following complaints: stomach trouble for the last month, but four days ago he was seized with an acute pain in the abdomen; pain originated in the epigastrium and radiated to the region of the liver; usually coming on after eating, but having no relation to various types of food; belching afforded some relief; no vomiting; constipation for one month, and sleeplessness. Entrance diagnosis: *duodenal ulcer and spastic colitis.*

Examination disclosed a short, heavy-set male; weight 161 pounds; not acutely ill; tonsils hypertrophied; gingivitis present; blood pressure 160/80; pulse 84; abdomen rigid and tender in the region of the gallbladder; liver enlarged; no abdominal masses palpable. Laboratory findings: essentially negative except for a W.B.C. of 13,950. Tentative ward diagnosis: *cholecystitis.*

Course including treatment: On March 9, 1934, the surgical consultant reported marked spasm in the epigastrium with a suggestive mass in the gallbladder area, and made a diagnosis of *acute empyema of the gallbladder with cholelithiasis.* The next day the tenderness was more localized, and after several days the patient was operated on. The gross findings reported at the operation were "small malignancy along lesser curvature of the stomach, glands along lesser curvature, liver full of nodules and capsule infiltrated with carcinomatous tissue." A gland was removed for biopsy and a posterior gastroenterostomy was done. On the basis of the operative findings the diagnosis was changed to *carcinoma of the stomach with wide-spread metastases.*

On the fifth postoperative day, fine rales were noted in the left lower lobe; the right lower chest was completely consolidated, and a complicating bronchopneumonia was noted on the chart. The cyanosis of the patient was relieved when oxygen was used. Several days later, the abdominal wound broke open and there was an evisceration of about four feet of small intestines and a portion of the transverse colon. The viscera were returned to the abdominal cavity. On the ninth day the rectal temperature was 102°; pulse rate 78; respiratory rate 24; both lower lobes were reported consolidated; the abdomen was soft and not distended. Later pain became excessive, necessitating one-half grain of morphine at a single dose.

The pathologic report on the tissue removed for biopsy was, grossly: gray, firm tissue resembling lymph nodes, measuring 12 x 15 mm. in diameter. Microscopic diagnosis: accessory pancreatic bodies.

On the 18th day the liver edge was down to the level of the umbilicus. The pain continued severe. Jaundice set in after three weeks, gradually becoming deeper, and the patient became progressively weaker. The pain was now intense. During the fourth postoperative week (April 8, 1934), the patient expired.

Postmortem examination disclosed a recent partially-healed abdominal wound; jaundice; slight enlargement of the spleen, lumbar and coeliac lymph nodes; beginning atheromatous degeneration of the aorta; adhesive pleurisy with empyema and acute hypostatic pneumonia; chronic fatty myocarditis; recent gastroenterostomy; ulcer on the lesser curvature of the stomach with subjacent perigastric adhesions to the liver and body of the pancreas forming a hard mass; carcinomatous dissemination in a cirrhotic liver with metastatic infiltration of adjacent parietal peritoneum; right subdiaphragmatic adhesions; and chronic nephritis.

Owing to the fact that the serosa of the gastric ulcer area was so firmly attached to the capsule of the liver, there was still some plausibility to the clinicians' view that this area was really carcinomatous and intimately bound up with the malignancy of the liver. Careful stripping off of the perigastric adhesions from the contiguous liver capsule disclosed what appeared to be normal liver parenchyma. This was confirmed by the microscopic finding of a non-malignant gastric ulcer.

The cause of death was extensive, discrete, multiple, carcinomatous nodules, scattered throughout the liver, complicated by an acute hypostatic pneumonia and empyema (pulmonary). The primary carcinoma of the liver was developed on an ad-

(Continued on page 864)

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S. E. GAVIN.....Fond du Lac
S. D. BEEBE.....Sparta
G. R. DUER.....Marinette
I. E. SCHIEK.....Rhinelander
JOSEPH F. SMITH.....Wausau
H. M. STANG.....Eau Claire
F. G. JOHNSON.....Iron River
R. W. BLUMENTHAL...Milwaukee

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OFFICIAL PUBLICATION OF THE STATE MEDICAL SOCIETY OF WISCONSIN

« « « EDITORIALS » » »

Medical Hall of Science

A FEW years ago, a writer in a popular magazine drew blood in his attack on the medical profession for our inability to describe the wonders of medical science in terms comprehensible and appealing to the laity. Since the gates of the 20th Century of Progress Exposition opened in 1933 at Chicago, however, no wide-awake editor would pay a nickel for an article in a similar vein—for the Medical Sciences, in the jargon of the showman, all but stole the show. And it's a matter for pride of all of us Wisconsin physicians that it was one of us—Eben Carey, Dean of the Medical School of Marquette University — who engineered the medical educational project.

Rare judgment was displayed by the managers of the Exposition in choosing a man like Dr. Carey for the great task he performed. Less wise men would have picked an *exhibitionist* instead of an educational *exhibitor*. A very real and very broad distinction is intended here. As an anatomist, Dr. Carey appreciated far better than most medical men the power, in education, of ocular demonstration. It is not so easy, however, to track the source of his confidence in the desire of the public and their ability to accept popularized, but thoroughly scientific instruction in the intricacies of our science. That's beside the point now because the public proved "they could take it and like it."

There is a lesson and also a warning in the success of the Chicago medical science exhibits. *Truth* henceforth will be more easily dispensed to the lay public; *pretense* and *chicanery*, to be accepted, will need to be refurbished. H.E.D.

John W. Coon, M. D.

WISCONSIN has lost a member of the medical profession whose pioneer work in the field of tuberculosis entitles him to special consideration. Dr. John W. Coon, superintendent and medical director of River Pines Sanatorium, Stevens Point, died on September 17, 1934, at the age of 74 years.

Dr. Coon saw the beginning of the organized fight against tuberculosis in Wisconsin. As a family physician, and later as register of vital statistics in the Milwaukee Health Department from 1892 to 1902, he had impressed on him the then common viewpoint of the average physician: that tuberculosis was a hopeless and a devastating disease.

In 1903 the president of the State Medical Society appointed Dr. Coon a member of a Committee of five to devise plans "for the dissemination of knowledge of tuberculosis and the establishment of sanatoria for the treatment of the consumptive poor." Later,

Our Society

"I have no hesitancy whatever in saying that in my opinion the State Medical Society of Wisconsin has become one of the most efficient, progressive and devoted arms of medical organization in the United States, and that its service for medicine and its service for humanity is of a most distinguished nature."

—Olin West, M. D., *Secretary and General Manager, American Medical Association*, September–1934.

as superintendent of the State Sanatorium at Wales, the Chicago Municipal Sanitarium, Valmore Ranch (New Mexico) and as superintendent and medical director of River Pines Sanatorium, he became a leader in the organized fight against tuberculosis in Wisconsin and in the nation.

Thousands of patients in the middle west mourn the death of Dr. Coon. He was the ideal physician, winning the confidence of his patients almost at once, and rarely losing that confidence so essential to success even though the patient's fight was long and often discouraging.

Dr. Coon's life work in his chosen profession holds much of value to the medical student and the young physician. He was always a student and always worked hard and faithfully for the best interest of his patients. He was honorable, sympathetic and just in his treatment of patients and fellow practitioners. He was not led astray by extravagant claims of unscrupulous and sometimes of half-educated members of his profession.

He was not the first the new to try,
Nor yet the last to lay the old aside.

Through his own efforts, Dr. Coon became a leader in his chosen field. With high ideals, with integrity of character, with the will to work hard and faithfully for his patients, he has left a rich heritage for those who follow him, an honored name and a legion of friends who are the better because they knew him and his work. T.L.H.

Election of Officers

DURING November, December and January all of the component county societies will hold their annual election of officers. Within the decade there has been a growing recognition that the offices of President, Secretary and Delegate are far from honors to be distributed. The three elective offices mentioned present an outstanding opportunity to do constructive work that will redound to the advantage of the profession in the society and within the whole state as well.

The obligations of these offices are such that well discharged, the society cannot help but progress; but when partially discharged, the profession must inevitably fail to attain that which may be had through an active year.

Nor may we close this comment without pointing out that it has been the most generous services of these officers during the past year that has brought the profession of this state such fine returns. Your officers serve you at no little sacrifice of time. Their efforts merit the ready cooperation of each member in every possible manner.

Surgery in the Treatment of Pulmonary Tuberculosis

THERE can be little disagreement with the statement that surgery in pulmonary tuberculosis is no longer experimental, made by the writer of the editorial in the August Journal. There are too many patients who have been changed from a state of chronic invalidism to that of self-supporting individuals by surgery, and also too many patients who have actually been saved by surgery, to admit of much argument.

Years ago the old, chronic, fibroid case with a positive sputum was given a sanatorium bed and was destined to spend his remaining years there with little, if any, hope for ultimate recovery. All too frequently he refused to stay at the sanatorium, would return home and spread tuberculosis to all within reach of his bacillus-laden sputum. Today every such case—provided

there are no contraindications as marked bilateral involvement or poor surgical risk—should be given the opportunities that collapse therapy, either by artificial pneumothorax or by one of the various surgical procedures, offers. The results of well selected surgery in some of these apparently hopeless cases are truly remarkable.

Unfortunately, however, this very success of surgery has brought with it questionable practices which should be recognized in time and should be heeded before their growth throws into disrepute the most valuable aids in the treatment of pulmonary tuberculosis.

I refer to the more or less indiscriminate use of these surgical methods by surgeons or men in general practice who have had little, if any, experience in treating tuberculosis. The mere fact that a physician is a competent surgeon, and, from a surgical viewpoint can do a first class phrenicectomy or thoracoplasty, does not qualify him to recognize the various indications for surgical interference, or to pass judgment on the needs of the individual patient suffering from pulmonary tuberculosis.

Surgery in pulmonary tuberculosis is, after all, but one method to accomplish a definite end in a course of treatment extending over a long period of time. When to apply surgical methods of collapse, and to what extent they may be indicated, is very definitely the responsibility of the physician with training and experience in tuberculosis.

Another factor that must be recognized in the application of surgery to pulmonary tuberculosis is the fact that pulmonary rest produced by surgical measures is not a substitute for the well established and well recognized sanatorium treatment. Used as an adjunct to sanatorium treatment, surgical collapse is one of the bright stars in the progress of medicine; used without sanatorium care it is bound to fail.

To subject a patient with pulmonary tuberculosis to surgery without the aid and judgment of a physician experienced in treating the tuberculous, or to use surgical methods without sanatorium care, will result in failure and possibly thereby discredit these most valuable therapeutic measures. O. L.

Of Phrenic Nerve Interruption

FEW students of tuberculosis will deny the benefits to a diseased lung which may result from paralysis of the diaphragm by interruption of the phrenic nerve. The question frequently arises as to whether or not the interruption should be permanent or temporary. Each procedure has its proponents, but because the diaphragm plays such an important role in the physiology of the respiration and circulation there are certain very serious objections to its permanent paralysis. Every phthisiologist should be fully aware of the consequences of performing an operation, the results of which may be detrimental to the patient.

Some of the more important of these objections are as follows: first, the circulation is interfered with through displacement of the heart by the high rising diaphragm. Furthermore, having lost its piston-like action, the diaphragm no longer assists in emptying the abdominal veins into those of the thorax and into the auricles. Second, following left sided block, the abnormally high position of the stomach may so disturb its function that a series of very distressing symptoms often arises in the relief of which the physician is powerless when the nerve interruption has been made permanent. Third, severe dyspnea may ensue, if as a result of the loss of approximately one-third of the function of the lung on the operated side, the patient is unfortunate enough to develop heart disease, tuberculosis on the operated side or pneumonia on either side. Fourth, atrophy of the diaphragm following permanent interruption sometimes occurs to such an extent that the diaphragm is reduced to a paper-thin membrane, thus predisposing it to rupture.

Although these untoward results may not always occur, nevertheless they are so serious when they do arise that they seem to contraindicate the use of permanent destruction of this important nerve of respiration and circulation. Because the benefits of prolonged paralysis of the diaphragm may be obtained by repeated temporary block with much less risk to the comfort and life of the patient, it is probable that, in the future, permanent destruction of this nerve will less frequently be done. R.H.S.

. . . . THE PRESIDENT'S PAGE . . . .

"There Is Work to Be Done"

WITHIN the past month a letter was directed to each county society president calling attention to the fact that two hundred or more young men had been licensed to practice in this state within the past past twelve or eighteen months; that at least half of this number have located in different counties. In addition, there are some four or five hundred physicians who have been in practice more than two years who are probably eligible to membership, but who have not selected to take advantage of membership of organized medicine.

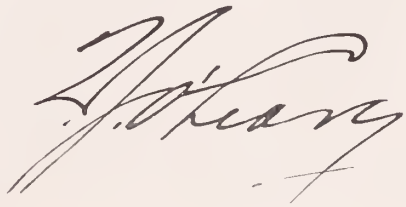
This letter solicits the support of each component society through its president to contact practitioners who are not members with the hope of inducing them to join the ranks of organized medicine. The reason for non-membership amongst this group is probably due to fancied grievances locally, and particularly to the lack of interest. I believe that if each member will co-operate with his president in contacting these men, explaining to them the manifold benefits that organized medicine affords, a great number may be induced to join their county society.

At this time it should be the aim of every member to have an increase in the membership and this a substantial one compared to the past three or four years. There is work to be done.

In the present issue of the Journal appears an article which if read closely and studied well discloses to you how near we are to a radical change in the present order of organized medicine. The only means we have to combat this movement is a well organized front with but one purpose: that to maintain the present order of practice.

The dues should not be considered a hardship, particularly on you new members, because the society has provided a means of prorating monthly the dues to the first of the year, and to you other members the dues should be considered an investment that is paying cash dividends, because it is through organized medicine that the relationship with the Relief Administration is at least as favorable as in any other state.

I have already received a number of replies from county presidents who were most enthusiastic about this increased membership, and I have been encouraged to the extent that I now make this general plea to all the members of each component county society in the hope that deeper interest will be aroused which will eventually create an interest in the non-members so that by the first of the year 1935 we will have many new names added to our roll.



SOCIETY PROCEEDINGS

DANE

Dr. James C. Sargent of Milwaukee delivered an illustrated talk at a meeting of the Dane County Medical Society in Turner Hall, Madison, October 9th. His subject was "Common Problems Concerning Urinary Tract Stones."

FOND DU LAC

Members of the Fond du Lac County Medical Society were guests of Sunnyview Sanatorium at Winnebago, Wisconsin, on October 16th.

Dr. E. P. K. Fenger of Glen Lake Sanatorium, Oak Terrace, Minnesota, gave a talk on "Early Diagnosis of Tuberculosis" and was assisted by Dr. H. W. Maly, also of Glen Lake Sanatorium.

MILWAUKEE

The October meeting of the Medical Society of Milwaukee County was held on October 12th in the Athletic Club, Milwaukee.

Dr. John P. Koehler of Milwaukee gave an address on "What is Wrong with the Health Department?"

Dr. Alfred Blalock, associate professor of surgery, Vanderbilt University School of Medicine, Nashville, discussed "Circulatory Changes in Shock."

This was followed by the social hour.

OUTAGAMIE

On September 6th the Outagamie County Medical Society met at the Riverview Country Club at Appleton for a special business meeting. Golf was played during the afternoon in which Doctors McGrath and Frawley had the lowest scores.

On October 4th Dr. John W. Harris, Madison, spoke to the Society on "Recent Advances in Obstetrics". This meeting received a very hearty response from the members of the Society. G. W. C.

PRICE–TAYLOR

The Price–Taylor County Medical Society held its annual meeting at the Hotel Fayette in Medford on October 4th. Following the business meeting, a banquet was served.

Officers elected for the year were as follows: President, Dr. J. D. Leahy, Park Falls; Vice-President, Dr. E. A. Lapham, Rib Lake and Secretary and Treasurer, Dr. E. B. Elvis of Medford.

RACINE

The regular monthly meeting of the Racine County Medical Society was held at the Elks Club, Racine, Thursday, September 20th at 8:15 P. M.

Dr. Donald Putnam Abbott of Rush Medical College gave a very fine talk on the subject "Indigestion; the Early Diagnosis and Treatment of Gastrointestinal Disorders." His talk was illustrated with slides.

A report of the Economic Committee was given by Dr. John Docter of Racine.

The regular meeting of the Racine County Medical Society was held Thursday, October 18th, at the Elks Club at 8:15 o'clock.

The program consisted of a talk by Dr. Eugene S. Knox of Green Bay on the subject "Gas Gangrene" which was illustrated by slides. Dr. H. A. Heise of Milwaukee gave a talk on "The Detention of Alcohol in Body Fluids (Quantitatively) and the Factor of Alcohol in Automobile Accidents."

Dr. L. M. Lifschutz, Dr. W. F. Konnak and Dr. E. W. Schacht were duly elected members of the Society. S.J.

ROCK

Forty physicians attended the meeting of the Rock County Medical Society held on September 25th at Beloit.

Dr. H. C. Schumm of Milwaukee was the speaker of the evening, the subject of his talk being "Lesions of the Knee Joint."

The new medical relief program was discussed with Dr. W. T. Clark, medical adviser to the State Relief Director, who was present to answer all questions.

Mrs. Marquerite Lison Ingram of the Crippled Children's division of the Department of Education, Madison, gave a short talk and showed a film on the work of the orthopedic schools. T.F.

VERNON–MONROE–JUNEAU

A meeting of the physicians in these counties was held on October 4th at Hillsboro.

A business meeting opened the program at ten o'clock after which a tour was made of the Hutter Brewing Company. Following the luncheon, Dr. H. E. Marsh of Madison spoke on "Management of Heart Disease" and Dr. H. W. Virgin, also of Madison, discussed "Fractures of Hands and Feet."

WINNEBAGO

Approximately seventy physicians from the Fox River Valley attended the dinner meeting of the Winnebago County Medical Society held in the Raulf Hotel, Oshkosh, on October 17th.

Speakers at this meeting were Dr. A. C. Broders of the Mayo Clinic who spoke on Grading of Cancer in Its Relationship to Prognosis and Treatment" and Dr. W. D. Stovall, Chairman of the Cancer Committee of the State Society, Madison, who discussed "The State Program for the Control of Cancer."

Dr. M. N. Pitz, president of the Winnebago County Medical Society, presided.

FIRST COUNCILOR DISTRICT

At the First Councilor District meeting held in Beaver Dam on Wednesday, October 10th, the following officers were elected for the year 1935:

President—Dr. H. P. Bowen, Watertown.
Vice-president—Dr. W. G. Riopelle, Beaver Dam.
Secretary—Dr. J. F. Wilkinson, Oconomowoc.

A resolution was passed creating a treasury for the district organization by authorizing a tax of twenty-five cents upon each member of the district annually.

The scientific program was devoted entirely to the subject of goitre and consisted of three masterful papers on that subject delivered in the following order:

Etiology—Dr. Marshall Boudry, Fond du Lac.
Diagnosis—Dr. D. J. Twohig, Fond du Lac.
Treatment—Dr. Arnold Jackson, Madison.

These three men covered the field in such a concise, thorough, and competent manner that everyone present was rigidly at attention during the entire program and at its conclusion felt that he had participated in a most up-to-date review of the subject. It is well worth repetition before any group of medical men.

Following the scientific program there was a social hour conducted by Dr. A. W. Rogers and Dr. H. G. B. Nixon and then a dinner. The dinner was followed by a quiz conducted by Dr. A. A. Hoyer of Beaver Dam and a short interesting talk by Congressman C. W. Henney, our conferre, from Portage. The speaker of the evening, Dr. Silas Evans, President of Ripon College, addressed the meeting on the subject of "The Professional Qualifications of The Physician" which contained a great many opinions and suggestions concerning the manner, poise, evidence of devotion to science and altruistic motive that was of great value because of its revelation of the layman's conception of what a physician should be. His talk revealed a profound sense of humor and a keen sense of the physician's responsibility to his community. Between the talks musical entertainment was very ably supplied by three young women from Wayland Academy situated in Beaver Dam.

As guests of the District the following physicians were present: Dr. A. H. Heidner, West Bend; Dr. C. M. Gleason, Manitowoc; Dr. S. E. Gavin, Fond du Lac; Dr. R. W. Blumenthal, Milwaukee, and Dr. Hubert Devine, Fond du Lac. J.F.W.

MILWAUKEE ACADEMY OF MEDICINE

A meeting of the Milwaukee Academy of Medicine was held on October 16th, the following program being presented:

"Infra-Red Photography in Medicine" by Leo C. Massopust of Marquette University.

"Use of Antivirus in Ulcerative Colitis" by Dr. Ernst Oesterlin.

MILWAUKEE HOSPITAL INTERNS

The first meeting of the season of the Milwaukee Hospital Interns' Association was held at the Milwaukee Hospital at 8:15 P. M., September 19th.

Dr. Frank Drew presided in the absence of Dr. Wm. P. O'Malley, past president.

Officers for the following year elected are: President, Dr. Frank Drew; Vice-President, Dr. Harry Barnes; Treasurer, Dr. Edward Jackson and Secretary, Dr. E. F. Weir.

MILWAUKEE NEURO-PSYCHIATRIC

A meeting of the Milwaukee Neuro-Psychiatric Society was held on October 25th at the University Club.

Following dinner at six-thirty o'clock, case presentations were made by Drs. Garvey, Kasak, Storcheim and McCormick.

MILWAUKEE OTO-OPHTHALMIC

The October meeting of the Milwaukee Oto-Ophthalmic Society was held at the University Club on Tuesday, October 23rd. A clinical meeting with exhibition of patients at six o'clock preceded the dinner at six-thirty.

Dr. Hilmer G. Martin spoke on "Heterophoria as an Etiological Factor in Strabismus" following the dinner, and Dr. John B. Hitz, read a paper on "Osteomyelitis of the Frontal Bone Secondary to Sinusitis."

CENTRAL WISCONSIN SOCIETY OF OPHTHALMOLOGY AND OTOLARYNGOLOGY

Physicians from northern and central part of Wisconsin attended a meeting of this Society held on Sunday and Monday, October 21 and 22, at Marshfield. The meeting opened with a dinner at six-thirty o'clock which was followed by a business meeting. Addresses were then given by Dr. C. S. O'Brien, professor of ophthalmology, University Hospitals, Iowa City, who spoke on "The Choice of Operation in Cataract Surgery" and Dr. D. M.. Lierle, professor of Otolaryngology, University Hospitals, Iowa City, who discussed "Nasal Allergy."

At nine o'clock on Monday, the physicians convened at St. Joseph's Hospital where ten minute talks were given by members of the staff as follows:

"Pre-operative Medical Management of Cataract Cases" by Dr. K. H. Doege.

"Relationship of Urology to Other Specialties" by Dr. W. G. Sexton.

"Malignant Tumors of the Neck" by Dr. P. F. Doege.

"Agranulocytic Angina" by Dr. J. B. Vedder.

"Eczema of Eye Lids and External Ear" by Dr. S. G. Schwarz.

"Throat Infections with Reference to Appendicitis" by Dr. H. A. Vedder.

"An Internist's Idea of Focal Infection" by Dr. F. A. Boeckman.

"Rheumatism in Children" by Dr. A. L. Millard.

"Brain Abscess" by Dr. R. S. Baldwin.

"Roentgen Therapy in the Treatment of Ear, Eye, Nose and Throat Conditions" by Dr. R. P. Potter.

The concluding session began at two o'clock Monday afternoon at the Marshfield Clinic library where Dr. O'Brien discussed "Ocular Tuberculosis" and Dr. Lierle spoke on "The Anatomy of the Temporal Bone."

The Woman's Auxiliary

Mrs. Rock Sleyster, 1220 Dewey Ave., Wauwatosa, *President*
Mrs. F. Gregory Connell, 420 Washington Blvd., Oshkosh, *President-elect*
Mrs. George H. Ewell, 2024 Kendall Ave., Madison, *Secretary*
Mrs. Donne F. Gosin, 631 S. Quincy Ave., Green Bay, *Treasurer*
Mrs. R. W. Tomlinson, 1021 Park Place, Wilmington, Del., *National President*

Tribute to Wisconsin Auxiliary

The Woman's Auxiliary to the State Medical Society of Wisconsin is again honored by having four of its members among the officers of the National Auxiliary.

Mrs. Rock Sleyster, Wauwatosa, our State President, is serving a second year as a director of the Woman's Auxiliary to the American Medical Association. Mrs. Sleyster will be remembered as the very able National Convention Chairman at Milwaukee in 1933. Wisconsin Auxiliary may look forward to a fruitful year under Mrs. Sleyster.

Everyone is familiar with the work done by Mrs. Robert Fitzgerald, Milwaukee, as National Chairman of Press and Publicity, and it is gratifying to know that she will "carry on" another year and give us the News Letter. She is a gifted writer, wields a facile pen, and will bring many interesting items to our attention in her forthcoming contributions to the Woman's Auxiliary Department of the A.M.A. Journal and as Editor of the Quarterly News Letter.

Wisconsin contributes the National Treasurer this year, Mrs. Eben J. Carey, Milwaukee, Past President, whose contributions to the Wisconsin Auxiliary are well known.

Mrs. Fred Nause, Sheboygan, has been appointed a Regional Chairman on the Hygeia Committee. She will have under her supervision the northern division made up of the following states: Minnesota, Iowa, Illinois, Indiana, Kentucky, Ohio, Wisconsin, Michigan, Virginia, and Tennessee. Mrs. James D. Lester, Nashville, Tennessee, is National Hygeia Chairman.

Message from Press and Publicity Chairman

To the Members:

We are on the threshold of another year in our Auxiliary work and in each and every group plans are being formulated for the coming winter.

Let us, as individual Auxiliaries, join in making this a year to be proud of in every phase. Let us help each other by passing along our ideas and accomplishments. Do this by using these Auxiliary pages. See to it that each worth while event and project is recorded so that others may read and profit.

In this way only can we become one united and progressive organization with one end in view—our success as an Auxiliary to the medical profession.

Let me have all the news you have to impart that we may print it in this monthly Journal. And I ask the County Press and Publicity Chairmen to cooperate by getting all material in to me before the fifteenth of each month.

With all good wishes for a successful year, I am,

Cordially,

(Mrs. T. J.) Minnie Gunther,
2117 N. 8th St., Sheboygan, Wis.

County News Items

DANE COUNTY

The Woman's Auxiliary to the Dane County Medical Society began its fall activities with a delightful buffet luncheon at the home of its president, Mrs. Reginald H. Jackson, Madison. The informal occasion was largely attended and afforded the members an opportunity for better acquaintances. A short business meeting was held. Mrs. George Ewell, State Secretary, gave a very comprehensive report of the National Convention. A report of the Sixth Annual Meeting at Green Bay was presented by Mrs. Albert Bryan of Madison. The members were urged to read the Auxiliary page in the Medical Journal.

The Dane County Auxiliary is actively promoting HYGEIA, especially in schools.

DOUGLAS COUNTY

The first meeting of the fall season for the Woman's Auxiliary to the Douglas County Medical Society was held Wednesday evening at the home of its president, Mrs. V. E. Ekblad, Superior.

Miss Martha B. Merrell, public librarian, reviewed a list of suggested books dealing with the science of medicine and its tributaries. These books, while perfectly authentic in content, are written in the modern trend and therefore have especial appeal to the layman, it was pointed out.

A report of the September meeting of the Woman's Auxiliary to the State Medical Society, held at the Northland Hotel in Green Bay, was given by

Mrs. Ekblad, the local president, and Mrs. T. J. O'Leary, delegate.

The delegates reported that the Wisconsin Auxiliary, comprising 750 members representing 17 county units, although third youngest in the nation, ranks fifth by virtue of its organization in the auxiliary to the National Medical Association.

MILWAUKEE COUNTY

The Woman's Auxiliary to the Medical Society of Milwaukee County held its first fall meeting on Friday, October 12th at the Y. W. C. A. with an attendance of about eighty-five members and guests. After the luncheon, Miss Erna Kowalke, director of the Visiting Nurses' Association, gave a very interesting talk on the organization and development of the Association and its work and place in the community at the present time. Following her talk a group of visiting nurses presented a skit called "As the Visiting Nurse Sees It", a realistic account of a nurse's daily activities, written by a member of the Association.

At the business meeting which followed, Mrs. Gurney Taylor, the president, presided and introduced Mrs. J. Foster McNary who gave a report of the National meeting held in Cleveland last June, and Mrs. Harry Heeb, president-elect, who gave a report of the State meeting held in Green Bay in September. Mrs. Taylor named Mrs. Karl Schlaepfer as Chairman of the newly organized Public Welfare Committee, and Mrs. Schlaepfer spoke of the purpose of the Committee being that of familiarizing Auxiliary members with the social agencies in the City and developing a program of social welfare in our organization.

An announcement was made that the Social and Hygeia Committees are planning a benefit bridge party to be given in the third week of November, the proceeds from which to be left in the treasury so that the new officers of 1935 might have funds on which to draw for the philanthropic projects and for the expenses of the State Convention to be held here next September.

On November 9th, Dr. Woodward, director of the Bureau of Legal Medicine of the A.M.A. addressed the Auxiliary on "Medical Legislation".

OUTAGAMIE COUNTY

A constitution for the Woman's Auxiliary to Outagamie County Medical Society was presented and accepted at the dinner meeting, Oct. 4th, at the Northern Hotel which was attended by 24 members.

Mrs. G. J. Flanagan, Kaukauna, and Mrs. J. J. Laird, Black Creek, reported on the sessions of the Auxiliary at the Annual Meeting.

PORTAGE COUNTY

A meeting of the Woman's Auxiliary to the Portage County Medical Society was held Monday afternoon at the home of Miss Louise Southwick. Mrs. Erich Wisiol discussed an article, "Waging War on Poleo," from the September issue of Hygeia, and Mrs. Earle E. Kidder and Mrs. Herbert P. Benn explained certain phases of the pure food and drug act, Mrs. Kidder discussing patent medicines, while Mrs. Benn's subject was the Copeland–Tugwell bill. A review of the book "A Hundred Million Guinea Pigs," by Kallet and S. J. Schlink, was given by Mrs. Henry Finch, a guest of the Auxiliary.

RACINE COUNTY

Racine County followed its regular precedent by making a trip through the city filtration plant. It was a most interesting and instructive visit, doubly so because Racine boasts of the best and purest drinking water of any of the Lake cities. The members of the Auxiliary up to date have visited the following institutions: Hospitals including the Isolation Hospital, County farm and asylum, County Sanitarium and the Southern Wisconsin Colony of Feebleminded and Epileptics. Most of the members visited these institutions for the first time and felt their time well spent.

SHEBOYGAN COUNTY

The Woman's Auxiliary to the Sheboygan County Medical Society held its monthly luncheon meeting on Wednesday, October 3rd, at the "Elsie Timm".

Miss Louise Christianson, director of the Vocational School, gave a very interesting talk about her work with the girls at the school. She told about its development, the methods used to keep the girls interested, the girls' clubs, their dramatic group and so on. An invitation was extended to the members of the Auxiliary to visit the school.

Mrs. Fred Nause gave a report of the sixth annual Auxiliary meeting at Green Bay.

The next luncheon will be held in Plymouth at the "Dresden Tea Shop".

WINNEBAGO COUNTY

The members of the Winnebago County Medical Society were guests of the Woman's Auxiliary at a dinner at the Colonial Tea Room on September 24th. Mrs. E. B. Pfefferkorn rendered two delightful vocal selections. Bridge was played and prizes were awarded.

TO THE COUNTY PRESIDENTS

Will the outgoing presidents of the seventeen county auxiliaries send the names and addresses of the newly elected officers and chairmen to the office of the State Medical Society, Washington Bldg., Madison, just as soon as elections are held in December? You are asked to cooperate so that each state officer and chairman can be supplied with a list of the new county officers.

TO THE COUNTY TREASURERS

If there are any additional dues for 1934, *now* is the time to send them to your state office,—State Medical Society, Washington Bldg., Madison.

It is hoped that the complete membership list for current year can be published in the December issue of the Medical Journal.

News Items and Personals

Dr. R. C. Buerki, Madison, was chosen President-Elect of the American Hospital Association at the annual meeting of the Association held in Philadelphia on September 28th. At the present time, Dr. Buerki is President of the Wisconsin Hospital Association.

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Dr. A. A. Pleyte, Milwaukee, and Dr. Hoyt E. Dearholt, Milwaukee, were speakers on the program of the Mississippi Valley Conference on Tuberculosis held at Cedar Rapids, Iowa, on September 27, 28 and 29. The subject of Dr. Pleyte's address was "Whither Goest Thou, Doctor?" while Dr. Dearholt presented "The W.A.T.A. County Statistical Strip—A Tuberculosis Worker's Map and Guide Book, or Geography for Tuberculosis Workers."

—△—

Dr. S. M. Welsh of La Crosse spoke on "Children's Diseases" before the annual meeting of the Wisconsin Chiropody Society held in La Crosse on October 1st.

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A special program of lectures and demonstrations in medicine will be held under the direction of The Mayo Foundation from December 3 to 7, inclusive. Mornings will be devoted to surgery and dry clinics. In the afternoons and evenings medical and surgical subjects, including cardiovascular diseases, diseases of the nervous system, artificial fever, roentgen and radium therapy, laryngology, oral and plastic surgery, gynecology, diseases of the endocrine glands and orthopedics, will be discussed.

While this program is arranged primarily for the Fellows of The Mayo Foundation, visiting physicians are invited to attend.

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A postgraduate clinic meeting was held at Methodist Hospital, Madison, Saturday morning, October 6th. The meeting was the annual gathering in connection with the Marquette–Wisconsin football game, a joint program being furnished by members of the Marquette faculty and the staff of the Jackson Clinic.

Dr. T. J. O'Leary, President of the State Society, gave a report of the September annual meeting in Green Bay. Other addresses were given by Dr. F. D. Murphy and Dr. J. C. Sargent of Milwaukee; Dr. S. E. Gavin, Fond du Lac, and Drs. G. H. Ewell, H. E. Marsh, A. M. Schwittay and R. H. Jackson, all of Madison.

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Mrs. Wilhelmina Jensen, mother of Dr. A. B. Jensen of Menasha, died on October 10th at her home in Chilton at the age of eighty-six years.

The following physicians who have recently obtained their Wisconsin license have opened offices or joined clinic staffs:

Dr. Paul M. Golley on October first opened an office at 421 East Silver Spring Drive, Whitefish Bay, Milwaukee.

Dr. Peter A. Duehr, formerly resident physician at Wisconsin General Hospital, has joined the staff of the Davis and Neff Clinic, Madison.

Dr. George C. Schulte has opened an office in the U. S. National Bank Building, Kenosha.

Dr. E. T. Lautenbach has become associated with Dr. C. H. Andrew of Platteville.

Dr. Mark M. Temkin has opened an office in Beaver Dam.

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Dr. W. C. Reineking, Madison, was elected to head the tuberculosis division of the American Hospital Association for the ensuing year at the annual meeting of the Association in Philadelphia.

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Dr. W. D. Stovall, Madison, and Dr. T. D. Smith of Neenah were speakers on the program of the Neenah–Menasha Visiting Nurse Association held in Menasha on October 10th.

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Mr. J. G. Crownhart, Secretary, spoke before the Clinic Managers' Conference held in Madison on October 17th and 18th.

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At a meeting of the Wisconsin Public Health Nurses held in Madison on October 4th and 5th, Dr. R. W. Blumenthal of Milwaukee spoke on organized medicine and public health nursing; Dr. W. D. Stovall, Madison, discussed modern preventive trends, and Dr. Louis Fauerbach, Madison, talked on skin diseases.

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Dr. R. W. Benton, Milwaukee, has moved his offices to the Goldsmith Building in the suite formerly occupied by Drs. Patek, Stoddard and Dieterle. He is continuing his practice in internal medicine.

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Drs. Albert B. Leigh and C. D. Boyd of Kaukauna are having a new office building constructed on West Wisconsin Avenue in Kaukauna. It will be a frame building with two suites of offices, an operating room, a dressing room, a general office and waiting room. The x-ray and laboratory departments will be in the basement.

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Drs. Wayne F. Cowan and H. P. Benn of Stevens Point have recently formed a partnership and are sharing joint offices at 457½ Main Street, Stevens Point.

Mrs. Arthur C. Helm, 79, wife of Dr. A. C. Helm and mother of Dr. Harold Helm of Beloit, died on October 15th at her home in Beloit.

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At the annual meeting of the Wisconsin Anti-Tuberculosis Association held on Monday and Tuesday, Oct. 29 and 30, the following physicians were speakers on the programs: Drs. J. Gurney Taylor, James C. Sargent, Oscar Lotz, J. J. Adamkiewicz, Louis M. Warfield, Hoyt E. Dearholt, all of Milwaukee, and Dr. F. F. Bowman of Madison; Dr. I. F. Thompson, Racine, Dr. R. D. Thompson, Statesan, and Dr. George Beebe of Eau Claire.

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Dr. W. J. Allen, Beloit, attended a fracture course given at Harvard University, October 8th to 13th. He was also present at the meeting of the American College of Surgeons which preceded the fracture course.

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Dr. Glenn R. Stauff, formerly of Green Bay, on October first moved his office to the town of Allouez.

MARRIAGES

Dr. Johannes Jensen, Milwaukee, to Miss Anita Netzow on September 15th.

Dr. Stuart H. Perrin, Superior, to Miss Esther Catherine Cleary, Prior Lake, Minnesota on September 29, 1934.

Dr. Cyril J. Radl, Pardeeville, to Miss Ruth Armstrong of Wauwatosa on November 10th at Wauwatosa.

DEATHS

Dr. W. C. Abaly, Madison, died on October 12th.

Dr. Abaly was born at Cottage Grove in 1862 and was a graduate of College of Physicians and Surgeons of Chicago in the year 1886. Following graduation Dr. Abaly opened an office in Madison specializing in diseases of eye, ear, nose and throat.

He is survived by his widow.

Dr. J. A. Lowe, Pleasant Prairie, died suddenly on October 16th.

Dr. Lowe was born near Peterborough, Ontario, Canada, in the year 1870 and came to the state when a youth. He graduated from Bennett College of Eclectic Medicine and Surgery in Chicago in 1902 and was licensed to practice in Wisconsin in 1903. He established his practice in Pleasant Prairie in 1903 and had resided and practiced medicine there since that time.

He is survived by his widow and one daughter.

Dr. John R. McDill, 74, the last surviving honorary member of the Medical Society of Milwaukee County, died at the home of his daughter at Cornwall-on-the-Hudson, New York, on September 15th.

Dr. McDill was born in Madison and was the son of Dr. A. S. McDill, a former superintendent of the State Hospital for Insane at Mendota. He was a graduate of Rush Medical College.

Dr. McDill served as chief operating surgeon of the 7th army corps in Cuba, and chief operating surgeon in the Philippines during the Spanish–American War. In Manila he organized the Woman's Hospital, becoming its chief surgeon. He was appointed chief surgeon at St. Paul's Hospital and the Philippine General Hospital. In 1912, he returned to his practice in Milwaukee. In 1916 he was appointed surgeon in chief of six field hospital units established in Germany and Austria under the auspices of the American Surgeons' Expeditionary Committee. When the United States entered the World War, Dr. McDill withdrew from the hospitals and returned to this country. He became chief surgeon in the base hospital of the 40th Division at Camp Kearney, California. In March, 1919, he was named chief medical officer in the rehabilitation division of the federal board of vocational education in Washington.

Dr. McDill was the author of *Lessons From The Enemy* and *How Germany Cares For Her War Disabled.*

He is survived by two sons and a daughter.

Dr. Arthur J. Burgess, a former practicing physician in Milwaukee for twenty years, died on October 18th in Warwick, New York.

He was born in Nova Scotia on July 13, 1856, and was a graduate of Harvard University Medical School in 1882. Following postgradute study abroad he returned to become a member of the medical staff of The Northern Hospital for the Insane, later practicing in Milwaukee. After retirement he lived in Florida in the winter and Warwick, N. Y., in the summer. In De Land, Florida, he was instrumental in the establishment of a hospital for negroes.

He is survived by his widow and two daughters.

CORRESPONDENCE

EVERY EFFORT TO COOPERATE

MARSHFIELD NEWS–HERALD
Marshfield, Wis.

Oct. 3, 1934.

State Medical Society,
119 E. Wash. Ave.,
Madison, Wis.
Gentlemen:

In mailing your weekly news letters to the News–Herald, may we ask that you address them simply to the newspaper rather than to any individual.

We have been using your releases regularly, and you may be assured that we will make every effort to cooperate with the Medical Society in every way possible.

Very truly yours,
MARSHFIELD NEWS–HERALD,
J. Parr Godfrey,
City Editor.

Sickness Insurance Report to President on December First; College of Surgeons and Foundations Support Movement

ON DECEMBER first or shortly thereafter President Roosevelt will decide whether sickness insurance in any form is to be a part of the "New Deal." At that time he will receive the report of his Committee on Economic Security which will include some recommendation on this subject matter.

Support for a broad program of sickness insurance, it is said, has come to high government officials from the American College of Surgeons, the Milbank Foundation, the Rosenwald Fund, Edward A. Filene's Twentieth Century Fund, relief officials, social workers and the American Hospital Association. Two employees of the Milbank Fund have been employed by the Committee on Economic Security to conduct the committee's study on the subject of "Provisions for Meeting the Economic Risks of Illness." These employees of the Committee are Edgar Sydenstricker and I. S. Falk. Mr. Sydenstricker and Dr. Falk (Ph.D.) are associates in the Milbank Foundation with Mr. John A. Kingsbury, Secretary of the Foundation. Their earlier Milbank Foundation studies looking towards the presentation before state legislatures of a system of compulsory sickness insurance have been previously discussed in this Journal (May, 1934).

While advisory committees will be appointed to discuss several angles of the subject matter, it is understood to be the present plan of the Federal Committee to select no official representatives of organized medicine although the committee of physicians will include as individuals the Presidents of the American College of Surgeons, the College of Physicians and of the American Medical Association. No formal hearings on the subject will be had. Members of the Cabinet Committee on Economic Security are Secretary of Labor Frances Perkins, Chairman; Secretary of Treasury Henry Morganthau, Jr., Attorney General Homer S. Cummings, Secretary of Agriculture Henry A. Wallace, and Federal Emergency Relief Administrator Harry L. Hopkins. Prof. Edwin E. Witte, Madison, is Secretary of the Committee and Director of its staff.

In a press release on the work of the Committee it is stated:

The Committee on Economic Security was charged by the President with the task of studying the entire problem of economic security for the individual, as a basis for the formulation of sound legislation to be presented to the 74th Congress which meets in January. The President declared in this connection:

> "Among our objectives, I place the security of the men, women, and children of the Nation first.
>
> "This security for the individual and for the family concerns itself primarily with three factors. People want decent homes to live in; they want to locate them where they can engage in productive work; and they want some safeguard against misfortunes which cannot be wholly eliminated in this man-made world of ours."

Following the approach outlined by the President, the Committee is trying to draw up a comprehensive program which will give protection to the individual

FELLOWS OPPOSE COLLEGE

A nearly complete poll of Wisconsin members of the American College of Surgeons discloses that only ten percent favor prepayment plans (sickness insurance) for both hospital and medical service. Some ninety percent hold that the institution of this principle would be subversive to the best interests of both public and profession.

That "prepayment plans" favored by the American College of Surgeons are in fact sickness insurance was clearly brought out by the New England Journal of Medicine of October 15th, who, in commending the position of the College, said in part of the prepayment arrangement, "one may as well say insurance, for that it must be by definition."

Wisconsin members of the College declared that its official position was taken without any effort to ascertain the views of the general membership.

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from all the vicissitudes and hazards of modern life —unemployment, accident, sickness, invalidity, old age, and premature death.

It is, of course, not contemplated that this program shall go into effect in its entirety immediately, but it is planned to give Congress and the country a "look ahead" as well as some recommendation for immediate action, to the end that there may be developed, from the outset, a unified plan for economic security.

WORK IT IS DOING

The Committee's report to the President is due to be made on December 1, 1934, and will not be made public until released by the President. In preparation for the formulation of the program, the Committee on Economic Security has initiated a number of studies under the supervision of outstanding authorities.

These studies include:

Unemployment Insurance. Dr. Bryce Stewart of the Industrial Relations Counsellors, Inc., New York City, with Merrill G. Murray of the Minnesota Employment Service.

Provisions for Old Age Security. Prof. Barbara N. Armstrong of the University of California, with Prof. J. Douglas Brown of Princeton University and Murray Latimer of the Technical Board of Advisors.

Provisions for Meeting the Economic Risks of Illness. Edgar Sydenstricker and Dr. I. S. Falk, Milbank Foundation, New York City.

Public Work as a Means of Economic Security. Emerson Ross of the F. E. R. A.

Employment Opportunities. Meredith B. Givens of the Social Science Research Council.

Special Measures for the Economic Security of Children. Miss Grace Abbott, former Chief of the Children's Bureau and Miss Katherine Lenroot, Acting Chief of the Children's Bureau.

Survivors' Insurance. Miss Olga B. Halsey of the Washington Office of the International Labor Organization.

Dependency and Relief. Frank Bane, American Public Welfare Association, Chicago.

Economic Security for Farmers and Agricultural Workers. Dr. Louis Bean of the Department of Agriculture.

Handling and Investment of Reserve Funds. O. S. Powell of the Federal Reserve Bank of Minneapolis.

Fiscal Aspects of the Security Program. Prof. G. A. Shipman of the University of West Virginia.

Background Factual Data. Alex Nordholm, Assistant to the Director.

Administrative Possibilities and Constitutional Questions. Thomas H. Eliot, Counsel of the Committee.

While it seems probable to observers that the Committee will first concern itself with the leading questions of relief, unemployment insurance, old age pensions and mothers' pensions, a study of a method for sickness insurance is said to be well under way by the Milbank men and will be considered by the Technical Staff of the Committee and the special advisory committees during November. The findings of the Committee and its recommendations will be made direct to the President preparatory to his message to Congress.

Observers at Washington attach much significance to the recent visit of Dr. Franklin H. Martin, Director General of the American College of Surgeons. They state that action of the College in endorsing the economic principles underlying all sickness insurance have given a most favorable turn to the joint drive of the Foundations which hopes to make sickness insurance a part of the New Deal legislation this winter both in Congress and in the several state legislatures. The support of the surgeons, it is pointed out in Washington, may go far towards convincing the President that the propagandists for this movement have merit and that the subject is one deserving of immediate attention as opposed to deliberate study.

Conferences with numerous officials in Washington disclose that it was the original plan of the Committee on Economic Security to give major consideration to the investigations of the subjects of old age pensions and unemployment insurance. In the original scheme, sickness insurance was down fourteen or fifteen in the list of a total of fifteen subjects for consideration. The action of the Medical Service Board and Regents of the American College of Surgeons together with the interested appearances of all those members of the medical profession who have previously announced their support of a sickness insurance plan has resulted in deluging the President with letters and telegrams. One member of the committee admitted nearly one-fourth of the time of the committee was being taken up with sickness insurance and there is scarcely a day goes by but what some physician who believes in the plan, many with Foundation or social work connections, calls upon the President.

SIR WILLIAM OSLER has well said, "Know syphilis in all its manifestations and relations and all other things clinical will be added unto you." The many insidious, destructive forms which syphilis takes in its later stages points to the necessity for early diagnosis and persistently continuous treatment. It is generally agreed that that treatment is most effective which is based on an adequate program of arsphenamine administration supplemented by a heavy metal in an effective form of which Iodobismitol is an example.

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While members of the medical advisory committee have not been announced, it is regarded as most signficant that organized medicine as represented by the State Medical Societies and the American Medical Association will not be officially represented. This is taken to mean that the question before the Cabinet Committee is not whether sickness insurance would be advisable, but whether the President can be presented with any concrete plan susceptible to immediate legislation in case the President desires to recommend such legislation.

STATE SOCIETY POSITION

The position of the State Medical Society of Wisconsin was reiterated by the House of Delegates at the Green Bay session when it adopted without change a supplementary report of the Secretary dealing with the position of the officers on the subject of "Social Security". This summarized report follows:

SOCIAL SECURITY

Viewing medicine in the field of its broad public service, little has been said of the tremendous accomplishments that it has made in the immediate years passed to cut the costs of illness. It was this Society that caused the creation of our State Board of Health a little over fifty years ago. In the short period of time, 1909 to 1932, just twenty-three years, there has been a 95% decrease in the deaths from typhoid fever in Wisconsin; and 89% decrease in the deaths from diphtheria; a 58% decrease in the deaths from tuberculosis; an 89% decrease in the deaths from scarlet fever, and a 58% decrease in infant mortality.

In this same short period of years, the average length of stay of patients in hospitals has been cut in two. What other group of men anywhere can point to any accomplishment in any period of but twenty-three years that has been so literally life-giving and life-preserving as the work of medicine or that has done so much to cut the costs of illness and far too early deaths?

Gentlemen, for these several years, it has been my privilege constantly to seek and to read no small part of that which has been written advocating the establishment of an institution of social medicine as a means of bringing a fuller measure of life itself to the great masses of our people.

No one can disagree with major premises of those who advocate this system of social insurance.

We know full well that poverty can lead to illness.

Who, better than the physician, knows that loss of income due to illness may be, and all to frequently is a cause of a future draped with debt and sometimes almost devoid of hope for security in old age.

But who, more than the physician living in the service of a profession, has even attempted to translate ideals into personal action to alleviate this condition?

And, of whom did the Federal Relief Administrator speak, when reviewing what had been given the unemployed in the years of 1929–1930–1931–1932 and 1933 in the field of medical care? From the fullness of his experience and knowledge he said freely, "It is a grand story, the work the physicians did for the unemployed."

I say that every man who is seeking to make a living for himself and his family agrees with the premise that social security makes for happiness and human welfare so far as it does not destroy initiative. Physicians are not a race apart, themselves free from fear of debt or leaving estates that will fail by a wide margin to care for loved ones. They sense the dangers as perhaps only one other profession—that of law—can sense them. They sense them not alone in their own fight to live but in daily seeing the results of only partial success or even failure in the lives of others.

But with all their daily contact with human suffering they shrink from applying social remedies that in the hands of politicians and in their inevitable growth would gnaw as a cancer at the very heart of a profession until that profession was reduced to a static state of pill dispensers ever more involved in the red taped autocracy of a bureaucracy.

We live at a time when our government is attempting a dual task of giving relief and making reforms in hopes that such reforms may prevent the necessity of similar relief measures in the generation to follow. In some ways, the program can be likened to a doctor giving many drugs in the same dose, hoping that not one but the combination will effect the cure.

But the physician would view that prescription as useless were the previously known effect of one drug not only to offset the advantage of the other but to cause further pain to the patient. So here does the physician say that the combination of physician and bureaucratic control present exactly that situation wherein the social result will be detrimental rather than an advantage in the commendable effort to bring social security to the patient, represented by the great mass of our people.

There are those, I know, who in the smugness of position or wealth challenge the motives of physicians. They boldly call you "money hungry." Some such there may be and if there are, so are they to be found in every walk of life. But I need not tell you that the true interest of every physician lies in giving the best possible service to his patient. And, by the same token, if social medicine were to the advantage of our people, it would be to the financial advantage of the physician.

There is no cause for the physician to fight social medicine if it would help him to serve his people well. He fights against its institution because he knows full well, whatever may be the conditions in

Relative Values of Carbohydrates Employed in Infant Feeding

Continued down from 1911

1916

"For the addition of sugar, I usually use dextri-maltose, which does not easily cause fermentation."—*L. L. Meininger: Use of Eiweissmilch, Arch. Pediat., 33:529-532, July, 1916.*

1916

In the treatment of marasmus, "Three per cent of malt sugar should be administered from the first, afterwards running up to as high a per cent as the child will take."—*L. T. Royster: A Handbook of Infant Feeding, C. V. Mosby Co., St. Louis, 1916, p. 100.*

1916

"Least irritating of all sugars, and more readily digested and quickly absorbed, is maltose."—*H. Lowenburg: A Practical Treatise on Infant Feeding and Allied Topics, F. A. Davis Co., Phila., 1916, p. 73.*

1916

"Dextrin-maltose is valuable in cases where intestinal disturbances are due to fermentation of milk sugar."

"Treatment (of sugar intoxication) consists in eliminating the latter (whey salts) as well as the sugars from the diet temporarily, and when the symptoms have subsided, a different sugar in proper proportion should be cautiously added; maltose and dextrin are preferable, because they are not apt to produce fermentation, while milk sugar is prone to set up fever and diarrhea."—*E. E. Graham: Diseases of Children, Lea & Febiger, Phila., 1916, pp. 179-201.*

1917

"For children who are not gaining on a normal formula with a sufficient amount of sugar of milk, or children who vomit when sugar of milk is fed, or who are constipated, the use of maltose instead of lactose often gives most satisfactory results. This is readily accomplished by substituting for the 4 or 5 per cent. of added sugar of milk an equal amount of dextri-maltose or malted milk, which latter gives, in addition to the maltose, some protein food and an insignificant amount of fat. In many cases children who have failed to gain on other food will immediately show a marked gain as soon as this change is made."—*R. G. Freeman: Elements of Pediatrics. Macmillan Co., New York, 1917, pp. 191 and 192.*

1917

"The carbohydrates most used in infant feeding are the three soluble sugars and starch. The three soluble sugars are lactose, or milk sugar, maltose, or malt sugar, and saccharose, or cane sugar. Maltose is not used in its pure form, on account of its cost. The various commercial preparations of maltose are combinations of maltose with various dextrins, but as in digestion dextrin is converted into maltose, the chemistry is practically the same."

"The sugar which is not absorbed is broken down by the bacteria of the intestine into a great variety of fermentation products, among them being lactic, butyric, acetic, and succinic acids."

"Another effect of the excessive fermentation which results from a relative excess of carbohydrate in the food, is the formation of an excessive amount of gas. This may cause abdominal distention, and, extending backward, it may carry irritating acid products into the stomach, and thus cause vomiting."

"Lactose is the sugar most likely to produce acute symptoms. The stools are practically always green and very irritating. Flatulence and colic are less prominent."

"The maltose-dextrin preparations rarely produce acute exacerbations."—*C. H. Dunn: The Hygienic and Medical Treatment of Children, Southworth Co., Troy, New York, 1917, pp. 423, 424, 425, 428.*

1918

"The sugars in the foods are milk sugar which is found in mother's milk as well as in cow's milk, cane sugar and malt sugar. Though milk sugar is a natural ingredient of milk it is not well borne by babies when added to their food; they digest cane sugar, the ordinary granulated sugar, much better; malt sugar is the easiest digested by babies."—*C. G. Leo-Wolf: Nursing in Diseases of Children, C. V. Mosby Co., St. Louis, 1918, p. 24.*

1918

"Maltose (malt sugar) has the advantage of being very easily digested; when part of the sugar given is maltose, many children gain more rapidly in weight than when only milk sugar or cane sugar is used."—*L. E. Holt: The Care and Feeding of Children, D. Appleton & Co., New York, 1918, p. 66.*

1919

"In the administration of protein milk with its large protein content, by adding to it sugar which is not easily fermented (dextri-maltose), we produce, instead of pathologic fermentation, a condition of putrefaction which changes the acidity of the intestinal contents to alkalinity, the peristalsis is decreased, the intestinal contents pass slowly through the large intestines with absorption of fluid and excretion of calcium and magnesium salts. These minerals unite with fatty acids to form the typical fat-soap-clay-coloured constipated stools characteristic of protein milk feeding, and it is at this point that dextri-maltose should be added to the food."

"The majority of the cases were kept on protein milk for a period varying from three to four weeks, and, in many instances, contrary to the usual opinion, we were able to keep the children on protein milk plus starch and dextri-maltose, sufficient for their caloric needs for a period of several months, in each instance accompanied by a substantial gain in weight and normal increase in vigor and tissue turgor with comparative freedom from digestive symptoms."—*A. Brown and I. F. MacLachlan: Protein milk powder, Canad. M. A. J., 9:528-537, June, 1919.*

1920

"There are three sugars commonly employed in infant feeding: (1) malt sugar or dextri-maltose, (2) cane sugar, and (3) milk sugar. Malt sugar is the most easily digested and assimilated, cane sugar next and sugar of milk the least so."—*L. O. Frech: The caloric method of artificial feeding in normal babies, Illinois M. J. 38:484-488, Dec. 1920.*

1920

Regarding treatment in disturbed metabolic balance in infants, "The one carbohydrate which seems to give the most satisfactory results in these cases is malt sugar."—*C. H. Seybert: Disturbed metabolic balance in infancy, Hahneman, Monthly, pp. 379-382, June, 1920.*

1921

"Next to woman's milk is cow's milk in simple modification with water and sugar in proper proportions and amount according to the age of the child. Milk Sugar is the most expensive and least satisfactory sugar. Dextri-Maltose is the best sugar."—*A. A. Shawkey: Infant foods and infant feeding, West Virginia M. J. 15:284-287, Feb. 1921.*

1921

With reference to hypotrophy, "In mild cases, the addition of dextrimaltose instead of cane or milk sugar may be sufficient to obtain a gain in weight."—*C. Herrman: The treatment of nutritional disorders in artificially fed infants, New York M. J. 114-158-160, Aug. 1921.*

1921

"Maltose and dextrin compounds are acceptable to the infant's digestion in relatively larger quantities. They are not as sweet as cane sugar. They are of practical value when larger amounts of cane sugar are not well borne.

"The so-called 'Mead's Dextri maltose with Potassium Bicarbonate' is laxative, and in the presence of a stationary weight may be given in larger amounts."—*F. W. Fergusson: A method for the modification of cow's milk, Journal-Lancet, 41:628-629, Dec. 1, 1921.*

1921

For cases of fermentative diarrhea, ". . . the ideal plan of treatment would be to give a food which is low in sugar (the food which that group of organisms thrive on) and high in protein. Calcium caseinate milk accomplishes this purpose. In our series of cases, we found it was necessary to use the casein calcium for from 5-8 days; we then stopped it and added dextri-maltose to the formula."—*A. G. DeSanctis and L. V. Paider: The value of calcium caseinate milk in fermentative diarrhea, Arch. Pediat. 38:233-236, April, 1921.*

1922

In the treatment of diarrhea, "The sugar is added gradually as conditions admit, some sugar other than milk sugar or cane sugar being used, preferably dextrin and maltose."—*H. E. Small: Diarrhoea in bottle-fed infants, J. Maine M. A. 12:154-158, Jan. 1922.*

1922

"The use of other soluble carbohydrates other than lactose for milk modifications are very good. Some believe the addition of dextrose or dextri-maltose makes the casein curd softer and easier to digest. This is questioned, but all agree that in cases of malnutrition, where the patient is intolerant to lactose and cannot get the benefit needed from the fat in the diet that the dextri-maltose is invaluable as it is the easiest sugar to digest, and can be immediately used for energy production without undergoing further change."—*E. G. Padfield: Remarks on infant feeding, J. Kansas M. S. 22:97-101, April, 1922.*

Continued down to 1934

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the old countries, in this country as it is now constituted and as it promises to be constituted in the many years to follow, the institution of social medicine would glorify the self-seeking politician-administrators into whose outstretched hands the system would ultimately, if not immediately fall.

Were this its only evil, the good still might offset the bad, but the concomitants of distribution by budget are minimum standards of service that become with great rapidity the standards for the maximum; with social control comes the pitiable belief of the subscribers that when they have paid for the state service they have purchased the ultimate, when in fact they have purchased a maximum.

Of far greater importance, overshadowing every other consideration, is the fact that the true physician cannot be content to treat his patient within the limits of mimeographed or printed instructions that are themselves necessitated by the limits of the budget.

The statistician, with his work sheets of neatly printed figures, can show to his satisfaction that if the sickness of A, B, C total $100 on the average per year out of a population of 100 then one dollar per capita will purchase the needed care for A, B, and C without straining anyone's pocketbook. But in their concentration on figures they forgot that when you and I pay for something it is because we expect to have it and so the spreading of costs that would in fact care for A, B, and C perfectly well is an incentive for D, E, and F to ask for the same service and six must share the service that three deserve.

Insurance is not a method of getting something for nothing. It is an individual purchase. In this instance it will represent the application of the principles of collective bargaining to medicine. It seeks to commercialize a profession through the furnishing of benefits in kind because they are cheaper to purchase and because they are bought and paid for in wholesale lots.

I know that health insurance has been likened to fire insurance. The latter, however, pays in terms of cash and the value of the policy is something easily ascertained by the purchaser. Health insurance does not pay in cash but pays in medical services.

I have been in such close contact with legislative halls during the past fifteen years that I know that there is a wide variance between the ideal and the law that is actually passed by practical politicians.

The Four Horsemen of social insecurity have been termed Accidents, Illness, Old Age and Unemployment. In Wisconsin, the compensation act is presumed to cover the field of accidents. We are on the threshold of the general application of an existing law for old age pensions and unemployment insurance is a fact. Are we now to add to these three a plan for health insurance?

I would not take of your time here this evening unless I felt it would serve a purpose. I represent this subject on this occasion because I feel that proposals for a system of social medicine are imminent in our own legislature.

You and I do not sit in legislative seats and utter the vote that will determine the fate of those proposals. But your friend and my friend does sit in that seat at Washington and at Madison. Do they know this subject as you alone can know it? With the rare exception of the physician legislator, they do not and cannot unless you tell them. You who sit here tonight are the delegates from each of the county medical societies of this state. Before you adjourn sine die on Thursday morning, I ask you to say to your officers that they are wrong in the way they understand and interpret your conclusions on this subject and instruct them as to your views, or if your officers understand you rightly, I ask you to resolve that you will carry the message to the first meeting of your fellow members, that you will carry the message that now is the time for each physician to see his legislator and explain the whole problem that he may not vote on this question without knowing the full implications of his vote.

With that knowledge that you alone can give in a friendly chat, I do not fear the result. Without that knowledge from you, the family physician, he is more prone to make a mistake than the layman in the streets, for the legislator is subject to a lobby that presently seeks to apply a sovereign cure because they have heard it spoken of well elsewhere.

Recent Licentiates Announced by State Board of Medical Examiners

BY EXAMINATION

Name	*School of Graduation*	*Year*	*Present Address*
Adland, Abe	Marquette	1934	1820 N. 12th, Milwaukee, Wis.
Adamski, Alexander W.	Marquette	1934	1318 Milwaukee Ave., S. Milwaukee, Wis.
Ansfield, Fred Joseph	Wisconsin	1933	1903 N. 18th St., Milwaukee, Wis.
Babby, Louis	Wisconsin	1933	2671 N. Teutonia Ave., Milwaukee, Wis.
Backus, Edw. A.	Marquette	1934	2187 N. 51st St., Milwaukee, Wis.
Becker, Harry G.	Illinois	1934	1138 N. Leavitt St., Chicago, Ill.
Becker, Walter T.	Marquette	1934	Cedarburg, Wis.

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Beech, Raymond H.	Northwestern		239 W. Chamberlain St., Dixon, Ill.
Behnke, Charles H.	Marquette	1934	133 Oakland Ave., Oshkosh, Wis.
Benn, Vernard A.	Wisconsin	1933	Medical Division, Richmond, Va.
Bennett, James H.	Northwestern	1934	Wis. Gen. Hospital, Madison, Wis.
Bennett, Ruth B.	Northwestern	1934	Children's Hospital, Milwaukee, Wis.
Benz, John Fred'k.	Marquette	1934	2506 N. 8th St., Milwaukee, Wis.
Bergstrom, L. F.	Wisconsin	1933	Amery, Wis.
Blankstein, Sam'l. S.	Rush	1934	Cook Co. Hospital, Chicago, Ill.
Booher, John A.	Wisconsin	1933	Reedsburg, Wis.
Bray, Wallace E.	Northwestern	1934	Delavan, Wis.
Brosin, Henry W.	Wisconsin	1933	1144 N. 22nd St., Milwaukee, Wis.
Brott, Everel W.	Wisconsin	1933	721 North 17th St., Milwaukee, Wis.
Brunkow, Benj. H.	Wisconsin	1933	1620 17th Ave., Monroe, Wisconsin
Bulley, Edward W.	Harvard	1932	766 El Cerrito Ave., San Mateo, Calif.
Casper, Wm. Theo.	Northwestern	1934	2200 N. 3rd St., Milwaukee, Wis.
Charles, John David	Marquette	1934	Mil. Co. Gen. Hosp., Milwaukee, Wis.
Christensen, Howard W.	Wisconsin	1933	Mil. Co. Gen. Hosp., Wauwatosa, Wis.
Coventry, Wm. Dean	Michigan	1930	2531 E. Superior St., Duluth, Minn.
Davis, Kenneth W.	Wisconsin	1933	Sheboygan Mem. Hosp., Sheboygan, Wis.
Dietz, Richard J.	Marquette	1934	2029 N. 48th St., Milwaukee, Wis.
Flannery, John V.	Marquette	1934	3360 N. 3rd St., Milwaukee, Wis.
Ford, Karl Keith	Wisconsin	1934	538 Maple Ave., Madison, Wis.
Frankow, Adrian W.	Marquette	1934	416 N. Maple Ave., Green Bay, Wis.
Frankow, Raymond Otto	Marquette	1934	416 N. Maple Ave., Green Bay, Wis.
Garry, Mark Wm.	Marquette	1934	2537 W. Highland Ave., Milwaukee, Wis.
Gebert, Walter H.	Marquette	1934	Mil. Co. Gen. Hosp., Wauwatosa, Wis.
Getz, Horace R.	Wisconsin	1933	1326 Jenifer St., Madison, Wis.
Golley, Paul M.	Wisconsin	1933	608 N. 14th St., Milwaukee, Wis.
Good, Palmer W.	Rush	1928	Kenosha, Wis.
Gramling, Frances K.	Marquette	1934	2203 S. Layton Blvd., Milwaukee, Wis.
Gramling, Joseph J. Jr.	Marquette	1934	1202 S. Layton Blvd., Milwaukee, Wis.
Guerrieri, Ancangolina	Marquette	1934	3018 N. 12th St., Milwaukee, Wis.
Halperin, Phillip	Wisconsin	1933	908 N. 12th St., Milwaukee, Wis.
Hammerly, Fred	Wisconsin	1933	Box 167, Monticello, Wis.
Haushalter, Lester	Marquette	1934	3332 N. 5th St., Milwaukee, Wis.
Heald, Bessey	Oregon	1934	2142 N. 61st St., Wauwatosa, Wis.
Hershberg, Ray. A.	Marquette	1932	Wis. Gen. Hosp., Madison, Wis.
Hougen, Edw. T.	Northwestern	1933	Wisconsin Rapids, Wis.
Huibregtse, Wm. G.	Wisconsin	1933	1434 Jefferson Ave., Sheboygan, Wis.
Huth, Melvin F.	Wisconsin	1933	Mil. Co. Gen. Hosp., Wauwatosa, Wis.
Ihrke, Irvin A.	Rush	1934	400 W. New York Ave., Oshkosh. Wis.
Kay, Eugene M.	Munich Med.—Germany	1925	3323 N. Green Bay, Milwaukee, Wis.
Kampine, Clifford E.	Marquette	1934	Pound, Wis.
Kehl, Kenneth C.	Washington	1932	1608 Park Ave., Racine, Wis.
Kent, Leslie T.	Northwestern	1933	1111 Dobson St., Evanston, Ill.
Kern, Theo. J.	Marquette	1934	1526 N. 30th St., Milwaukee, Wis.
Kierzkowski, Casimir V.	Wisconsin	1933	Riley Hospital, Indianapolis, Ind.
Kremser, Valentine C.	Marquette	1934	1451 S. 74th St., West Allis, Wis.
Kundert, Palmer R.	Harvard	1933	Wis. Gen. Hosp., Madison, Wis.
Kwapiszewski, Clemens R.	Marquette	1934	2811 S. 10th St., Milwaukee. Wis.
Lacke, Clement L.	Wisconsin	1933	221 Clifford Ct., Madison, Wis.
Lamal, Andre H.	Marquette	1934	Mil. Co. Gen. Hosp., Wauwatosa, Wis.
Lautenbach, Edw. T.	Marquette	1934	Plymouth, Wis.
Leibenson, Samuel	Rush	1934	Mil. Co. Gen. Hosp., Wauwatosa, Wis.
Lenz, Ralph B.	Marquette	1934	Box 53, Hilbert, Wis.
Lewis, Charles Noble	Wisconsin	1933	1102 E. Johnson St., Madison, Wis.
Lindquist, Norman L.	Wisconsin	1933	Mil. Co. Gen. Hosp., Wauwatosa, Wis.
Lowe, Rob't. C.	Minnesota	1932	114 W. Wis. Ave., Neenah, Wis.
Marshall, Wallace S.	Northwestern	1934	Appleton Clinic, Appleton, Wis.
McGinnis, Howard J.	Marquette	1934	736 W. Summer, Appleton, Wis.
Moskowitz, Leo	Ohio State	1933	908 N. 12th St., Milwaukee, Wis.
Miller, Stanley R.	Marquette	1934	309 Wash. St., Stevens Point, Wis.
Newcomb, Charles J.	Wisconsin	1932	Waupun, Wis.
O'Leary, Mary Joan	Marquette	1934	East Troy, Wis.
Oswald, Fred	Marquette	1934	6835 Auburn Ave., Wauwatosa, Wis.
Ozanne, Bryce K.	Rush	1934	Washington Blvd. Hosp., Chicago, Ill.
Parish, Geo. A.	Wisconsin	1933	1616 Elizabeth Ave., Marinette, Wis.
Ricciardi, Ignatius J.	Marquette	1934	Mil. Co. Gen. Hosp., Wauwatosa, Wis.
Ries, Michael F.	Wisconsin	1933	Lomira, Wis.
Rosen, Theodore	Tuft's Medical	1933	Mt. Sinai Hosp., Milwaukee, Wis.
Rusch, Harold P.	Wisconsin	1933	1124 W. Johnson, Madison, Wis.
Ruzicka, Martin Jos.	Marquette	1934	Prague, Nebraska
Sarfatty, Isaac J.	Marquette	1934	Mt. Sinai Hospital, Milwaukee. Wis.
Schwartz, Harry Lloyd	Northwestern	1932	36 S. Ashland Ave., Chicago, Ill.
Shabart, Elmer Jos.	Wisconsin	1933	2355 N. 55th St., Milwaukee, Wis.

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Name	*School of Graduation*	*Year*	*Present Address*
Sheehan, Wm. C.	Wisconsin	1933	321 W. Carroll St., Baraboo, Wis.
Shemanski, Leonard S.	Marquette	1934	1202 S. Layton Blvd., Milwaukee, Wis.
Sinaiko, Edwin S.	Wisconsin	1933	1814 Kendall Ave., Madison, Wis.
Slattery, Francis G.	Marquette	1934	Mt. Morris, Mich.
Smullen, James Joseph	Loyola	1934	1233 Wrightwood Ave., Chicago, Ill.
Stoek, Leigh	Women's Medical	1929	Convent-Holy Nativity, Fond du Lac, Wis.
Stamm, Marshall P.	Marquette	1934	1627 S. 60th St., West Allis, Wis.
Stevens, Ralph W.	Pennsylvania	1933	Wis. Gen. Hosp., Madison, Wis.
Stiles, Waldo W.	Medical Evangelists	1933	Arpin
Stollenwerk, Richard J.	Marquette	1934	Mil. Co. Gen. Hosp., Wauwatosa, Wis.
Temkin, Mark M.	Wisconsin	1933	2321 N. 11th St., Milwaukee, Wis.
Usow, John Maurice	Marquette	1934	2658 N. 23rd St., Milwaukee, Wis.
Van Hecke, Leander Jas.	Marquette	1934	201 Brawley St., Stevens Point, Wis.
Vedner, J. Harold	Marquette	1934	Waupaca, Wis.
Walsh, Eugene L.	Iowa Medical	1933	Mil. Co. Gen. Hosp., Wauwatosa, Wis.
Warth, Chester Geo.	Marquette Medical Sch.	1934	St. Mary's Hospital, Milwaukee, Wis.
Wasserman, Sidney	Marquette	1934	2542 N. 51st St., Milwaukee, Wis.
Waterman, Irl L.	Wisconsin	1933	117 Tyler St., Sparta, Wis.
Weir, Earl Foster	Wisconsin	1933	2200 W. Kilbourn St., Milwaukee, Wis.
Zietlow, Fred'k. Geo.	Northwestern	1934	Norwalk, Wis.

BY RECIPROCITY

Name	*School of Graduation*	*Year*	*Last Address*
Awtry, Hugh H.	Vanderbilt	1929	Wis. Gen. Hosp., Madison
Baldwin, Rob't. S.	Rush Med.	1931	Marshfield Clinic, Marshfield, Wis.
Class, Ferdinand L.	Rush	1899	Huron, S. D.
Fenton, Rob't. L.	Iowa State	1928	Baraboo, Wis.
Filek, Allen Aug.	Rush	1933	Muscoda
Kelly, Wm. J.	Loyola	1932	1951 Irving Pk. Blvd., Chicago, Ill.
Kuehl, Fred'k. O.	Illinois	1932	904 S. Ashland Ave., Green Bay, Wis.
McBain, Louis B.	Wisconsin	1930	3018 Oakridge Ave., Madison, Wis.
Petersen, Gordon W.	Wisconsin	1932	Wis. Gen. Hosp., Madison, Wis.
Pifer, Paul Emory	Western Reserve	1932	7413 15th Ave., Kenosha, Wis.
Pulver, John E.	Creighton	1908	127 N. Clinton, Chicago, Ill.
Schwittay, Addie M.	Wisconsin	1931	Jackson Clinic, Madison, Wis.
Wenzel, Anna M.	Kansas	1927	Bd. of Trade Bldg., Superior, Wis.

Responsibility for Filing Birth Certificates

The state law provides that the physician or midwife in attendance when any birth occurs shall fill out and file a certificate of birth with the local registrar of the district in which the birth occurred.

Questions have been asked regarding the order of responsibility where there are two or even more physicians actually in attendance—who should be held responsible for filing the birth certificate if Dr. A, who is the family physician, finds it necessary to call in Dr. B, an obstetrician, to assist him in properly handling a complicated case of delivery.

The State Board of Health holds that in such cases the family physician should fill out and file the birth certificate. The specialist may be called in from another city or even from another state and while he may be technically responsible for the actual delivery of the child, he would be compelled in most cases to rely upon the family physician to fill out the official record of birth. The family physician is actually in charge of the case and should see to it that the birth certificate is filled out and filed as the law requires. In some few cases both physicians sign the birth certificate but we advise against this practice for the reason that it makes it impossible for us to determine who is entitled to the fee for reporting the birth.

The State Health Department is pleased to report to the physicians of the state that there has never been a time in the history of Wisconsin when births were more completely reported than at the present time. In a test to determine the accuracy of birth registration in 1933 for sixteen cities with a population of 20,000 or more, based on a sample of 4,519 births reported direct by the parents, the check shows that 4,408 of these certificates were on file in the state office which shows 97.5 per cent completeness.

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WANTED—Locum tenens work by capable physician; available for short or long period; Wisconsin license; references; will not compete. Address number 851 in care of the Journal.

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BOOKS RECEIVED FOR REVIEW

An Activity Analysis of Nursing. By Ethel Johns, R.N., editor, The Canadian Nurse and Blanche Pfefferkorn, A.M., R.N., director of studies, National League of Nursing Education. Price $2.00. The Nursing Information Bureau of the A.N.A., 50 West 50th St., New York, N. Y.

Nursing Schools Today and Tomorrow. Final report of the Committee on the Grading of Nursing Schools. Price $2.00. The Nursing Information Bureau of the A.N.A., 50 West 50th St., New York, N. Y.

Applied Anatomy. By Gwilym G. Davis, M.D., late professor of orthopedic surgery and associate professor of applied anatomy in the University of Pennsylvania. 9th edition. J. B. Lippincott Company, Philadelphia.

Physiology in Health and Disease. By Carl J. Wiggers, M.D., Professor of physiology in the School of Medicine of Western Reserve University, Cleveland, Ohio. Price $9.00. Lea and Febiger Co., Washington Square, Philadelphia.

Symposium on Silicosis. An unofficial transcript of the Silicosis Symposium held in connection with the Trudeau School of Tuberculosis at Saranac Lake, N. Y., June 18–22, 1934. Edited by B. E. Kuechle, Claims Manager, Employers Mutuals, Wausau, Wisconsin.

The Patient and the Weather. By W. F. Petersen, M.D., Edwards Brothers, Inc., Ann Arbor, Mich.

Diabetic Manual for Patients. By Henry J. John, M.A., M.D., director of the diabetic department and laboratories of the Cleveland Clinic. 2nd edition. Price $2.00. C. V. Mosby Company, St. Louis, Mo.

Allergy and Applied Immunology. By Warren T. Vaughan, M.D., Richmond, Virginia. 2nd edition. Price $5.00. C. V. Mosby Company, St. Louis, Mo.

A Manual of the Practice of Medicine. By A. A. Stevens, A.M., M.D., formerly professor of applied therapeutics in the University of Pennsylvania. Cloth $3.50 net. W. B. Saunders Company, Philadelphia.

Nature's Way. By Victor C. Pedersen, M.D. Price $1.00. G. P. Putnam's Sons, New York, N. Y.

CARCINOMA

(Continued from page 841)

vanced cirrhotic background,—the cancer avec cirrhose of Hanot. Excellent descriptions of this type may be found in MacCallum[1], Ewing[2], Kaufmann[3], and Nelson's looseleaf Medicine[4].

BIBLIOGRAPHY

1. MacCallum, W. G.: Textbook of Pathology, Third Edition, p. 1074.
2. Ewing, James: Neoplastic Diseases, Second Edition, p. 686.
3. Kaufmann, Edward: Pathology (English Translation) Vol. 11, p. 960.
4. Kern, Richard A.: Nelson's Looseleaf Medicine, 1933, Vol. 5, p. 518.

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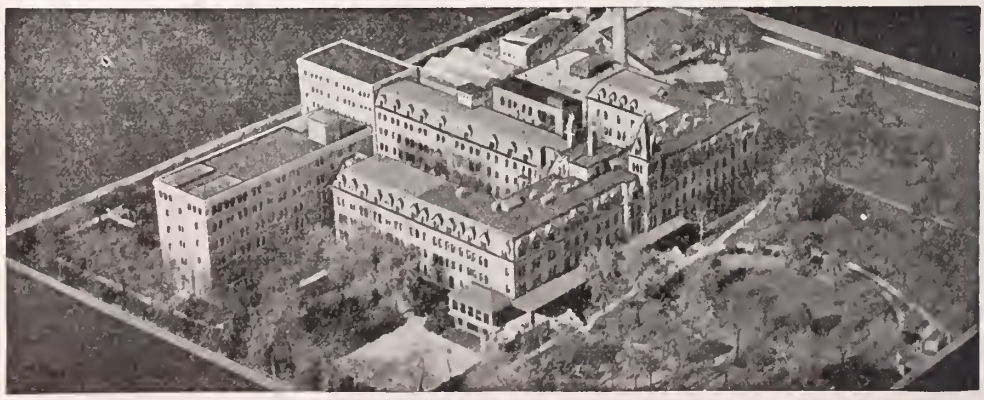

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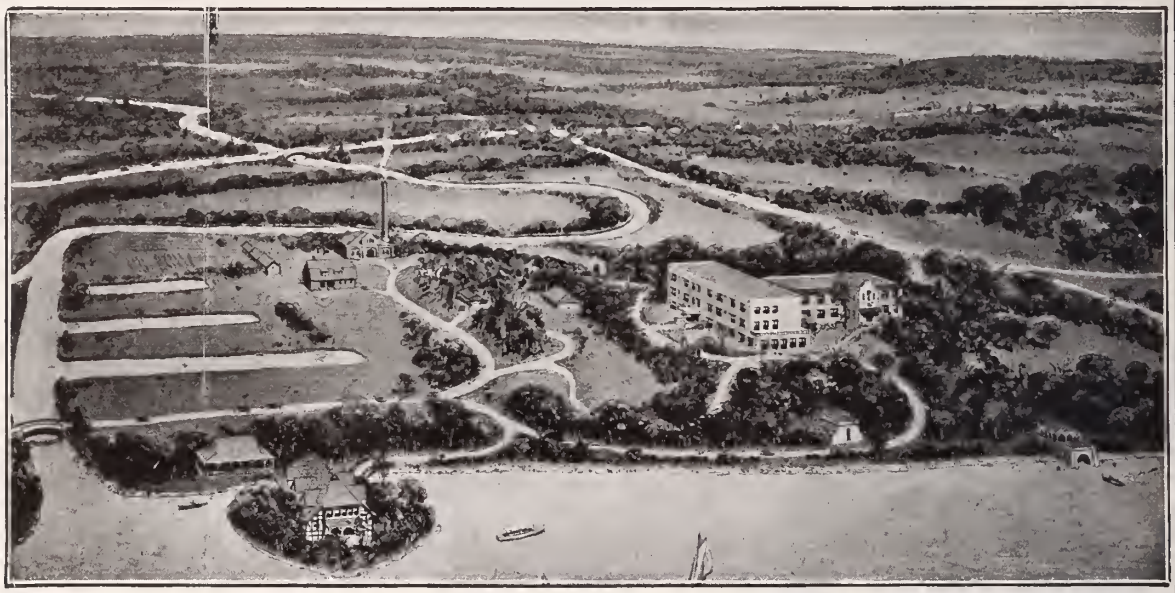

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Age of Onset of Pulmonary Tuberculosis*

By J. E. HABBE, M. D.
Milwaukee

IT IS a well established fact that the *clinical* onset of a parenchymatous tuberculosis of the lungs in its ordinary chronic form (excluding from consideration in this paper the acute miliary and also the acute pneumonic forms), may take place at any age from late childhood through old age. From the clinical history often obtained as to date of onset of first symptoms or initial hemoptysis or effusion, it can be inferred with reasonable certainty that pulmonary disease often antedates by a number of years the first positive diagnosis. From the roentgenogram which even today may first be made years after onset of the oldest symptoms, one can also infer in a very rough way that the disease has been present for a number of years because of the x-ray appearance of marked fibrosis and less often pulmonary calcification.

Lawrason Brown and Homer Sampson of Saranac Lake, New York, have occasionally expressed an opinion informally that they have observed proven cases of pulmonary tuberculosis in its ordinary chronic form develop so infrequently in individuals who have shown roentgenologically normal lungs in early adult life that it is their belief that such individuals have very little likelihood of developing the disease at a later age except where there is exposure of a very intimate and long continued nature. Phthisiologists in general are agreed on the high morbidity and mortality rates for young individuals of both sexes. However, I am not aware of there being any general acceptance of Brown and Sampson's opinion as to the relative rarity of tuberculous pulmonary pathology having its onset in normal lungs after early adult life.

I have made an effort to determine the validity of their contention by a review of all the cases diagnosed active pulmonary tuberculosis in the department of Preventive Medicine of the A. O. Smith Corporation, Milwaukee, between the years of 1925 and 1933 inclusive. I have not concerned myself with attempting to determine the age of onset of the disease for each individual from the history of duration of symptoms because it would be generally agreed that this would be relatively inaccurate in many cases. I have, however, made particular investigations of all cases which were not diagnosed definitely at the time of their first examination in an effort to determine how many of these individuals had roentgenologically normal lungs when first x-rayed and the respective age of such patients at the time of these first examinations. It should be explained that, with only occasional exceptions, all individuals examined in this Department of Preventive Medicine had routine flat postero-anterior teleroentgenograms upon their initial examination, together with other routine x-ray and laboratory studies regardless of symptoms and signs, also that the average age of these industrial employees and their dependents was approximately 35 years, and finally, that a large percentage of these individuals had more or less routine re-examinations during the period covered by this study. Quite often such re-examination included single or stereoscopic chest films, the latter always being made in the presence of any positive chest symptoms or physical findings.

MATERIAL

During the period of time covered by this survey (1925–1933, inclusive) approximately 5,000 adults have been examined, the males predominating over the females in the proportion of about four to one. It has been

* Read at the mid-year meeting of the Radiological Section, State Medical Society, Janesville, May 18th and 19th, 1934.

estimated that 4,000 individuals had the complete examination including at least a single chest film when first examined and that of this number fully half had subsequent check-ups both clinical and roentgenological, either routinely or in the presence of definite (though often exceedingly mild) chest symptoms, at some subsequent time which varied from one to seven years, the average period of serial x-ray observation being something over three years. The average age of the entire group was thirty-five years, which makes a rather desirable age group for this particular investigation for we are a few years beyond the age of the highest morbidity rates but still in an age period when the rates are high.

During this eight-year period there were 64 cases diagnosed active pulmonary tuberculosis (1.5%) of which there were 17 cases of minimal involvement, 26 cases of moderately advanced disease, and 21 cases of far advanced disease. There was no appreciable difference in the average, lowest, or highest ages of the three stages of the disease, the average of the minimal group being 33.5 years, of the moderately advanced group 32 years, and of the far advanced group 32 years. This is not surprising and is not to be construed as evidence of equal frequency of pathologic onset at any age since the great variation in the rate of pathologic progression in different patients is well known to all.

The Minimal Cases: Of the 17 cases showing minimal disease 16 showed positive evidence by x-ray on the first examination (94%). Of the two cases which were not diagnosed when first examined, one had fluoroscopy only when first seen (which we would all agree constitutes inadequate roentgenologic exclusion) while the other when first seen had a single chest film routinely made which on review showed slight but definite parenchymatous changes in one mid and lower lung field, but these were not recognized until the second examination by which time the x-ray findings had progressed.

The Moderately Advanced Cases: There were 26 cases which were moderately advanced when first diagnosed. Of these, 21 cases (81%) were diagnosed when first seen, but of the five cases not diagnosed on the original study, examination of the records show that one had fluoroscopic examination only and two apparently had no x-ray study, while one in this group also had parenchymatous changes which were missed. One man at the age of 29 was x-ray negative when first seen, but was moderately advanced three years later on his second examination made at the age of 32. This man's family, a wife and 2 children, were clinically free of any pulmonary tuberculosis, hence we have in this group *one* case which does not support the opinion of Brown and Sampson, since there was no obtainable history or evidence of unusual exposure in the family or outside.

The Far Advanced Cases: There were 21 cases diagnosed far advanced tuberculosis of which 19 were diagnosed positive on the first examination (90%). One case which was missed when first seen, on review of the film shows changes of a minimal character which seven years later had become far advanced at the time of the second examination. The other case was x-ray negative when first seen, which was one year after marriage to a woman with active pulmonary tuberculosis. When first seen he was thirty years of age and had symptoms, but a definite diagnosis could not be established. When re-examined 16 months later he was far advanced and within two years of this date he had died of progressive pulmonary disease complicated by extensive ileo-cecal ulceration. He had not cooperated well during his period of treatment. Here then, was *one* other case with x-ray negative lungs at 30 and an ordinary adult lesion a year later. However, he had undoubtedly been submitted to prolonged and intense exposure within the family.

SUMMARY

Of 64 cases of established active pulmonary tuberculosis in all stages, two individuals (both men) had roentgenologically normal lungs at ages 29 and 30 years respectively and became roentgenologically and clinically positive at ages 32 and 31 years respectively. The man who was negative at thirty and positive (far advanced) at age 31, in all probability contracted the disease

from his active wife or child. From the best evidence available, the man who at age 29 was x-ray negative and at age 32 moderately advanced was living in a family where there was no active tuberculosis.

While it must be admitted that the period of serial roentgenologic observation of this group of several thousand young adults with an average age of 35 years, extending over an average period of somewhere between three and five years, has not been carried on long enough and is not sufficiently representative of all classes to justify any definite conclusions; it probably does represent a somewhat uncommon clinical and roentgenologic survey of a fairly large number of working individuals in this middle age group and has, therefore, seemed worth reporting. In so far as the material has been studied, no evidence has been obtained to disprove Brown and Sampson's opinion as to the relative rarity of chronic pulmonary tuberculosis developing in individuals who have roentgenologically normal lungs at the age of 25 or older.

The explanation of the age predilection of tuberculosis for its pathologic onset in young adults is beyond the scope of this paper. It is, of course, well accepted that many young individuals between the ages of 18 and 25 lower their resistance materially from one cause or another and become victims of the ubiquitous tubercle organism, which explains easily the high incidence of tuberculosis in this age group. However, it must also be agreed to that many older individuals between the ages of say 30 and 50 also have periods of markedly lowered resistance, but at these ages they do not seem to have the same high susceptibility to contraction of the disease that young adults show.

This survey does not represent by any means the first to attempt to follow up a group of x-ray normal adults to see how many will later develop clinically proven pulmonary lesions. However, similar surveys with which I am familiar have dealt more often with a younger group as for example several groups of medical school students followed with serial x-rays for admission to graduation at Yale, Harvard and Minnesota. During this earlier age period one would expect to see a number of cases developing x-ray changes during the period of study. Brown and Heise reported on 264 cases sent to Trudeau with a diagnosis of tuberculosis which they were unable to confirm, with follow-ups over a period varying from 1–7 years. Of the 203 cases diagnosed non-tuberculous none developed proven lesions, while of the 61 kept in the suspect group, one with a tuberculous rib later developed a proven apical lesion. While the ages in this group are not given it is probable that they represent an age group rather similar to the one herein reported.

In further support of the Brown–Sampson opinion is the x-ray appearance of tuberculous lesions in different age groups. In the great majority of active cases we observe pathologic changes that appear in part to be the result of young lesions (fresh infiltration) and older lesions (showing fibrosis and calcification). However, we sometimes see an appearance and distribution of the lesion suggesting the *entire* lesion to be one of recent development, most often in individuals in the late 'teens or early twenties. If any, widely experienced in the x-ray appearance of tuberculous lesions, young and ancient, can testify to commonly seeing cases showing *only* an appearance of young lesions in persons over 25 years, this would constitute evidence against the theory. In my own experience I have not seen such cases except in rare instances. All of the films on cases of 40 years or older when first examined, occurring in this series (15) were reviewed and in every case there were areas of lung involvement showing string-like or discrete nodular areas of fibrosis, or less often calcification, suggesting ancient lesions (meaning several years old or more).

The fact of regular pathologic onset of chronic pulmonary tuberculosis in early adult life, once proven, would be an important one for clinicians and roentgenologists alike to know. It would serve to intensify the search among young adults for clinically latent lesions, it would aid in a more prompt differential x-ray diagnosis in many cases where previously taken normal films were available for comparison, and in com-

plicated lesions such as mixed silicosis and tuberculosis, it would give us a better understanding of the time of onset and development of the several lesions.

CONCLUSIONS

In a group of approximately 2,000 industrial workers and their adult dependents (males predominating over females about four to one) studied serially-roentgenologically as well as serially-clinically over a period of one to seven years (average three years plus), only two individuals were found with roentgenologically normal lungs (less than a definite parenchymatous lesion) at first examination who at some subsequent examination were proven to have contracted pulmonary tuberculosis. (0.1%)

While the survey would obviously be more significant if it covered a longer period of serial observation, it nevertheless does seem to support the contention of Saranac Lake phthisiologists that individuals having no definite parenchymatous changes at the age 25 or beyond, are very unlikely to subsequently develop clinical pulmonary tuberculosis except where there is unusually intense exposure to the bacillus.

Roentgenologists making large numbers of chest x-ray studies could do much to prove tenable or untenable this theory by checking back carefully on all adults showing tuberculous lung changes to see if earlier roentgenograms are available, particularly where the first films were taken after the patient had reached the age of 25 years.

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Direct Signs of Duodenal Ulcers*

By M. E. GABOR, M. D.
Milwaukee

THE syndrome of duodenal ulcer is a more or less clear cut clinical entity. The establishment of the final diagnosis of ulcer has been made possible through x-ray examination. Heretofore, the characteristic roentgen signs of duodenal ulcer were defects of some kind of the duodenal bulb, or some indirect signs, such as hypersecretion and hyperperistalsis of the stomach. Difficult filling, rapid emptying of the duodenum or "poor cap" visualization were other suggestive indications. Due to the fact that these manifestations are frequently reflex sensations of many abdominal lesions or other remote pathology, the significance of these became a very limited one.

Recent studies enhanced this field of examination to such an extent that more attention has been paid to actual changes within the duodenum itself and the indirect symptoms were taken into account only as helpful hints. Ackerlund and Berg introduced a method whereby the entire surfaces of the gastric and duodenal mucosa were studied. By manipulating a small amount of barium so that it is uniformally distributed over the entire stomach and duodenum, an accurate picture of the mucosal folds themselves is obtained instead of merely the contour of the lumen. Both fluoroscopy

* Based on a paper read before The Medical Society of Milwaukee County.

and radiography are employed in this method of examination.

Just as we examine a fractured arm in at least two different exposures so it is even more important to have all the possible views of the duodenum. The second feature of this method is to distribute the ingested barium uniformly over the entire organ. This is attained by a careful compression manipulation, a factor which must be applied individually because the proper degree of pressure helps to visualize every fold of the duodenum. Having thus secured the proper angle of view with a properly applied pressure over the duodenum, an opportunity to get an optimal view presents itself during the fluoroscopic examination; and now without the slighest change in the position of the examiner a picture is taken within a fraction of a second. *This method consists of an instantaneous and aimed exposure:* by a single movement of the apparatus whenever desired during the fluoroscopy one may obtain an optimal view of the most characteristic phase of the examination. This "hitting the spot" is a very satisfactory way of checking the fluoroscopic findings. The employment of different views is quite essential to obtain satisfactory results. If one considers that more than half of all the duodenal ulcers occur on the posterior wall only to be visualized by lateral or oblique views, the utilization of this procedure is most evident. The first three figures illustrate these different views of the duodenal bulb. Figure 1 presents the usual anterio-posterior view, the patient facing the examiner. The duodenal cap lying in direct opposition to the spine is often poorly visualized on this account. Figures 9 and 12. Figure 2 reveals an oblique position in which the patient is rotated so that his left shoulder is turned towards the examiner. The part towards the spine represents the posterior wall and the opposite one the anterior wall of the duodenum. This position enables us to study the posterior wall giving thus an excellent opportunity to locate accurately the lesions on this portion. In the picture, Figure 3, the patient's right shoulder points forward. This position is valuable in that it gives us a clue concerning the axis of the cap which is either deviated or shortened in duodenal pathology. The relationship between the duodenum and the gall bladder, and a better visualization of the duodenal loop also can be observed to a great advantage in such a position.

The first direct sign of an ulcer is the niche, a defect that can be filled out by contrast medium. It is visible as a small bud of variable size being seldom larger than a pea. Figures 4, 10, 11, 13. It has different forms according to the stage of its acuteness, and the reactive processes: rounded, jagged, angular or star-shaped. One is able to distinguish the niche as a darker spot than the remaining portion of the shadow of the bulb. As a rule, the site of the ulcer corresponds to the narrowest point of the lumen. The further we go from the pylorus aborally the less frequently one finds ulcers. For that reason ulcers at the uppermost portion of the bulb are quite rare. Generally, a serous infiltration is found around an ulcer especially so in the acute cycle of the lesion. The reason why it is so difficult to visualize an ulcer after a recent haemorrhage is that the crater may be filled with coagulum or thrombosis. Besides, the haematemesis causes a diminution of serous infiltration that had ensued around the ulcer.

Cases which come under observation are mostly chronic and therefore the roentgenological signs vary. There is a constant variation first in the inflammatory, later in the shrinking activity of ulcerous lesions. The inflammatory factors are manifested by swelling and infiltration. Then retraction, fibrosis and adhesions with consequent deformation take place. These sequelae seen during the different stages of the ulceration have their characteristic features in the x-ray. Very often the original ulcer itself undergoes such organic changes that it can hardly be recognized. But deformities of the cap due to such foregone inflammatory and fibrotic transformations are revealed as rigid and uneven contours of the duodenal walls. Such deformities owe their existence to a ruffling of the mucosa and muscular elements at the point of the ulcer or adja-

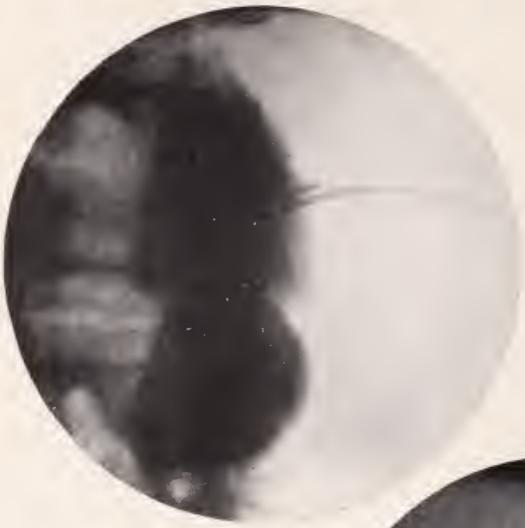

Fig. 1

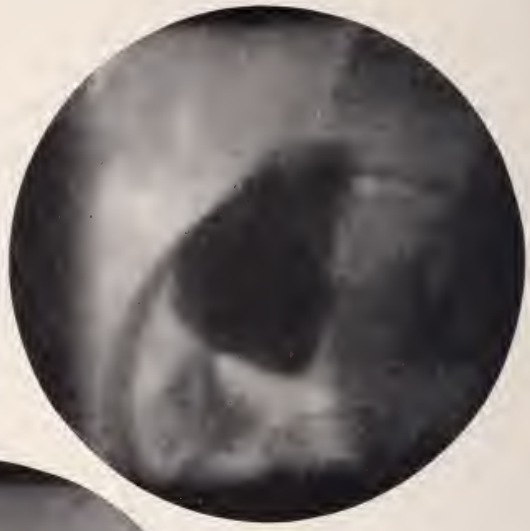

Fig. 2

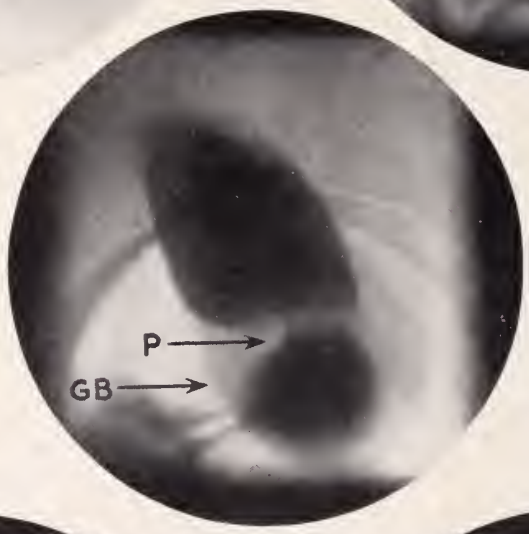

Fig. 3

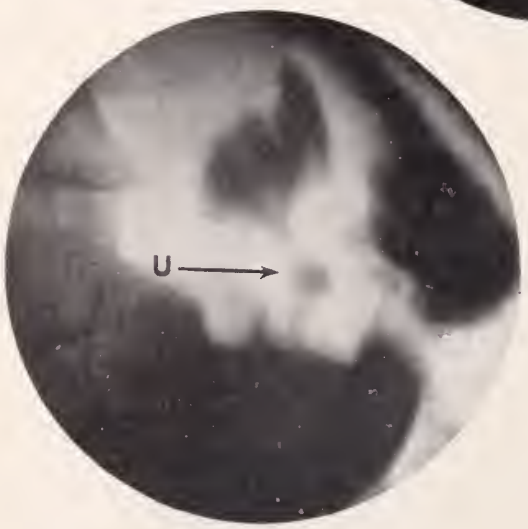

Fig. 4

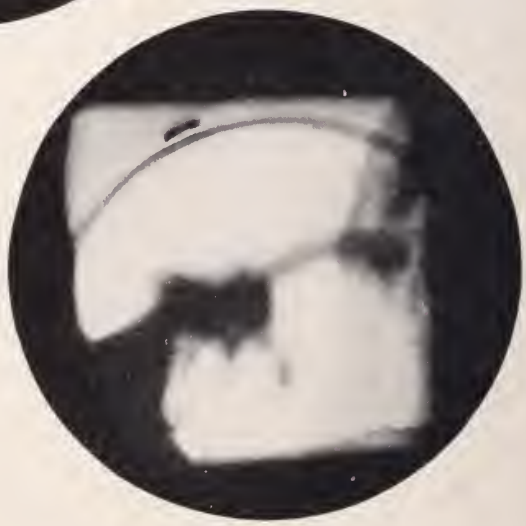

Fig. 5

Fig. 1—Normal duodenal bulb in the antero-posterior position.
Fig. 2—Same duodenal bulb as seen by the new method in a *left oblique* position. The part turned towards the spine represents the *posterior* wall of the duodenum.
Fig. 3—Same normal duodenal bulb in a *right oblique* view. It superimposes the gall-bladder which has been filled up previously. P—Pylorus. GB—Gall-bladder.
Fig. 4—Man, aged 72. Ulcer history and symptoms for 15 years with profuse vomiting almost daily in the past 6 months. Cause of his complaints was an ulcer at the base of the duodenum (U) resulting in pyloric obstruction. This picture was taken in the right oblique view with a dosed-compression method using instantaneous exposure.
Fig. 5—Laborer, aged 27. Aimed compression and instantaneous exposure of a greatly deformed cap. No ulcer visible any more and the loss of normal substance is replaced by extensive scar tissue formation giving this bizarre outline. Note loss of convexity on the anterior wall.

cent to it. The more irregularly shaped they are, the more certain one can be that they are of organic nature, especially so if the cap is reduced in size. Figure 5.

A flattening of the affected duodenal portion is quite pathognomonic. In such cases there is a longitudinal retraction of the wall around the ulcer resulting in a loss of its convexity. This type of retraction is always of organic origin and is caused by shrinkage of the tissues running longitudinally through the lesions. Figure 6. Retraction usually develops unilaterally while in the case of "kissing ulcers" it is bilateral. The "kissing ulcers" show a greater progressiveness in their pathology and are more often prone to complication than the simple ulcers. The biconcave form in these cases is due to bilateral ulceration. Another conclusive sign of duodenal ulcer is the pouch formation, the so-called pseudo-diverticulum. It is nothing more than a pre-stenotic pouch of the lumen and is always the sign of a chronic ulcer. Niches are responsible for this phenomenon and they are situated mostly above or to the right of this saccular dilatation. Sometimes they are multiple according to the number of lesions. Figure 7.

One of the most positive signs of duodenal ulcer is the "star-formation" and the so-called annular ridge. These findings point instructively to the activities in and around the ulcer. The annular ridge is a zone of inflammatory edema immediately surrounding the niche itself. It is not present in bleeding ulcers and can be brought out most easily in the profile view. The star-formation manifests itself in a radial pointing of the mucous folds toward the niche. It designates a stage of cicatrization, is caused by a shrinkage of tissues and remains stationary even after the ulcer as such is healed. Figures 6 and 7. Periodicity of pain in duodenal ulcers is a well known feature. An exacerbation of an old lesion or the appearance of a new ulcer leaves its marks on the duodenal cap. Thus, multiform and severe deformities of the duodenal wall are often seen. Classical signs of such cicatrization are represented by a reduced size of the cap; the loss of substance is replaced here by extensive scar tissue formation. Figures 5 and 6. A shrinkage of the diseased duodenum diminishes the distance between the pylorus and the Papilla Vateri and the cap has an axis that shows a distinct deviation from its normal course and at times it is almost horizontal. Consequently the "knee" created by the first and second portion of the bulb is often abolished. Figures 6 and 8.

It is not unusual to find either a normal or a somewhat hazy looking duodenal cap which if examined with properly employed manual pressure in some oblique or lateral view may reveal a niche or some deformity characteristic of an ulcer. Figure 9 reveals the duodenal bulb depicted with the old usual method. It is an incompletely filled cap. The patient was turned gradually to the left until a typical penetrating ulcer of the *posterior wall* was visualized during the screening. At this very moment an instantaneous exposure was made and the ulcer was "caught" on the film as seen in Figure 10. An ulcer of the *anterior wall* facing the gallbladder was visualized with the same technic as seen in Figure 11. It can be readily seen how advantageous and important it is to use all possible views to bring out the various characteristics of duodenal lesions. Both these "profile" niches were varified by operation. Often *one or two swallows of barium are sufficient to show the ulcer* most advantageously as we can see in Figure 13. The relief of the mucosal folds are visualized to the full extent and a thorn-shaped ulcer of the posterior wall is revealed in the profile. The stomach of the same patient as visualized by the old technic presented only a so-called "poor cap" of the duodemun. Fig. 12.

DIFFERENTIAL DIAGNOSIS

In the differential diagnosis one has to take into consideration affections of the gallbladder, adhesions due to gallbladder pathology, real diverticula and duodenal tumors. An enlarged or even normal gallbladder may cause impressions upon the duodenal bulb which have to be distinguished from those due to real duodenal pathology. These impressions are always sharply outlined and either flatten the cap down, or may

Fig. 6

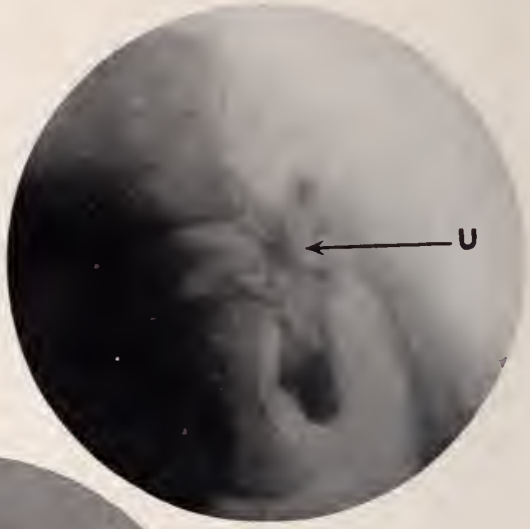

Fig. 7

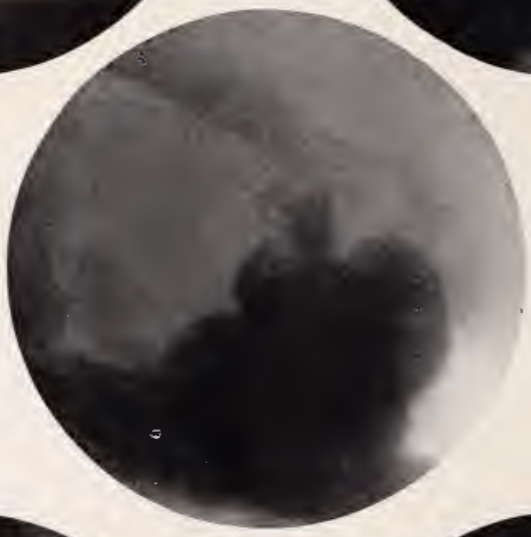

Fig. 8

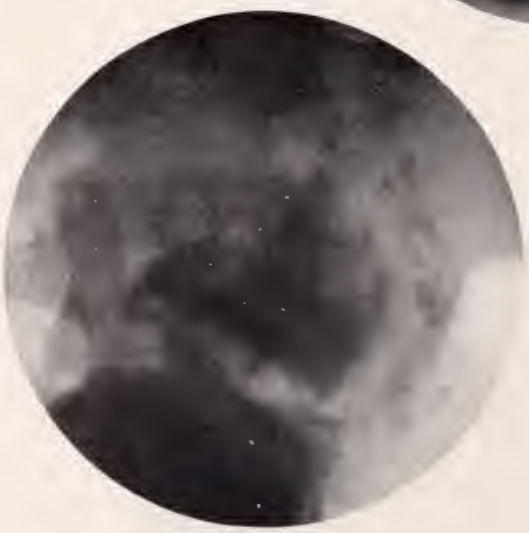

Fig. 9

Fig. 10

Fig. 6—Attorney, 41 years old. Several gastric hemorrhages in the past, ulcer history for 6 years. The folds of the duodenum *run concentrically* toward a darker spot, that is the ulcer (U). The bulb is reduced in size. To visualize such pathology in the duodenum, an aimed, dosed compression with instantaneous exposure was used administering only two sips of barium.

Fig. 7—Aimed exposure of duodenal cap revealing about the same pathology as seen in figure 6, *a cicatrization of the mucosal folds* pointing to a darker spot, that is the ulcer (U). An edema, i.e., an inflammatory zone is seen as a lighter territory surrounding the ulcer itself. Operative control.

Fig. 8—Duodenal bulb showing great destruction, so-called "Phthisis bulbi". It is greatly reduced in size.

Fig. 9—Duodenal bulb visualized by the old technic. It is poorly filled without revealing pathology.

Fig. 10—Same duodenal bulb as seen with an aimed, instantaneous exposure with dosed compression. Typical "profile" *ulcer* (N) *of the posterior wall* penetrating into the pancreas.

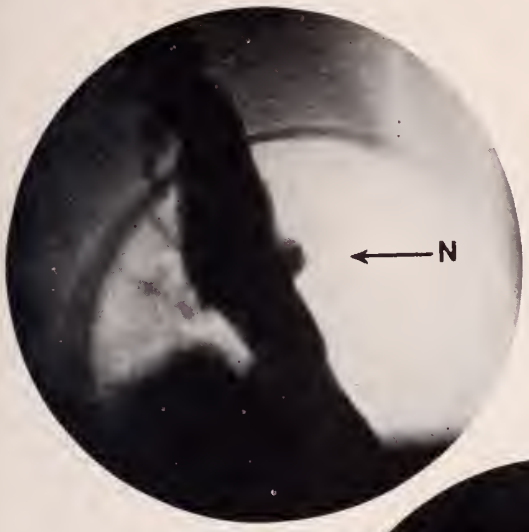

Fig. 11

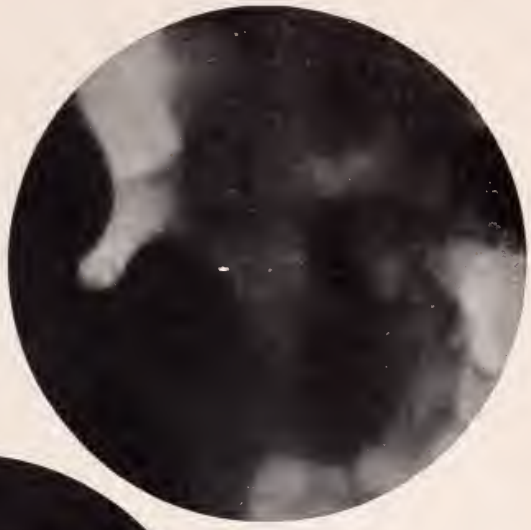

Fig. 12

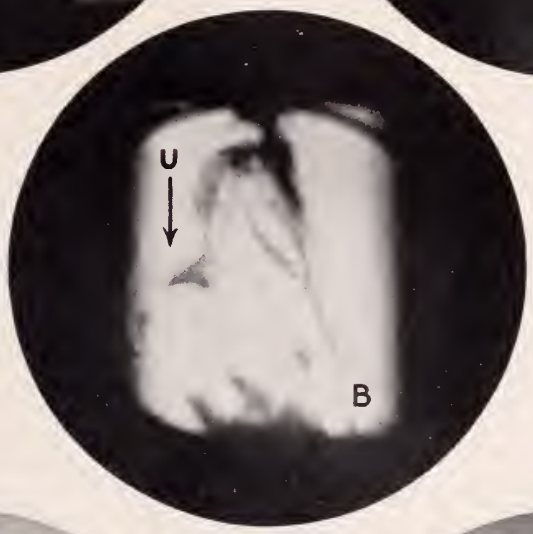

Fig. 13

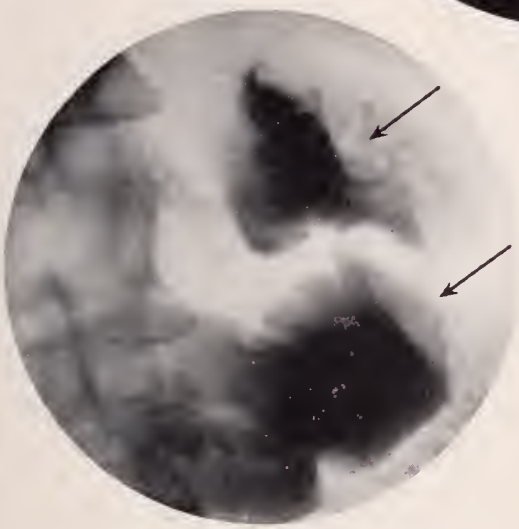

Fig. 14

Fig. 15

Fig. 11—"Profile" *ulcer* (N) *on the anterior wall* of the duodenal bulb. visualized by an aimed exposure as above. Distinct loss of convexity of the anterior wall. Both of these cases (Figs. 10 and 11) were varified by operation.

Fig. 12—Stomach and duodenum as seen with the old method. The duodenal bulb is poorly filled without revealing any pathology.

Fig. 13—Using *one sip of barium the mucosal folds of the duodenal bulb* were visualized to the full extent. With aimed and instantaneous exposure in the *left oblique* view *a thorn shaped ulcer* (U) was depicted on the *posterior wall*. This duodenum is of the same patient as seen in Fig. 12.

Fig. 14—Impression of a gall-bladder upon the greater curvature of the duodenum and antrum of the stomach. Note the completely smooth and sharp outline caused by such pressure excluding the possibility of organic lesion. Right oblique view.

Fig. 15—Impression of a gall-bladder filled out by a great solitary stone (*"calcified gall-bladder"*). upon the duodenum. The latter shows a ragged outline pointing illustratively to adhesions between the two organs. Picture was taken in the right oblique view using the new technic of aimed and instantaneous exposure. Verified by operation.

encroach upon the anterior wall of the duodenum, the pylorus and even partly the antrum. Figure 14. Peri-duodenal adhesions due to cholecystopathia may alter the configuration of the bulb. A ragged outline is highly illustrative for the involvement of both organs. Figure 15. In the absence of deformities it is the fixation to the right of the bulb which has diagnostic value. Tumors in this region are mostly papillomas or polyps originating in the antrum and may be forced sometimes into the bulb by peristalsis. The congenital diverticula, as a rule, do not occur at this portion of the duodenum although at times they may become projected into this territory.

Duodenal ulcers are more frequent than those of the stomach. The preponderance of ulcers of the posterior duodenal wall has also been established. The roentgenological diagnosis of duodenal ulcers was considered a great achievement about fifteen years ago. Now, presentation of duodenal ulcers with this technique has become a daily occurrence. Duodenal lesions have a prominent place in the diseases of the gastrointestinal tract, hence the importance of the diagnosis. Fortunately it has decreased and even supplanted the vague diagnosis of gastric neuroses. The visualization of the duodenal ulcer, per se, enables one to make proper prognosis also. For instance, we know that ulcers on the posterior wall have a tendency to penetrate and bleed while those on the anterior are inclined to perforate. The pancreas lying posterior to the duodenum offers a support for the prevention of perforations.

The greatest value of this method of examination is that it gives us direct aid for the type of treatment. A simple ulcer without any complications, such as, adhesions or rigid deformities offers a good field for medical treatment. While ulcers with a shortened or greatly damaged bulb, or with pseudo-diverticulum formation need surgical interference. Periodic x-ray examination may reveal the different phases in the life cycle of such an ulcer and can be checked up accurately with roentgen study. The absence of any of the here mentioned direct signs of duodenal ulcers should be contraindication to surgery.

CONCLUSIONS

The instantaneous exposure method applied with an aimed and dosed compression is the most exact type of examination available for the diagnosis of duodenal ulcer. Only thus is one enabled to offer a detailed study of duodenal outline and the pattern of the mucosal folds objective enough to determine organic pathology. Its great value is shown in the differentiation of true ulceration in contrast to deformities which are only spastic and often deceive the examiner. The direct signs for duodenal ulcers are:

1. Niche, if found is identical with the anatomical findings. It must be looked for in all available views.
2. Pointing of the mucosal folds towards the niche presenting the "star-formation". An accompanying "halo" around the ulcer is also very conclusive.
3. Pouch, i. e., pseudo-diverticulum formation.
4. Shortening of the bulb with deformities. The distance between the pylorus and the Papilla Vateri is always diminished in these cases.
5. Loss of convexity, that is, retraction with a corresponding incisura on the opposite wall.

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COUNCIL MEETS

The first meeting of the Council in the new year will be held in Milwaukee on Saturday, January 5th. The entire day will be devoted to this initial meeting.

The Moloch of the Tropics

By M. FERNAN-NUNEZ, M. D.
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"The Lord shall smite thee with a consumption and with a fever and with an inflammation and with an extreme burning . . ."

THESE words from the 22nd verse, 28th chapter, of the Book of Deuteronomy, were spoken of the most important disease of the ages. This terrible visitation on man has also been alluded to in the Sanskrit and in the sacred writings of practically every religion extant today.

It was known in the remotest antiquity, and was vividly described in the immortal writings of Hippocrates, in the Iliad of Homer, and in the works of Plato and Aristóphanes. It has inspired such famous paintings as Le Guide's "Hercules Killing the Hydra" of the Louvre of Paris; "The Madonna of the Fever" in the crypt of St. Peter's of the Vatican; the self portait of Albert Durer in the Bremen Museum; and, Maurice Sand's "Spirit of the Marshes" in the Museum of Orleans.

It caused the downfall of Greece and Rome and of many ancient civilizations; it defeated Napoleon's campaigns in Palestine and Holland; and, its ravages in the French army in Algeria caused that land to be called the "Grave of the Christians". Oliver Cromwell and many other great figures of history died of it.

During the World War it affected more men in the German army than any other disease; it is said to have demoralized the army of Russia; and the Allies all but lost the campaigns in Gallipoli and Mesopotamia because of it.

This disease was not present in the Western Hemisphere until the arrival of the Spaniards, who brought it from the Mediterranean area, little thinking it would find such favorable conditions for its propagation that, like a Frankensteinian monster, it would eventually destroy their power in the New World.

It does not occur in spectacular epidemics but constantly and quietly carries on its work of destruction. Over 300,000,000 people throughout the world suffer from it each year with more than 5,000,000 deaths yearly which are caused by it directly or indirectly.

What is the name of this disease? Tuberculosis? No, although Osler did call that the "Captain of the Men of Death". Pneumonia, you respond. Wrong again. It is malaria, the Moloch of the tropics, on whose fiery altars the human race is being ever sacrificed.

Let us observe a victim throughout the course of a typical attack. He is suddenly siezed with a chill, which, for an hour, shakes his body like a storm. This is followed by a burning fever of around 105° F. for a period of two to eight hours. Then comes a drenching sweat during which the patient literally lies in a pool of perspiration for 2 to 4 hours. His brain aches as if it will split the skull in which it is encased, great nausea tortures him, and he may be delirious. How accurate was the biblical description of malaria of two thousand years ago!

Now this chain of symptoms characterizes a number of different tropical fevers. Then, how shall we make a diagnosis of malaria? Let's prick the finger of the patient and get a drop of blood for examination with the microscope. What does it show us? Those millions of motionless, small red discs are red blood cells, the erythrocytes. But here's one of them that does show motion, and within it we see some black dots dancing around. They are the plasmodia, small unicellular ameba-like animals which are the cause of the malaria. They were first seen by Dr. Alphonse Laveran, a medical officer of the French army, while on duty in Algeria in the year 1880.

THREE SPECIES

There are three distinct species of these parasites, each producing differences in the malarial attacks.

1. In the tertian type, which is most common in the United States, and practically the

only one found in Wisconsin, the chill, fever and sweat are repeated at the same hour on every third day. It is the easiest type to cure.

2. With the quartan parasites, another type which is especially common in Italy and the Mediterranean coast, and tends to become chronic, the attacks come on the scheduled hour of every fourth day.

3. The attacks of the estivo-autumnal species occur with great irregularity. This variety dominates the tropics and often produces the deadly pernicious types of malaria in which a victim may suddenly drop unconscious to the ground as if mortally wounded; or turn delirious and run amuck, injuring anyone who crosses his path; or, may bleed to death through his kidneys with the terrible "blackwater fever".

There is nothing more spectacular in all the realm of medicine than to see such a comatose or delirious patient return to himself within a short time after receiving proper treatment, without which he would almost surely die.

In all cases the particular malarial plasmodium invades the red blood cells, multiplies there by direct or asexual division, and each crop of parasites reaching maturity at approximately the same time as the others, bursts the infected red cell to produce the sudden dramatic attack of the disease. The liberated parasites attack new cells and the cycle is constantly repeated on every third or fourth day, or sooner, according to the respective species of plasmodium.

Fortunately for the patient, Providence has again supplied a remedy right in the tropics. In the year 1638, Dr. Juan de Vega, physician to the Spanish viceroy of Peru, cured the latter's wife, the Spanish Countess of Chinchon, of malaria by use of a tea made from the bark of a tree. She was so gratified that she turned her fortune over to the Jesuit order to be used in supplying the bark of this tree to the suffering of all races, since that Society maintained missions in all parts of the world. It is still popularly known as Jesuit's bark, although the scientific term for it is Chinchona bark, in honor of the Countess of Chinchon.

A few years ago I visited the Castle of Chinchon in Spain. Its walls, long crumbling into dust, were mute evidence of the generous act of a noble woman who gave her all that a beneficent remedy might be made available to a suffering world. Her fame, now enshrined in the name of that drug, will endure far beyond any memory of her castle.

The active principle of this bark is quinine. If we administer it to our patient in sufficient amount it will stop his paroxysms within one or two weeks and will surely cure him if he continues it for a long enough time to destroy all the parasites in his blood, i. e., at least two months. However, to immediately stop his attacks and prevent the severe anemia caused by the destruction of his red blood cells by the parasites we can give him an intravenous injection of neoarsphenamine, an organic preparation of arsenic. This will so wound the parasites that the cycle of asexual reproduction will be broken, and we can then give them the coup de grace with much smaller doses of quinine than would otherwise be required.

The cause of the enormous death rate from malaria is a widespread lack of quinine in many endemic areas. During the World War the Germans were cut off from the supplies of quinine coming from the fields of production in the tropics. Their chemists succeeded in providing a synthetic substitute, plasmochin, which is very useful. However, quinine still remains the specific for malaria.

Our patient received his infection through the bite of a female anopheles mosquito which had several days previously fed upon the blood of a human with malaria. In the mosquito the parasites underwent a sexual phase of reproduction, an alternation of generations which Nature provides for the strengthening of the species in many forms of life. This completed, the mosquito then infected our patient by biting him, and the asexual or direct division of the parasites started up again to produce the recurring malarial attacks.

To prevent malaria contact with the anopheles mosquito must be eliminated. This may be accomplished chiefly by:

1. Screening of houses, sleeping under mosquito nets, and remaining indoors after dark because it is at night that the anopheles mosquito is most active.

2. Stagnant waters which can not be easily drained should be oiled with petroleum to kill the larval forms of the mosquitoes. Much of the decrease in malaria in the United States has been due to the great numbers of automobiles dripping oil on the roads which was washed by rains into water collections where mosquitoes bred.

3. Lands and swamps holding collections of water where mosquitoes breed should be drained. In medieval times malaria was very common in the castles because of the moats surrounding them, which furnished excellent breeding places for mosquitoes.

Indeed, the word "Mal - aria" meaning "bad - air" was applied to the disease because it was early known to have some connection with the noxious atmosphere of the swamps. Thus, the ancients came very close to the fact of its transmission by the mosquito, which had to wait until its discovery in 1897 by Sir Ronald Ross, a British army medical officer, while on duty in India.

It is also of equal importance to thoroughly cure all cases of malaria so that mosquitoes can not get the disease from them. This requires that the patient continue his quinine, plasmochin or atabrine over a period of two months in order to eventually destroy all the parasites in his blood.

THERAPEUTIC MALARIA

While malaria is such a curse to millions of people, it has become a blessing to many individuals. It had long been observed that patients suffering with syphilis were often cured by an attack of malaria. In former years patients afflicted with syphilis of the brain, called paresis, were usually doomed. They constituted the Zombies or living dead of the hospitals for the insane. All over the civilized world today many such patients are being restored to usefulness by being inoculated hypodermically with blood from a patient with benign tertian malaria. After the fever has accomplished its effect on the syphilis the malaria is then cured by treatment, preferably neoarsphenamine. Several of these spectacular cures have been accomplished right here in Wisconsin.

Naturally, such a phenomenal thing as this has incited much research as to the mechanism of the cure. In the animal body the spleen, lymph nodes, bone marrow and certain other tissues make up an organ called the reticulo-endothelial system. One function of this organ is to produce immunity against disease. It is greatly activated by malaria as is shown by the enlarged spleen which is one of the chief symptoms of that disease. The system also operates in producing the immunity which follows an attack of syphilis. Usually a given disease causes the production of an immunity which is specific for that disease alone. However, in certain instances the reticulo-endothelial system when activated against one disease may function to a degree against another infection of an allied group, as in malaria and syphilis, both of which are caused by animal parasites.

SUMMARY

How interesting is the history of the spread of diseases over the world! Syphilis was unknown in Europe before the discovery of America. It was originally a tropical disease called yaws, which, being inoculated into a non-immune race, assumed virulent characteristics and decimated the populations of all Caucasian lands during the sixteenth century. Malaria in turn was brought to the New World where it became a tremendous influence in the history of mankind.

Thus we see the dominant rôle that tropical medicine plays in the progress of civilization. A disease of little interest to us in these latitudes today may be brought to our doors by modern means of communication and become of profound importance to us tomorrow. In other decades such a prospect would have terrified our ancestors, but nowadays we have the assurance that modern medical science can readily control any such situation, provided we as individuals always cooperate fully with our public health authorities.

Congenital Esophageal Atresia

By JOHN DOCTER, M. D.
Racine

ACCORDING to Dr. A. W. Chapman of Glens Falls, N. Y., who reported a similar case in the Archives of Pediatrics, May 1933, there have been 255 such cases reported up to his report. There seems to be an increase during recent years and this anomaly may be more frequent than was formally supposed especially in those cases in which food could not be found to agree with the baby. This could easily happen in areas far removed from a medical center and the true cause of death was not determined.

In the most common variety of congenital esophageal atresia the upper portion ends in a blind pouch while the lower extends up from the stomach into the trachea or more rarely a bronchus. At least 80% are said to come under this classification. It is this form of atresia in which the stomach becomes distended with air. The x-ray verifies this and did in this case I am reporting. When atresia exists without the tracheoesophageal fistula the roentgen ray examination does not reveal enlarged stomach with air. This is a reasonably safe method of determining whether a tracheoesophageal fistula is present in a given case.

A paper published in 1918, by Brennemann stated that no case without a connection between stomach and lungs had been reported in over 10 years.

Baby G., fifth child of healthy parents, female, four previous children males, all normal, living and well. This baby was full term, normal birth delivered at home by Dr. Peehn of Sturtevant, Wis. Was sent to me because of vomiting. Everything was regurgitated. Birth weight 7½ lbs. No cyanosis but cry was peculiar and hoarse in character and child seemed to have mucus in its throat and nose, especially noticeable when she cried. Breathing was labored with the least exertion and my first impression of the case was that there was some obstruction of trachea due to pressure of thymus or neoplasm. Very marked acetone breath was present, dry cherry red tongue and lips and sunken fontanel. Dehydration of a moderate degree present. Respirations 50 per min. and noisy, pulse 154 and good quality. Lungs: noisy breathing

Fig. 1. Anteroposterior view. Barium lodged in upper portion of esophagus where there appears to be a complete obstruction of the esophagus.

Fig. 2. Anteroposterior view. Stomach distended with gas. Triangular-shaped area of density extending from 2nd rib anteriorly to the mediastinal region. In mid zone of right lung is area of consolidation suggestive of pneumonia.

over entire upper back and front with harsh mucous rales heard throughout. No dullness. Eagerness of child to feed made me think of starvation caused by something out of the ordinary. Meconium stools were present.

A gavage tube was passed and met obstruction a few inches down and fluoroscope showed tube in esophagus at level of second rib anteriorly. Tried to pour barium solution into the tube but it would not flow. Two teaspoonfuls of barium were given by mouth and roentgenogram verified fluoroscopic finding. Nothing passed into stomach for 4 hours later. Child's entire physical examination was normal except above findings. No operation was attempted after explaining the seriousness of child's condition and also the poor results and prospects in this kind of obstruction. The baby was made as comfortable as possible and expired on the fourth day. Necropsy was not obtained. Cause of death —pneumonia and starvation.

DISCUSSION

Etiology: The consensus of opinion according to Chapman's report is that this condition is the result of some developmental error and depends upon the fact that the pharynx, trachea and upper portion of the alimentary canal have a common origin.

Prognosis and treatment: In this type of atresia the mortality is 100%. Gastro-enterostomy, gastrotomy and other operations combined with ligation of lower end of esophagus have met with no success and life has not been prolonged over 28 days.

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The Palliative Treatment of Inoperable Carcinoma of the Stomach by Means of Jejunostomy

By C. O. DIAMOND, M. D., and E. H. MENSING, M. D.
Milwaukee

THE percentage of cases of carcinoma of the stomach that are recognized early enough to be resected, with the hope of obtaining a three to five-year cure, is an unusually low one. Gatewood reports a series of 417 cases from the Presbyterian Hospital in Chicago. An exploratory operation was done in 209 of these cases and 30% of these were found to be inoperable. Resection was done in 58 cases, and of these 39.5% lived more than 5 years, showing a five-year operative survival of 4.2%. From these figures it is seen that surgical treatment of gastric carcinoma is in a great majority of cases only palliative.

We have a number of surgical procedures which can make the life of a patient with inoperable gastric cancer more comfortable.

Walters explores all cases of carcinoma of the stomach excepting those where widespread metastases exist and according to him 50% of these cases have a lesion which can be resected. Since metastases in the liver do not ordinarily cause symptoms they should not be a contraindication to even a "palliative resection".

The carcinomatous lesion itself does not play the entire role in producing symptoms, because the entire stomach is usually the seat of degenerative, inflammatory, and atrophic changes. The infection and sloughing due to ulceration of the lesion produce a certain amount of "toxemia" which is an important factor in the production of symptoms.

To relieve the patient there are several points of attack. First, the lesion itself, if at all possible, should be removed. Mayo and Balfour report many cases who have lived two, three and four years in general well-being after a partial resection even though metastases were present at the time of operation. If the lesion is not resectable and particularly if pyloric obstruction exists, a gastro-enterostomy can be done. A gastro-enterostomy when performed for this type of case very often results in a continuance of symptoms because of the poor gastric mo-

tility that usually exists in carcinoma of the stomach. Furthermore, the operative mortality is high because of the poor condition of the stomach wall in which the sutures are introduced.

Jejunostomy can be done in cases of gastric carcinoma where other operative procedures are contraindicated. It can be performed when the cases are known to have metastasized widely, and where the cachexia is marked. It has been our experience that patients whose lesion is not resectable get along better with a jejunostomy than with a gastro-enterostomy. When a jejunostomy is performed and proper jejunal alimentation is instituted the symptoms are invariably relieved until the terminal stages of the disease. In former years jejunostomy presented problems in many cases because in feeding by means of gravity too great a quantity of food was introduced into the jejunum at one time. A special feeding machine has been devised by means of which slow feedings can be given more or less continuously, which is quite essential until the jejunum has become accustomed to the feedings. Later the machine is not necessary because the patient can then feed himself by the gravity method. After considerable animal experimentation, Ivy formulated a bland, balanced, non-irritating medium which could be given in adequate amounts to supply the caloric needs of the patient. The jejunostomy tube can be held in place indefinitely by means of adhesive strapping. Sloughing carcinoma should be treated by gastric lavage to overcome some of the infection.

In those cases where the lesion is inoperable and especially when accompanied by pyloric obstruction, jejunal alimentation has proved invaluable; many a patient with advanced cachexia has returned to a condition of well-being for a considerable length of time following the performance of the jejunostomy.

REPORT OF CASES

Case No. 1.—S. D., a white male, age 37, was admitted to the Veterans' Administration Hospital, Milwaukee, April 9, 1931, complaining of continuous vomiting which began two weeks prior to admission. Physical examination showed a markedly undernourished patient who was dehydrated and in a

state of alkalosis. A small, freely movable mass was palpable to the right and above the umbilicus.

X-ray examination revealed a greatly distended stomach with 75% retention at the end of 48 hours. A diagnosis of carcinoma of the stomach was made and gastric lavage was instituted. To overcome the dehydration and alkalosis large amounts of saline solution were administered. The patient was operated by Dr. E. H. Mensing April 24, 1931. A large carcinoma was found involving the pylorus and greater curvature of the stomach, with metastases to the adjacent lymph nodes. The condition of the patient did not warrant any extensive surgery at the time. A Witzel-Mayo jejunostomy was performed. He improved so rapidly that on May 5, 1931, a gastric resection was contemplated. The carcinoma was found to be unresectable, so the wound was closed and the jejunostomy tube was reinserted. Jejunostomy feedings were resumed. *His weight increased from ninety-five pounds to 132 pounds by Aug. 14, 1931.* X-ray examination June 26, 1931, showed 100% retention after the 6th hour and 90% after 24 hours. During this time the patient was free from pain and feeling well. He was able to leave the hospital and would take frequent outings, feeding himself by hanging the feeding bottle on a tree, as shown in the accompanying photograph. On Aug. 24, 1931, he began to have pain which did not require morphine until Sept. 6, 1931. He expired on Oct. 7, 1931, 166 days following the jejunostomy.

Case No. 2.—J. R., white male, age 47, admitted to the Veterans' Administration Hospital Dec. 7, 1931, complaining of pain in the left upper quadrant of the abdomen, with occasional nausea and vomiting. He had lost about 25 pounds since onset. Examination revealed tenderness in the left upper quadrant of the abdomen and a small mass palpable in the left lower quadrant midway between

the umbilicus and the anterior superior iliac spine. X-ray revealed an atonic stomach, no deformity of the gastric contour, but 50% retention at the end of 6 hours. The medical department made a diagnosis of duodenal ulcer with pyloric obstruction. Since no improvement followed medical treatment, he was transferred to the surgical department. He was operated April 21, 1932, by Dr. E. H. Mensing and a large carcinoma was found involving the pylorus and greater curvature of the stomach, with metastases to the liver and lymph glands of the mesocolon, and gastro-hepatic omentum. The lesion was not resectable and a jejunostomy was performed. Jejunostomy feedings were begun and the patient gained weight rapidly. On Sept. 1, 1932, an x-ray examination revealed a filling defect involving the entire pyloric portion of the stomach with 60% retention at the end of 6 hours. On Oct. 11, 1932, he felt well enough to ask for his discharge from the hospital. He was readmitted to the hospital March 13, 1933, stating that the jejunostomy tube had come out six weeks prior to readmission and that he had lost considerable weight. An x-ray at this time revealed 90% retention in 6 hours. On April 4, 1933, another jejunostomy was performed. He gained in weight and gastric distress disappeared until July 25, 1933, when he began to complain. Numerous metastatic nodules were palpable in the liver. Morphine was started Sept. 15, 1933. Since then emaciation has been rapid, and, at the present time, death is a matter of days. *Jejunostomy feedings had been maintained in this patient for 491 days.*

Case No. 3.—O. R., white male, age 39, admitted to Veterans' Administration Hospital, Jan. 5, 1933, complaining of cramp-like pains in the pit of the stomach coming on 15–20 minutes after eating. Soda relieved the gaseous eructations but did not relieve the pain. He states that this trouble began about two years ago, becoming worse in the spring and fall of the year. Physical examination revealed a patient who has lost 20 pounds in weight. The abdomen revealed marked tenderness in the epigastrium. Gastric analysis revealed no free hydrochloric acid or lactic acid. X-ray examination showed a large filling defect involving the greater curvature, with a slight amount of retention at the end of the 6 hours. A diagnosis of carcinoma of the stomach was made and the patient was operated on Feb. 2, 1933, by Dr. E. H. Mensing. A large carcinoma of the stomach was found which was adherent to the surrounding structures. A large nodule was palpable in the liver and numerous enlarged lymph nodes were present in the mesocolon. The lesion was not resectable and a jejunostomy was performed. The patient gained in weight and improved symptomatically. The patient got along well until shortly before his death, which occurred on June 24, 1933. This patient lived for 142 days following the jejunostomy.

CONCLUSIONS

1. Palliative surgical treatment can be offered to patients with malignancy of the stomach even though metastases have occurred in the lymph nodes and liver.
2. Gastric resection is the method of choice if the lesion is at all operable.
3. Gastro-enterostomy is physiologically unsuited to most cases that cannot be resected because of the associated gastric pathology, impaired gastric motility, and high mortality.
4. Jejunostomy is a simple operation with low mortality and gives relief from symptoms, increases weight, and improves physical well-being.

Perinephric Abscess With Reno-Inguinal Fistula; Report of Case

By JOHN A. SCHINDLER, M. D.
Monroe

PERINEPHRIC abscess is sufficiently common to enter frequently into differential diagnosis. Though the diagnosis is evident enough in clear cut cases the picture presented is often atypical.

Brunn and Rhodes[1] on a diagnostic basis classified the diseased under three groups. In the first group there are no localizing signs, merely fever, lassitude, body aches and leukocytosis, the diagnostic orientation being toward influenza, typhoid, paratyphoid, endocarditis, undulant fever, and tuberculosis. In the second group there is only moderate discomfort over the kidneys, and the diagnosis though strongly suggested is nevertheless uncertain. In either of the above groups a good flat plate of the abdomen will usually give the clue to the diagnosis. Alexander of Leipzig in 1912, Riviesz of Budapest in 1925, and Lipsett[2] and Beer[3]

of New York in 1926, drew attention to the diagnostic significance of the roentgenograph in perinephric abscess:

1. Concavity of the lumbar spine toward the side of the lesion.

2. Absence of the psoas shadow on the side of the lesion.

3. Dimming of the upper and lower pole of the kidney.

In the third group the clinical diagnosis is evident. Usually there is (Fowler and Dorman[4]):

1. A history of an antecedent skin suppuration;
2. An acute onset, high fever, chills;
3. Severe pain and tenderness in the costovertebral angle often referred to the hip or leg on the affected side.
4. A leukocytosis of 18,000 to 20,000;
5. A negative urine.

In the third group the differential diagnosis often includes retrocecal appendicitis. Roentgen studies, even early, usually leave little doubt.

Vogl[5] has suggested that the absence or presence of typical costo-vertebral tenderness depends upon whether the abscess is perinephritic or paranephritic, a distinction usually possible only by surgery or autopsy. If the abscess is in the perinephritic fat the tension within the capsule gives rise to severe pain. But if the abscess is without the capsule in the paranephritic fat the tension is not produced and consequently there is less local pain.

Diagnostic puncture is an easy and valuable aid in diagnosis. Friedrich[6] considers puncture dangerous because of the possibility of carrying the infection into the kidney. Rolnick and Burstein[7] belittle this danger; in twelve cases of perinephric abscess they secured pus in eight out of twelve punctures and no untoward effects in any.

The frequency of an antecedent skin suppuration such as boil, carbuncle, or stye, has been stressed frequently. The skin lesion may have been active 4 to 8 weeks before the perirenal lesion. The organism in these cases is almost invariably *staphylococcus albus* or *aureus*. Another frequent etiological factor is trauma over the kidney region. Infrequently the perinephric abscess may result from the perforation of an acute cholecystitis into the pararenal region (Gruenfeld and Sigoloff[8]), or from a ruptured retrocecal appendix.

The condition is found much more commonly in adults than in children. In children suppurative lesions of the skin are more apt to result in acute osteomyelitis than in perinephritis, whereas in adults the reverse is true. This is possibly due to the relative number of end arteries in the bone marrow and kidneys in the two age groups. In the child the number of end arteries in the bone is much greater than in the adult. Since the metastatic abscesses in either region probably begin around an embolus of bacteria, the law of chance favors the bone in children and the kidneys in adults.

When early surgical drainage is for some reason delayed the majority of perinephric abscesses point in the posterior lumbar region. There are cases on record (Crenshaw[9]) in which the abscess burrowed up through the diaphragm establishing a nephro-bronchial fistula. This possibility is always to be thought of when a cough aggravated by the recumbent position develops after a renal condition. Fistulas have also been reported extending into the stomach, into the colon or into the peritoneal cavity, although these instances are very exceptional.[10] Nephro-inguinal fistula has been reported in six instances since 1900[11]. These instances have occurred in cases of renal tuberculosis or neglected renal calculus.

The following case is of interest in several respects: first, as a perinephric abscess without localizing signs but with pain in the thigh on the same side; secondly, because of delayed treatment due to the intervention of a chiropractor; thirdly, because of the nephro-inguinal fistula and psoas abscess which developed.

REPORT OF CASE

E. P., unmarried male, age 28, weight 180 pounds, white, automobile mechanic, had always been strong and healthy. He had had the usual childhood diseases, but had otherwise never been ill. On Aug. 2, 1933, he developed a large boil on the left forearm, which, after being opened and drained, healed uneventfully. There were no other

boils. He went on with his work feeling perfectly well.

On Sept. 15, 1933, he felt unusually tired and had a dull but not severe backache, a headache, and a dull pain in the region of the right hip. For three or four days he continued at work. On Sept. 19, 1933, he had a sudden severe chill while at work lasting one-half hour and followed by profuse perspiration. The next day he consulted Dr. J., a capable physician of Madison, Wisconsin. According to Dr. J., the only physical findings were a temperature of 101° F., and slight tenderness on the outer aspect of the upper right thigh. There was no costo-vertebral or other posterior tenderness. His appetite was good, bowels regular, urine negative, W. B. C. count 18,000, R. B. C. count 5,100,000, hemoglobin 102%. Although he felt well enough to be up he was kept in bed for a week because of daily chills and a temperature varying from 101° F. to 105° F. After a week he left Madison and returned to his parental home.

I was called to see him Sept. 28, 1933. He was walking around the house with a lumbar scoliosis to the right, stooped forward and a definite limp due more to stiffness than pain in the right hip region. He was perspiring profusely and had a temperature of 102.6° F. There was moderate tenderness over the trochanteric region of the femur on the right. Extension of the right thigh caused a pain in the same region, and flexion of the thigh caused a pain in the same region, and flexion of the thigh was limited to 45°. There was no spasm nor tenderness in the right lumbar region. The liver and spleen were barely palpable and not tender. His appetite was excellent, but he was becoming constipated, an unusual thing for him. The laboratory findings were: R. B. C. count 4,300,000, hemoglobin 78%, W. B. C. count 20,000 with 87% polymorphonuclears and a marked shift to the left in the Schilling differential, Wassermann negative, the blood sedimentation rate (Walton technique[12]) 43 cm. in one hour, urine negative. Blood cultures were negative and two agglutination tests made on Sept. 28th and Oct. 4th were negative for undulant fever, typhoid, paratyphoid and tularemia. The patient was to be taken to the office for roentgen studies when I was notified on October 4th that a chiropractor had been consulted and a diagnosis made of "Pressure on the Spinal Nerves". Consequently roentgen study was deemed an extravagant superfluity by the family. I, thereupon, dropped the case.

On Dec. 11, 1933, more than two months later, I was called to the patient's home. He reported that his fever and chills had stopped two weeks after beginning "Chiropractic". The limp, however, had grown worse and he was bedridden. The dull pain was still present in the right upper thigh, and there was a considerable lump above Poupart's ligament on the right which had gradually increased in size since it was first noticed two weeks before. This swelling was hard, indurated, painless, measuring 7½ cm. x 11 cm. and was not reddened, tender, nor hot. In the center was a small area of fluctuation. The right thigh could not be extended fully to within 30°. The right dorsal lumbar muscles were spastic and slightly tender. The lumbar spine could not be extended. He had lost 24 pounds in two months, was very weak and appeared anemic. Red blood cell count was 3,800,000, hemoglobin 68%, W. B. C. count 16,000, sedimentation rate 58 cm. in one hour, and the urine showed occasional hyaline casts and trace of albumen. Temperature rose to 101° F. in the evenings.

Roentgenographs showed a normal right femur. The lumbar vertebrae and intervertebral discs were without pathology. The lungs showed no evidence of active tuberculosis. The shadow of the right psoas muscle was persistently absent on all plates, the lumbar spine was concave to the right, and the lower end of the right kidney shadow was lost in a shadow of increased density.

Aspiration of the psoas abscess produced a small amount of very thick caseous material, smears of which showed staphylococcus, the cultures a staphylococcus aureus. No acid fast organisms could be found and guinea pig inoculation was negative for tubercle bacilli.

Intravenous pyelograph showed good function of both kidneys, a normal left pelvis and ureter, and a hydronephrosis of moderate degree on the right. An incision was made into the abscess and a number 14 French catheter introduced under the fluoroscope. The course of the catheter was taken along the floor of the pelvis, then up along the line of the psoas muscle almost to the transverse process of the second lumbar vertebra. About two ounces of thick grey pus was aspirated. Two ounces of lipiodol introduced through the catheter outlined an irregularly shaped cavity lying along the lateral margin of the psoas muscle.

Daily irrigations, alternating with $KMNO_4$ and a specific bacteriophage made for the staphylococcus cultured from the abscess, were instituted. The sinus tract closed in rapidly and in slightly over a month the entire tract had healed completely. Intravenous urography then showed a normal right kidney pelvis. In the past three months the patient has worked daily, has felt excellent, has normal use of the right leg, and has reached 190 pounds in weight.

In order to exclude the bare possibility, (although the history did not in the least suggest it), of an abscessed retrocecal appendicitis which had burrowed into the perinephric space a colon examination with barium was made. The appendix was well visualized, freely movable with a normal appearing lumen.

COMMENT AND SUMMARY

The pain referred to the upper outer aspect of the thigh in similar cases of perinephric abscesses and in other posterior lum-

bar pathology is not a viscero-sensory reflex reference to the lateral femoral cutaneous nerve as understood by Head, Mackenzie and Pottenger, but has a more plausible anatomic explanation which is to be the subject of a paper on Visceral Pain Localization to be published in the near future.

Spontaneous nephro-inguinal fistula has become a distinct rarity in an age where genito-urinary diagnosis is so highly developed, and is today reported only in neglected cases. Of the few cases reported in our century the etiology is either nephrolithiasis or renal tuberculosis. The case here reported very definitely followed a perinephric abscess which was without localizing signs, the patient finally presenting himself with a swelling in the right groin. Roentgen examination suggested a perinephric abscess. After incision of the psoas abscess injection of lipiodol through a catheter outlined a tract leading to the right kidney region. The function of the right kidney as determined by intravenous pyelographs was normal, the only abnormality being a moderate hydronephrosis. The treatment instituted was conservative, namely, irrigations with $KMNO_4$ and a specific bacteriophage, and sinus tract closing in completely in slightly over a month, the patient having made a complete recovery.

A catheter introduced into the opening of the psoas abscess extends into the right kidney region, and lipiodol injected through it outlines an irregular abscess cavity at the lower pole of the kidney.

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Diphtheria in Wisconsin

By H. M. GUILFORD, M. D.
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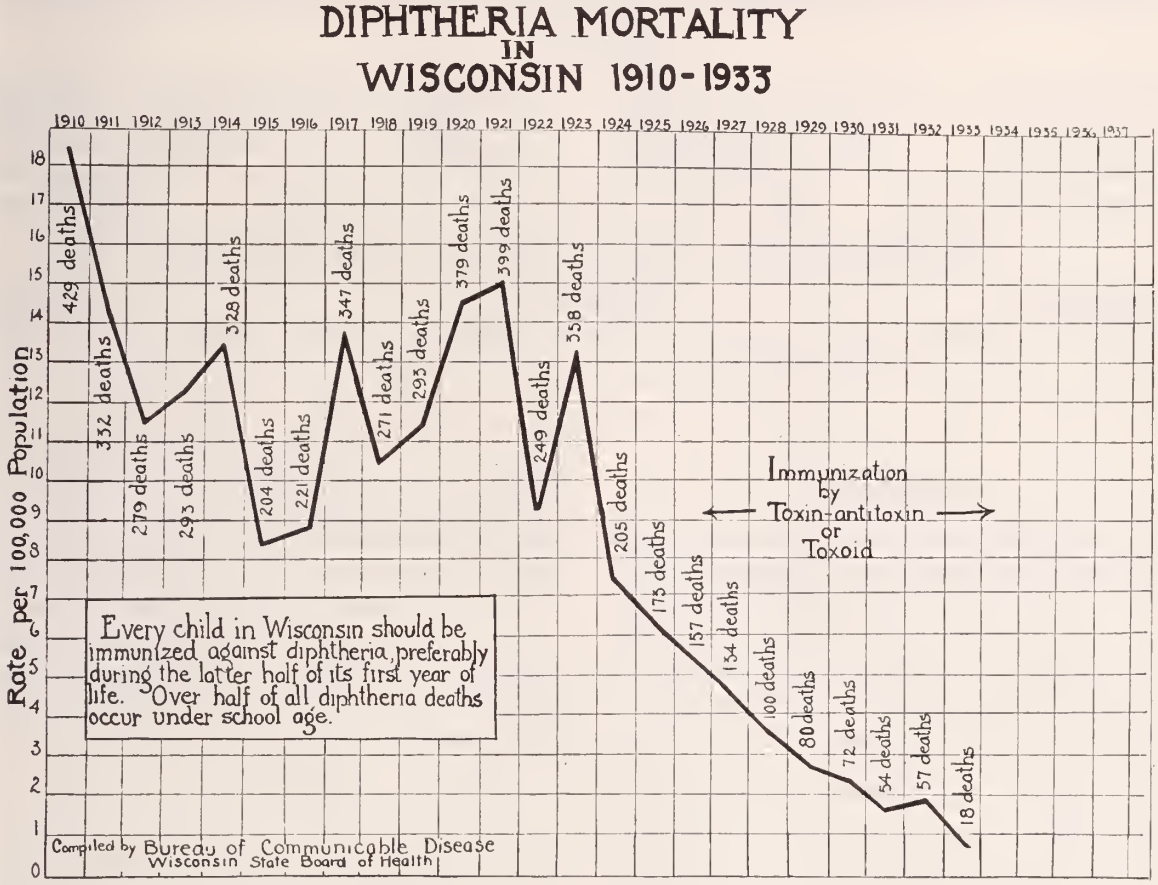

THE chart recording the annual mortality from diphtheria in Wisconsin since the year 1910, published in this volume, shows the decline that has taken place in the death rate in the last ten years. It is drawn according to rates per 100,000 population. It illustrates the triumph over a devastating disease through the wide application of a medical discovery.

We wish to call attention to the very great decline in the number of cases that have occurred since 1925. The record by years is as follows:

Year	Cases reported
1925	2,363
1926	2,054
1927	1,862
1928	1,155
1929	1,025
1930	799
1931	795
1932	604
1933	299

The decline in the case rate is almost as pronounced as the decline in the death rate in the same period.

Active immunization against diphtheria began to be used limitedly as early as 1922 in Wisconsin. It was taken up much more widely by 1925 in various communities of the state. The impressive decline in the case rate has been wholly synchronous with the progress in immunization. There have been no new factors by way of treatment to account for the drop in the mortality rate and the mortality rate has, therefore, been entirely dependent upon the drop in the number of cases.

The percentage of reported cases proving fatal since 1920 has varied from 6 to 9 per cent annually. The clinical nature of the disease is such that a similar percentage of fatalities is likely to continue in the succeeding years. Immunization of children, especially early in life, can prevent many of these deaths.

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« « « EDITORIALS » » »

Appendicitis

DURING the past decade there has been a gradual increase in the mortality rate from appendicitis. During the past few years the surgeon has more and more often been confronted with cases of ruptured appendicitis complicated with peritonitis and consequently the increase in mortality from the disease. The only way in which the medical profession can lower the death rate from appendicitis is to make an early diagnosis and insist upon early operation. If all cases of appendicitis could be operated upon during the first thirty-six hours of the disease the mortality could be reduced to less than two (2%) per cent.

During the past five years there has been a marked increase in the use of home remedies, particularly laxatives, and frequently the physician is not called until the appendix has ruptured and peritonitis has developed. To avoid this disaster the people must be educated concerning the danger of taking or giving cathartics in abdominal pain.

The best way to do this is for each County Medical Society to devote one week to an appendicitis campaign. Recently the Dane County Medical Society had such a campaign and it was very successful. Physicians spoke before every high school and business club in the County and the local radio station gladly gave as much time as was requested. The State Board of Health cooperated in providing stickers which were given to every high school student with the request that they paste it on a book that they use daily.

If this program were carried out in every county in the state, and repeated every year, we could greatly reduce the high mortality of appendicitis. A. T.

Diagnosis of Pregnancy

ALTHOUGH it is only six years since the first announcement by Aschheim and Zondek of the effects of human pregnancy urine on the ovaries of mice, there is now available to the medical profession a more dependable method for the diagnosis of early pregnancy than has heretofore existed. The laboratory methods now in use are based on these earlier reports, but the technical details have been varied in numerous ways, and methods still more reliable have been discovered. Friedman, in this country has perfected a very prompt method, using rabbits. Under favorable conditions a decision can be made within 24 hours. The relative simplicity of this diagnostic test has led many clinicians to think they can do the tests with less training and experience than they have for testing urine for sugar and albumin. The

We Wish You A Happy Holiday Season

study of large series of pregnancy diagnostic tests has shown that the method is neither fool-proof nor 100 per cent accurate. Experience, judgment, and exact standards are of demonstrable importance.

The discovery that urine could be preserved adequately for this test by the use of boric acid was first made and applied in Wisconsin. It is known that specimens in which ammoniacal fermentation has occurred are apt to be toxic to the animals, and also to lose the typical substance which gives a positive test. This difficulty has been overcome so that physicians remote from large institutions still have the opportunity to use such diagnostic means. Wisconsin physicians have had this service provided on a cost basis for nearly three years.

The choice of rabbits may determine whether a positive test is found or missed, for some breeds of rabbits are not in continuous heat, as is required. The living conditions of the rabbits, including food, temperature, and segregation, must be controlled. When the animals are used they do not need to be treated with all the precautions used for human antiseptic surgery, but survival does require specialized care. Most important is the discrimination in the observation of the ovaries when exposed for the reading of the effect brought on by urine injection. Certain abnormal reactions may be induced by urine from women with some of the endocrine dyscrasias in the absence of pregnancy. These have too often been confused with positive tests for pregnancy. In such cases the use of an alternate method or a modification of the technique may avoid the confusion and give some further evidence as to the clinical nature of the problem at hand.

Analysis of the accuracy of the diagnoses made by these methods shows errors which have been reported as low as 2 and as high as 12 per cent. The larger figures apply to material received from numerous physicians, including many problem cases with menstrual irregularities. Study of the types of error incurred show that often incorrect results could have been avoided if the clinician had given even a brief history of the difficulty which led him to ask for the test. For example, at the time of the beginning menopause the urine contains materials, probably pituitary in origin, which simulate a positive test for pregnancy. At such a time the differentiation may be of considerable importance. If the age is known before the test is made, a technique employing rats rather than rabbits may be chosen, and unequivocal results secured. This choice of tests is not wise in other cases, for it is slower and more expensive of technician's time as well of number of animals sacrificed. Or again, when retention of products of conception, hydatid mole, or chorioepithelioma are suspected, modifications of the method in still another way will give helpful data for clinical decisions. Most important is the timing with relation to the last menstrual period, since the reactions do not become dependable until after three weeks of gestation.

The animal tests for pregnancy are therefore still methods which require the services of adequately trained technical observers. As in the case of any other laboratory methods, these reactions are "methods of precision", but that does not mean of 100 per cent accuracy. If it is recalled that the laboratory worker is in effect a consultant to the clinician, it will seem only right that the clinical problem be stated. In other words if a bit of essential history accompanies the urine specimen, the results will be more frequently correct. This rule applies to all consultations and all laboratory procedures. E. L. S.

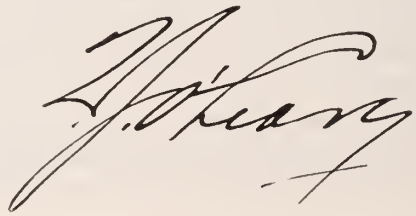
. . . . THE PRESIDENT'S PAGE . . . .

A Field For Local Effort

AT THE time of this writing the Cancer Committee is preparing plans to bring before the public knowledge of the cancer situation, to create interest in the early recognition of this disease. Physicians are frequently requested to speak before lay groups. These groups are interested in medical topics presented in a manner that is easily digestible from the lay public standpoint. To further this plan it would be well to have one or more of the physicians in each community prepare to respond with an interesting and enlightening discourse. Some of this program will have to be voluntary contributions on the part of individual physicians, because the committee's funds will be limited. They will not be able to send trained speakers into all the different communities. Before the smaller groups a local physician carries more weight than a trained man coming from the outside.

There is another subject that I think could be discussed before lay audiences to great advantage, and that is the everyday disease of acute appendicitis. The mortality rate of this sometime simple disease is far too high; a condition that cannot be wholly blamed upon the family physician or the surgeon. It is not always the physician's fault that an early diagnosis is not made and that a simple surgical procedure is not recommended which causes our high mortality rate, but due to the lack of knowledge or the lack of respect for the early signs of appendicitis in the acute stage on the part of the family. The physician could do a great service to his public if he would deliver talks on this subject before lay groups, especially before parent-teacher associations and in school rooms. I know that talks on this subject have been frowned upon in the past because they were based on surgical achievement, but from the standpoint of early recognition of the signs and symptoms there should be no criticism. If the public were educated to respect sudden abdominal pain, especially in young children, we would see a lowering of the death rate.

When this page reaches you, we will be very near the holiday season, and with this thought in mind, I wish you all a very merry Christmas, and a happy and more prosperous New Year.



Society Proceedings

BROWN-KEWAUNEE-DOOR

The October meeting of the Brown-Kewaunee-Door County Medical Society was held at Alaska Hotel, October 30th.

Mr. Joe Horner of the Press-Gazette discussed physicians and medicine from a layman's point of view.

CALUMET

Dr. A. J. Wagner of Brillion was elected President of the Calumet County Medical Society at its recent meeting at Chilton. Other officers elected were: Dr. P. J. Wollersheim of Forest Junction, Vice-President; Dr. R. J. Winkler of Hilbert, Secretary-Treasurer; Dr. I. N. McComb of Brillion, Censor.

Dr. Wagner was also a speaker on the scientific program, his subject being "Consideration of Pernicious Anemia with Special Regard to Vitamin B."

CHIPPEWA

Officers elected recently for the Chippewa County Medical Society for the year 1935 are: President, Dr. Merton Field, Chippewa Falls, and Secretary, Dr. Rollin Schwartz, also of Chippewa Falls. M. F.

CRAWFORD

The annual meeting of the Crawford County Medical Society convened on November 14th after a dinner at Kabers. The following physicians were present: Drs. N. A. Peterson and W. A. Sannes of Soldiers Grove; E. T. Ackerman of Gays Mills; T. E. Farrell of Seneca; G. J. Maloof and A. E. Dillman of Wauzeka; and the following from Prairie du Chien: J. J. Kane, O. E. Satter, J. M. Sullivan, H. H. Kleinpell, H. L. Shapiro, E. H. Lechtenberg and C. A. Armstrong. Dr. A. J. McDowell, Soldiers Grove, honorary member of the Society though quite well did not feel able to make the trip.

The following officers were elected: President, Dr. N. A. Peterson of Soldiers Grove; Dr. J. M. Sullivan, Delegate; Dr. E. T. Ackerman of Gays Mills, Alternate; Dr. C. A. Armstrong, Secretary and Treasurer.

President Kane and the Secretary called on all the non-members outside the city of Prairie du Chien two days before the meeting and five, possibly six, new members are assured for 1935, giving a membership of fifteen out of seventeen physicians in the County.

A new fee bill for the county is being prepared.

The Society strongly urged the adoption of a rule requiring all school children, on first entering school to be vaccinated and receive diphtheria and whooping cough immunization.

It was a splendid meeting and was enjoyed by all the physicians present. C. A. A.

DANE

The Dane County Medical Society met on Thursdays evening at six-thirty, Nov. 15th, at the Park Hotel, Madison, to hear Drs. Sumner Koch and Loyal Davis of Chicago.

Dr. Koch spoke on "Surgical Repair of Injuries Involving Tendons of the Upper Extremities" and Dr. Davis discussed "Diagnosis and Treatment of the Injuries of the Peripheral Nerves of the Upper Extremity."

FOND DU LAC

The Fond du Lac County Medical Society held its annual initiation November 8th at which time the following officers were elected:

President, Dr. H. R. Sharpe, Fond du Lac; Vice-President, Dr. R. G. Raymond, Brownsville; Secretary-Treasurer, Dr. J. C. Devine, Fond du Lac; Delegate, Dr. D. J. Twohig, Fond du Lac, and Censor, Dr. E. V. Smith, Fond du Lac. J. C. D.

GRANT

The 32nd annual meeting of the Grant County Medical Society was held in Grantland Club Rooms, Lancaster, Thursday, October 25th.

The program began at 2:30 o'clock and was as follows:

"Present Status of Immunization Against Certain Communicable Diseases" by Dr. W. D. Stovall, Madison.

"Duodenal Ulcer" by Dr. Joseph Dean, Madison. Illustrated with lantern slides.

"Recent Advances in Clinical Obstetrics" by Dr. John W. Harris, Madison.

"Treatment of Appendiceal Abscess" by Dr. D. F. Ward, Secretary, Dubuque County Medical Society, Dubuque, Iowa.

"Medicine and the New Deal" by Dr. J. Newton Sisk, Madison, followed by round table discussion.

A six-thirty chicken dinner was served by the ladies of the Evangelical Church and a social hour enjoyed.

Election of officers resulted as follows: President, Dr. Rush C. Godfrey, Lancaster; Vice-President, Dr. F. S. Tuffley, Boscobel; Secretary-Treasurer, Dr. M. B. Glasier of Bloomington; Delegate, Dr. E. C. Howell, Fennimore; Alternate Delegate, Dr. J. E. Donnell, Cuba City, Censor, Dr. E. M. Houghton, Lancaster.

The applications of Dr. Allan Filek of Muscoda and Dr. William Kelly of Potosi were presented for membership and were accepted. M. B. G.

JEFFERSON

A meeting of the Jefferson County Medical Society was held on November 1st at the New Com-

mercial Hotel, Watertown. The principal speaker was Dr. E. L. Sevringhaus of Madison.

LA CROSSE

The La Crosse County Medical Society met in due session on Tuesday, October 30th. A resolution was passed supporting the American Medical Association's stand as well as the stand taken by the State Society in its attitude toward health and sickness insurance. A. H. G.

LINCOLN

At a meeting of the Lincoln County Medical Society held on November 8th, the following officers were elected for 1935: President, Dr. W. H. Bayer, Merrill; Vice-President, Dr. Rowe Baker, Tomahawk; Secretary-Treasurer, Dr. F. C. Lane, Merrill; Delegate to State Meeting, Dr. H. G. Hinckley, Merrill; Alternate Delegate, Dr. K. A. Morris of Merrill. F. C. L.

MILWAUKEE

The Medical Society of Milwaukee County held a meeting on November 16th at the Milwaukee Athletic Club. The following program was presented:

"What is Wrong with the Health Department" by Dr. John P. Koehler.

"Appendicitis in Children" by Dr. G. H. Fellman.

"Diagnosis of Appendicitis" by Dr. A. J. Patek.

"Surgery of Appendicitis" by Dr. C. A. Evans.

This was followed by the social hour.

OUTAGAMIE

At the regular meeting of the Outagamie County Medical Society held Tuesday, October 30th, a motion was made by Dr. Joseph Benton of Appleton, seconded by Dr. Albert Leigh of Kaukauna, that the Outagamie County Medical Society abide by the decision of the American Medical Association on any plan that they may see fit concerning such form of sickness insurance. This motion was unanimously carried by the Society.

The Grievance Committee appointed by the president are: Dr. C. D. Boyd, Kaukauna; Dr. V. F. Marshall, Appleton; and Dr. E. W. Cooney, Appleton. G. W. C.

POLK

Officers elected for the year 1935 in the Polk County Medical Society are as follows: President, Dr. J. A. Riegel, St. Croix Falls; Vice-President, Dr. W. C. Andrews, Frederic; Secretary and Treasurer, Mr. Earl C. Swenson, Frederic; Delegate, Dr. R. G. Arveson, Frederic; Alternate, Dr. A. N. Nelson, Clear Lake, and Dr. T. O. Ries of Luck to the Board of Censors. E. C. S.

RACINE

Dr. G. deTakats, associate professor of surgery, Northwestern University, was speaker before the regular meeting of the Racine County Medical Society held at the Elks Club, Racine, on November 15th. His subject was "Peripheral Vascular Disease."

ROCK

The Rock County Medical Society and the Woman's Auxiliary met in the Hotel Hilton, Beloit, on October 23rd.

Dr. George W. Hall, clinical professor of neurology at Rush Medical College, gave a lecture on "Nervous Diseases."

A talk on "Vivisection" was made by Dr. W. J. Meek of Madison before the members of the Auxiliary.

SHEBOYGAN

The Sheboygan County Medical Society held its monthly meeting at the Memorial Hospital, Sheboygan, on October 25th. The speaker of the evening was Dr. W. J. Carson of Milwaukee and his subject was "Surgery of the Kidney", illustrated with lantern slides.

Dr. W. G. Huibregtse of Sheboygan and Dr. Horace Hansen of Sheboygan Falls were elected to membership and Dr. E. J. Barrett of Sheboygan was elected to honorary membership. A. C. R.

WASHINGTON–OZAUKEE

The Washington–Ozaukee County Medical Society held its October meeting at Hilgen Spring Park in Cedarburg. A very fine dinner preceded the meeting.

Dr. Rock Sleyster of the Milwaukee Sanitarium gave a paper "The Patient with Chronic Complaints."

Dr. George H. Ewell of the Jackson Clinic gave a paper "The Diagnosis and Treatment of Common Diseases of the Rectum and Anus."

Both papers were highly appreciated and discussed at length by the members. R. S. F.

WAUPACA

At a meeting of the Waupaca County Medical Society held on October 26th at New London, election of officers was held. Dr. W. F. Wilker of Iola was elected President; Dr. J. H. Murphy, Clintonville, Vice-President, and Dr. L. G. Patterson, Waupaca, Secretary-Treasurer. L. G. P.

MILWAUKEE ACADEMY

Members of the Milwaukee Academy of Medicine met on November 20th. The scientific program consisted of the following:

1. Presentation of Clinical Cases, Pathological Specimens.
2. Mental Changes Associated with Pernicious Anemia by C. W. Osgood, M. D. Discussion opened by J. L. Garvey, M. D.
3. Silicosis—with lantern slides by E. L. Tharinger, M. D.

MILWAUKEE NEURO-PSYCHIATRIC

The November meeting of the Milwaukee Neuro-Psychiatric Society was held on Thursday, the 22nd, at eight o'clock at the University Club. Following the dinner at six-thirty, Dr. H. W. Hefke spoke on "Artificial Fever Therapy."

MILWAUKEE OTO-OPHTHALMIC

The November meeting of the Milwaukee Oto-Ophthalmic Society was held at the University Club on Tuesday, November 20th. A clinical meeting with exhibition of patients took place at six o'clock.

Dr. Georgiana T. Theobald of Chicago spoke on "Some Phases of Ocular Pathology."

MILWAUKEE ROENTGEN RAY

The Milwaukee Roentgen Ray Society held a dinner meeting at the University Club on Friday, November 16th, at six-thirty o'clock.

"Present Trends in Cardiac Roentgenology" by J. Edwin Habbe, M. D.

"Pathogenesis of Human Silicosis" by Norbert Enzer, M. D.

MILWAUKEE SOCIETY OF CLINICAL SURGERY

A meeting of the Milwaukee Society of Clinical Surgery was held Saturday, October 13th. Following the dinner at six-thirty o'clock, a scientific program was presented as follows:

"Clinical and Experimental Observations on Pulmonary Suppuration" by Dr. Emile Holman, San Francisco, professor of surgery, Stanford University.

In the morning, surgical clinics were conducted at St. Mary's Hospital by the following physicians:

Dr. E. W. Miller and Associates; Dr. Louis Fuerstenau and Associates; Dr. Dexter Witte and Dr. T. H. Burbach; Dr. R. W. Roethke and Associates; and Dr. John Grill.

NINTH COUNCILOR

The autumn meeting of the Ninth Councilor District Medical Society was held at Wausau on the afternoon and evening of November 15th.

At four o'clock, Dr. John L. Garvey of Milwaukee gave a neurological clinic at St. Mary's Hospital. After the dinner at six-thirty o'clock, the following speakers presented papers:

"Exhibition of Chest X-Ray Plates" by Dr. H. H. Christensen of Wausau.

"Problems in Neurology of Interest to the General Practitioner" by Dr. John L. Garvey, Milwaukee.

A showing of Dr. DeLee's new film "The Science and Art of Obstetrics"—courtesy of the Petrolagar Laboratories.

THE WOMAN'S AUXILIARY

Mrs. Rock Sleyster, 1220 Dewey Ave., Wauwatosa, *President*
Mrs. F. Gregory Connell, 420 Washington Blvd., Oshkosh, *President-elect*
Mrs. George H. Ewell, 2024 Kendall Ave., Madison, *Secretary*
Mrs. Donne F. Gosin, 631 S. Quincy Ave., Green Bay, *Treasurer*
Mrs. R. W. Tomlinson, 1021 Park Place, Wilmington, Del., *National President*

Membership of Auxiliary Reaches 761*

THE Wisconsin Auxiliary has 761 members of which 240 are new members. The records show less than 30 delinquent members. During the current year there have been 8 removals and 7 deaths.

At the conclusion of the calendar year of 1933, the paid membership of the thirteen organized county auxiliaries was 569.—compared to eight county auxiliaries with a membership of 367 in 1932.

The paid membership of 761 does not include the 36 members of Outagamie County Auxiliary which is newly organized,—making a total membership for the State Auxiliary of 797.

The membership of the 17 county auxiliaries for the current year is as follows:

	Regular Members	New Members
Brown–Kewaunee–Door		55
Columbia	11	4
Dane		55
Douglas		21
Green Lake–W–Adams	7	1
Kenosha	24	4
Manitowoc	20	2
Marinette–Florence	11	6
Milwaukee	284	52
Outagamie	Newly organized	
Polk	13	3
Portage	15	11
Racine	40	8
Rock	30	6
Sheboygan	23	3
Waukesha	17	2
Winnebago	26	7
	521	240

* In addition to the total membership four members, now deceased, paid their 1934 dues.

BROWN KEWAUNEE-DOOR

55 Members

Organized November, 1933

Atkinson, Mrs. Henry S., Green Bay
Bartran, Mrs. Wm. Henry, Green Bay
Bellin, Mrs. Julius J., Green Bay
Buchanan, Mrs. Richard C., Green Bay
Burdon, Mrs. R. M., Green Bay
Carter, Mrs. Ralph M., Green Bay
Charbonneau, Mrs. Arthur A., Green Bay
Chloupek, Mrs. Charles J., Green Bay
Clifford, Mrs. Paul M., Green Bay
Colignon, Mrs. James C., Green Bay
Comee, Mrs. Wm. Clyde, Green Bay
Cowles, Mrs. Robert L., Green Bay
Crikelair, Mrs. Frank L., Green Bay
Dana, Mrs. Dana B., Kewaunee
Decker, Mrs. Walter J., De Pere
De Cock, Mrs. Joseph L., Green Bay
Denys, Mrs. G. F., Green Bay
Dockry, Mrs. Lyman E., Kewaunee
Ford, Mrs. W. W., Green Bay
Fuller, Mrs. Maynord H., Green Bay
Goggins, Mrs. Geo. F., De Pere
Gosin, Mrs. Donne F., Green Bay
Gosin, Mrs. F. J., Green Bay
Gregory, Mrs. D. H., De Pere
Jordan, Mrs. E. M., Green Bay
Kelly, Mrs. Wm. Weber, Green Bay
Kersten, Mrs. N. M., De Pere
Killins, Mrs. Wendell A., Green Bay
Kispert, Mrs. Robt. W., Green Bay
Knox, Mrs. Eugene S., Green Bay
Leaper, Mrs. Warren E., Green Bay
Lenfestey, Mrs. James P., De Pere
Levitas, Mrs. Isaac E., Green Bay
Milson, Mrs. Louis, Green Bay
Minahan, Mrs. John R., Green Bay
Minahan, Mrs. Patrick R., Green Bay
Minahan, Mrs. Robert E., Green Bay
Mueller, Mrs. Walter E., Green Bay
Mc Carey, Mrs. Arthur J., Green Bay
McNevins, Mrs. Edwin S., Green Bay
Nadeau, Mrs. Emile G., Green Bay
Olmsted, Mrs. Austin O., Green Bay
Oliver, Mrs. Thos. J., Green Bay
Quigley, Mrs. Lawrence D., Green Bay
Robb, Mrs. James Jos., Green Bay
Saunders, Mrs. Otis W., Green Bay
Schmidt, Mrs. Ernst S., Green Bay
Shewalter, Mrs. G. M., Green Bay
Stiennon, Mrs. Oscar A., Green Bay
Tippet, Mrs. Walter P., Green Bay
Troup, Mrs. Ralph L., Green Bay
Vosburgh, Mrs. Wallace H., Denmark
Williamson, Mrs. Carl S., Green Bay
Wochos, Mrs. Frank, Kewaunee
Wochos, Mrs. Wenzel M., Kewaunee

COLUMBIA

15 Members

Organized January, 1931

Batty, Mrs. Arthur J., Portage
Caldwell, Mrs. Hugh M., Columbus
Costello, Mrs. Wm. H., Randolph
Fredrick, Mrs. Harry F., Westfield
Fredrick, Mrs. Harry Y., Westfield
Gillette, Mrs. Harry E., Pardeeville
Henney, Mrs. Charles Wm., Portage
Mac Gregor, Mrs. James W., Portage
Pease, Mrs. Willard A., Rio
Snyder, Mrs. Karl, Portage
Watson, Mrs. E. H., Columbus

New Members

Cheli, Mrs. Clement F., Columbus
Federman, Mrs. E. H., Montello
Frederick, Mrs. Anthony J., Columbus
Tierney, Mrs. E. F., Portage

DANE

55 Members

Organized May, 1933

Aageson, Mrs. Carl W., Madison
Amundson, Mrs. Karl, Cambridge
Atwood, Mrs. David C., Madison
Bardeen, Mrs. Charles, Madison
Bertrand, Mrs. Jos. H., De Forest
Bilstad, Mrs. G. E., Cambridge
Bowman, Mrs. Frank F., Madison
Briggs, Mrs. Stanley J., Madison
Brindley, Mrs. Benj. I., Madison
Campbell, Mrs. Ralph, Madison
Carter, Mrs. Homer, Madison
Chorlog, Mrs. John K., Madison
Crownhart, Mrs. George, Madison
Dean, Mrs. Joseph, Madison
Dimond, Mrs. Waldo B., Madison
Eiel, Mrs. Merrill O., Madison
Ellis, Mrs. Ivan G., Madison
Elsom, Mrs. James, Madison
Ewell, Mrs. George H., Madison
Ganser, Mrs. Wm. J., Madison
Gray, Mrs. Rodney J., Brooklyn
Green, Mrs. Morton K., Mendota
Harper, Mrs. Cornelius A., Madison
Henika, Mrs. Guy W., Madison
Hurlbut, Mrs. John A., Madison
Hyslop, Mrs. Volney B., Madison
Jackson, Mrs. Arnold, Madison
Jackson, Mrs. James, Madison
Jackson, Mrs. Reginald, Madison
Kammer, Mrs. Adolph J., Belleville
Keenan, Mrs. Harry, Stoughton
Krehl, Mrs. Wm. Homer, Madison
Kundert, Mrs. Fred Wm., Madison
Lyght, Mrs. Charles, Madison
Mc Gary, Mrs. Lester, Madison
Marsh, Mrs. Harold, Madison
Mowry, Mrs. Wm. A., Madison
Neff, Mrs. Eugene, Madison
Puestow, Mrs. Karver L., Madison
Reineking, Mrs. Walter, Madison
Schneiders, Mrs. Edwin F., Madison
Schubert, Mrs. Clarence K., Madison
Sevringhaus, Mrs. Elmer L., Madison
Sisk, Mrs. Newton, Madison
Smedal, Mrs. Agner T., Stoughton
Sprague, Mrs. Lindley V., Madison
Stebbins, Mrs. Geo. G., Madison
Stehr, Mrs. Arthur C., Madison
Sullivan, Mrs. Arthur, Madison
Sullivan, Mrs. Eugene, Madison
Supernaw, Mrs. Jack, Madison
Tenney, Mrs. Horace Kent, Madison
Tormey, Mrs. Thomas W., Madison
Winn, Mrs. Harry N., Madison
Wirig, Mrs. Marres H., Madison

DOUGLAS

21 Members

Organized December, 1933

Beebe, Mrs. Loran W., Superior
Broghammer, Mrs. Francis J., Superior
Ekblad, Mrs. Victor E., Superior
Giesen, Mrs. Charles W., Superior
Goodfellow, Mrs. John R., Superior
Hathaway, Mrs. Geo. J., Superior
Kyllo, Mrs. John C., Superior
Lohmiller, Mrs. Royal K., Superior
Mc Gill, Mrs. James W., Superior
Mc Gill, Mrs. Patrick G., Superior
Meyers, Mrs. Judson M., Superior
Myers, Mrs. Elmer A., Superior
O'Leary, Mrs. Thos. J., Superior
Orchard, Mrs. Herbert J., Superior
Schnell, Mrs. Wm. H., Superior
Searle, Mrs. D. R., Superior
Sincock, Mrs. Henry A., Superior
Smith, Mrs. Richard C., Superior
Wall, Mrs. Mark Henry, Superior
Weisberg, Mrs. Joseph H., Superior
Zwickey, Mrs. Wm. H., Superior

GREEN LAKE-WAUSHARA-ADAMS

8 Members

Organized August, 1930

Casper, Mrs. Stephen L., Berlin
Eisele, Mrs. Paul, Ripon
Mueller, Mrs. Gustav, Princeton
O'Neal, Mrs. Orvil, Ripon
Scott, Mrs. Burt E., Berlin
Senn, Mrs. Christian U., Ripon
Wiesender, Mrs. Arthur, Berlin

New Member

Ludwig, Mrs. E., Berlin

KENOSHA

28 Members

Organized November, 1932

Andre, Mrs. Edgar, Kenosha
Andre, Mrs. F. E., Kenosha
Ashley, Mrs. Thad W., Kenosha
Bennett, Mrs. Wm. Harold, Kenosha
Binnie, Dr. Helen A., Kenosha
Binnie, Miss Norabelle, Kenosha
Bowing, Mrs. Irwin E., Kenosha
Caughey, Mrs. C. R., Kenosha
Cleary, Mrs. John H., Kenosha
Graves, Mrs. Jos. P., Kenosha
Hill, Mrs. Ben S., Kenosha
Mayfield, Mrs. Alfred L., Kenosha

Murphy, Mrs. Simon Wm., Kenosha
Randall, Mrs. Albert J., Kenosha
Rauch, Mrs. A. M., Kenosha
Richards, Mrs. Cyril G., Kenosha
Ripley, Mrs. Howard M., Kenosha
Robinson, Mrs. Herbert A., Kenosha
Ruffolo, Mrs. Anthony F., Kenosha
Schlapik, Mrs. Alexander, Kenosha
Stewart, Mrs. Wm. C., Kenosha
Swarthout, Mrs. Ellis F., Kenosha
Thompson, Mrs. George E., Kenosha
Ulrich, Mrs. Charles F., Kenosha

New Members

Bennett, Mrs. L. J., Kenosha
Holm, Mrs. John H., Kenosha
Pechous, Mrs. Chas. E., Kenosha
Riordan, Mrs. John F., Kenosha

MANITOWOC

22 Members

Organized March, 1933

Aldridge, Mrs. Henry, Manitowoc
Andrews, Mrs. Malcolm, Manitowoc
Barnstein, Mrs. Charles, Newton
Belson, Mrs. Harold, St. Nazianz
Cary, Mrs. Erwin, Reedsville
Donohue, Mrs. William, Manitowoc
Gleason, Mrs. Charles M., Manitowoc
Gregory, Mrs. Lawrence, Manitowoc
Hammond, Mrs. Fredk. W., Manitowoc
Hammond, Mrs. Reginald, Manitowoc
Kelly, Mrs. John, Cato
Martin, Mrs. Richard E., Two Rivers
Moriarty, Mrs. Leo, Two Rivers
Rees, Mrs. Thomas H., Manitowoc
Shimek, Mrs. A. J., Manitowoc
Skwor, Mrs. Charles J., Mishicot
Steckbauer, Mrs. Joseph W., Manitowoc
Stueck, Mrs. Arthur F., Manitowoc
Turgasen, Mrs. Francis, Manitowoc
Zlatnik, Mrs. Alfred P., Two Rivers

New Members

Hoffman, Mrs. Geo. M., Manitowoc
Schneck, Mrs. Nathan, Manitowoc

MARINETTE-FLORENCE

17 Members

Organized February, 1930

Bird, Mrs. Maurice D., Marinette
Boren, Mrs. Clarence H., Marinette
Boren, Mrs. John Wm., Marinette
Duer, Mrs. Guy Robert, Marinette
Haasl, Mrs. Henry H., Peshtigo
Jorgenson, Mrs. Harvey L., Marinette
Lid, Mrs. Torstein A., Marinette
May, Mrs. James V., Marinette
Nadeau, Mrs. A. T., Marinette
Redelings, Mrs. Theo. J., Marinette
Schroeder, Mrs. Harry F., Marinette

New Members

Boren, Miss Esther G., Marinette
Frederick, Mrs. Coulter G., Marinette
Pickett, Miss Marion, Marinette
Pinegar, Mrs. Kenneth G., Marinette
Sawbridge, Mrs. Edward, Stephenson, Mich.
Shaw, Mrs. Robert W., Marinette

MILWAUKEE

336 Members

Organized December, 1931

Adamkiewicz, Mrs. Joseph, Milwaukee
Ausman, Mrs. Donald C., Milwaukee
Ausman, Mrs. Harry R., Milwaukee
Bach, Mrs. Edward, Milwaukee
Bach, Mrs. James A., Milwaukee
Bach, Mrs. Mark J., Milwaukee
Baranowski, Mrs. Stanley A., Milwaukee
Barta, Mrs. Edward F., Milwaukee
Bauer, Mrs. Fredrick, Wauwatosa
Baum, Mrs. Earl, Milwaukee
Baumgart, Mrs. Clarence H., Milwaukee
Baumgarten, Mrs. Solomon, Milwaukee
Becker, Mrs. Charles J., Milwaukee
Beebe, Mrs. Claude S., Milwaukee
Belknap, Mrs. E. L., Wauwatosa
Benton, Mrs. Roy W., Milwaukee
Bergen, Mrs. Ralph D., Milwaukee
Bernhard, Mrs. Louis A., Milwaukee
Bernhart, Mrs. Ervin L., Milwaukee
Bickler, Mrs. Edwin P., Milwaukee
Biller, Mrs. Saul Earl, Milwaukee
Birk, Mrs. Benj. J., Milwaukee
Blair, Mrs. John, Milwaukee
Blumenthal, Mrs. Robert, Milwaukee
Bork, Mrs. Albert L., West Allis
Borman, Mrs. M. C., Milwaukee
Bourne, Mrs. N. Warren, Milwaukee
Brey, Mrs. Peter F., Milwaukee
Brook, Mrs. Jeffrey J., Milwaukee
Browning, Mrs. Levi M., Milwaukee
Bruins, Mrs. Dirk, Milwaukee
Brunkhorst, Mrs. Robert O., Milwaukee
Burbach, Mrs. Theo. H., Milwaukee
Byrnes, Mrs. Maurice B., Milwaukee
Caffrey, Mrs. Anthony J., Milwaukee
Cahana, Mrs. Stephen, Milwaukee
Callan, Mrs. Patrick L., Milwaukee
Cannon, Mrs. Harold J., Milwaukee
Carey, Mrs. Eben J., Milwaukee
Churchill, Mrs. Bernhard, Milwaukee
Coffey, Mrs. Charles J., Milwaukee
Coffey, Mrs. Sylvester E., Wauwatosa
Cron, Mrs. Roland, Milwaukee
Currer, Mrs. Paul M., Milwaukee
Dallwig, Mrs. Herbert C., Milwaukee
Davidoff, Mrs. Isidore, Milwaukee
Davis, Mrs. Carl H., Milwaukee
Dearholt, Mrs. Hoyt, Milwaukee
De Neveu, Mrs. Arthur, Milwaukee
De Nosaquo, Mrs. Samuel, Milwaukee
Dieterle, Mrs. John O., Milwaukee
Dorr, Mrs. Addison M., Wauwatosa
Dries, Mrs. Joseph, Milwaukee
Dundon, Mrs. John R., Milwaukee
Eberbach, Mrs. Carl, Milwaukee
Egan, Mrs. Wm. John, Milwaukee
Eisenberg, Mrs. Joseph J., Milwaukee
Eisenberg, Mrs. Philip J., Milwaukee
Elconin, Mrs. David V., Milwaukee
Enzer, Mrs. Norbert, Milwaukee
Epperson, Mrs. Paul, Milwaukee
Farrell, Mrs. Hubert J., Milwaukee
Fetherston, Mrs. John, Milwaukee
Fidler, Mrs. Charles, Milwaukee
Fine, Mrs. Jacob M., Cudahy
Fitzgerald, Mrs. Robert E., Wauwatosa
Fleming, Mrs. Wm. J., West Allis
Foerster, Mrs. Harry, Milwaukee
Foerster, Mrs. Otto H., Milwaukee
Foley, Mrs. Leander D., Wauwatosa
Fons, Mrs. Jerome W., Milwaukee
Fox, Mrs. Max Jake, Milwaukee
Franklin, Mrs. Samuel, Milwaukee
Frederick, Mrs. Roland H., West Allis
Frey, Mrs. Philip G., Milwaukee
Friedman, Mrs. Gerald, Milwaukee
Froelich, Mrs. John A., Milwaukee
Fuerstenau, Mrs. Louis A., Milwaukee
Gaenslen, Mrs. Fred J., Milwaukee
Gebhard, Mrs. Urban E., Milwaukee
Gilchrist, Mrs. Ralph T., Milwaukee
Gorder, Mrs. Arne C., Milwaukee
Gordon, Mrs. John, Milwaukee
Gramling, Mrs. Elmer, Wauwatosa
Gramling, Mrs. Henry, Milwaukee
Gray, Mrs. Alfred W., Milwaukee
Gray, Mrs. Walter, Milwaukee
Greenthal, Mrs. Roy Mark, Milwaukee
Griffith, Mrs. Joseph C., Milwaukee
Grill, Mrs. John, Milwaukee
Grob, Mrs. Arthur R., Milwaukee
Grotjan, Mrs. Wm. F., Milwaukee
Grove, Mrs. Wm. Edward, Milwaukee
Guerin, Mrs. Leon H., Milwaukee
Gute, Mrs. Edwin B., Milwaukee
Habbe, Mrs. John Edwin, Milwaukee
Habeck, Mrs. Edgar, Milwaukee
Hackett, Mrs. James H., Milwaukee
Hankwitz, Mrs. Paul G., Milwaukee
Hardy, Mrs. Clarence F., Milwaukee
Harlow, Mrs. George A., Milwaukee
Haushalter, Mrs. Henry P., Milwaukee
Hawkins, Mrs. Harry M., Milwaukee
Heeb, Mrs. Harry John, Milwaukee
Heidner, Mrs. Fred C., Milwaukee

Henes, Mrs. Edwin M. Jr., Milwaukee
Herner, Mrs. Wm. L., Milwaukee
Hiller, Mrs. Robert I., Milwaukee
Hipke, Mrs. Gustav, Milwaukee
Hitz, Mrs. John Barnard, Milwaukee
Hitz, Mrs. Henry B., Milwaukee
Hoermann, Mrs. Bernard, Milwaukee
Hoffman, Mrs. George H., West Allis
Hogue, Mrs. Gustavus, Milwaukee
Holbrook, Mrs. Arthur T., Milwaukee
Howard, Mrs. Merle, Wauwatosa
Howard, Mrs. Timothy J., Milwaukee
Hughes, Mrs. John R., Milwaukee
Hume, Mrs. Wilson W., Milwaukee
Huston, Mrs. John, Milwaukee
Jackson, Mrs. Edward, Milwaukee
Janney, Mrs. Francis R., Wauwatosa
Jermain, Mrs. Louis F., Milwaukee
Jermain, Mrs. William, Milwaukee
Johnson, Mrs. Christopher, Milwaukee
Johnson, Mrs. Hobart W., Wauwatosa
Joseph, Mrs. Wm. A., Milwaukee
Judge, Mrs. Thomas A., Milwaukee
Kastner, Mrs. Alfred L., Milwaukee
Kilian, Mrs. Alvin D., Milwaukee
King, Mrs. Joseph, Wauwatosa
Klein, Mrs. John T., Milwaukee
Kleinhans, Mrs. Martin A., Milwaukee
Korthals, Mrs. Frederick J., Milwaukee
Kradwell, Mrs. William, Wauwatosa
Kretchmar, Mrs. Louis, Milwaukee
Kretlow, Mrs. Fred, Milwaukee
Kristjanson, Mrs. H. T., Wauwatosa
Krueger, Mrs. Bernard, Cudahy
Kuhn, Mrs. Henry J., Milwaukee
Kusterman, Mrs. Alois F., Milwaukee
Lahmann, Mrs. Albert H., Milwaukee
Langjahr, Mrs. Arno R., Milwaukee
Le Cron, Mrs. Wilbur L., Milwaukee
Lettenberger, Mrs. Joseph, Milwaukee
Lieberman, Mrs. Ben, Milwaukee
Liefert, Mrs. Wm. C., Milwaukee
Lillie, Mrs. Osville R., Milwaukee
Long, Mrs. Chester W., Milwaukee
Lotz, Mrs. Oscar, Milwaukee
Love, Mrs. Irving B., Milwaukee
McBeath, Mrs. Norman, Milwaukee
McCabe, Mrs. John, Milwaukee
McCormick, Mrs. Thomas F., Milwaukee
Mc Donald, Mrs. C. F., Milwaukee
Mc Donald, Mrs. Robert E., Milwaukee
McGovern, Mrs. John J., Milwaukee
Mc Killip, Mrs. Wm. J., Milwaukee
McMahon, Mrs. Francis, Milwaukee
McMahon, Mrs. Henry O., Milwaukee
Mackoy, Mrs. Frank W., Milwaukee
Madison, Mrs. Frederick W., Milwaukee
Madison, Mrs. James D., Milwaukee
Malone, Mrs. Julian Y., Milwaukee
Margoles, Mrs. Frank C., Milwaukee
Markson, Mrs. Simpson S., Milwaukee
Matthews, Mrs. John B., Milwaukee
Miller, Mrs. Ernest, Milwaukee
Mock, Mrs. F. C., Milwaukee
Mollinger, Mrs. Simon M., Milwaukee
Monaghan, Mrs. Leo James, Milwaukee
Mueller, Mrs. Gilbert F., Milwaukee
Muenzner, Mrs. Richard J., Milwaukee
Murphy, Mrs. Francis D., Wauwatosa
Murphy, Mrs. James A., Milwaukee
Neilson, Mrs. George W., Milwaukee
Nickolo, Mrs. Willard, Milwaukee
Oberbreckling, Mrs. Peter E., Milwaukee
O'Hara, Mrs. John James, Milwaukee
Olson, Mrs. Henry John, Milwaukee
O'Leary, Mrs. Elmer B., Milwaukee
O'Malley, Mrs. Thos. Stanley, Milwaukee
O'Malley, Mrs. Wm. P., Wauwatosa
O'Neill, Mrs. Edward J., Milwaukee
Osgood, Mrs. C. W., Milwaukee
Ozonoff, Mrs. Jacob B., Milwaukee
Partridge, Mrs. C. D., Cudahy
Paschen, Mrs. James G., Milwaukee
Patek, Mrs. Arthur J., Milwaukee
Peterman, Mrs. Mynie G., Milwaukee
Peterson, Mrs. Enoch F., Wauwatosa
Pfeil, Mrs. Rudolph, Milwaukee
Pierce, Mrs. Dennis F., Hales Corners
Pink, Mrs. John James, Milwaukee
Podlasky, Mrs. Harry B., Milwaukee
Powers, Mrs. Herbert, Milwaukee
Pugh, Mrs. George J., Milwaukee
Quick, Mrs. Edward, Milwaukee
Raymond, Mrs. Arthur J., Milwaukee
Reifenrath, Mrs. I. B., Milwaukee
Reinke, Mrs. C. C., Milwaukee
Rettig, Mrs. E. Henry, Milwaukee
Reuter, Mrs. Maurice J., Milwaukee
Reynolds, Mrs. John H., Milwaukee
Riehl, Mrs. Fred, Milwaukee
Roethke, Mrs. R. W., Milwaukee
Rogers, Mrs. Malcom, Milwaukee
Rolfs, Mrs. Theodore H., Milwaukee
Rosenberger, Mrs. Andrew, Milwaukee
Rueth, Mrs. John E., Milwaukee
Ruppenthal, Mrs. A. J., Milwaukee
Russell, Mrs. Hugh C., Milwaukee
Russell, Mrs. Ralph J., Wauwatosa
Ryan, Mrs. William, Milwaukee
Sander, Mrs. Oscar, Milwaukee
Sargeant, Mrs. Harry W., Wauwatosa
Sargent, Mrs. James C., Milwaukee
Schelble, Mrs. Edward J., Milwaukee
Schlaepfer, Mrs. Karl, Milwaukee
Schlueter, Mrs. Urban A., Milwaukee
Schmidt, Mrs. Herbert G., Milwaukee
Schneider, Mrs. Chester C., Milwaukee
Schowalter, Mrs. Raymond P., Wauwatosa
Schulz, Mrs. Irwin, Wauwatosa
Schumacher, Mrs. H. S., Milwaukee
Schumm, Mrs. Herman, Milwaukee
Scollard, Mrs. Wm. J., Milwaukee
Seaman, Mrs. Gilbert E., Milwaukee
Seeger, Mrs. Stanley, Milwaukee
Seelman, Mrs. John J., Milwaukee
Sherwood, Mrs. Moriss W., Milwaukee
Siekert, Mrs. Hugo P., Milwaukee
Silbar, Mrs. Sidney J., Milwaukee
Sleyster, Mrs. Rock, Wauwatosa
Smith, Mrs. Eugene A., Wauwatosa
Smith, Mrs. Lemuel D., Milwaukee
Spitz, Mrs. Milton M., Milwaukee
Sproule, Mrs. Ralph P., Milwaukee
Squier, Mrs. Theo. L., Milwaukee
Stamm, Mrs. Leander P., Milwaukee
Stefanez, Mrs. John S., Milwaukee
Stoddard, Mrs. Charles, Milwaukee
Stranberg, Mrs. Walter L., West Allis
Sullivan, Mrs. Gerald A., Milwaukee
Sure, Mrs. Julius H., Milwaukee
Taylor, Mrs. Gurney, Milwaukee
Teschan, Mrs. Rudolf, Milwaukee
Tharinger, Mrs. Edward L., Milwaukee
Thill, Mrs. Dominic P., Milwaukee
Tisdale, Mrs. Lewis C., Milwaukee
Tolan, Mrs. Thos., Milwaukee
Truitt, Mrs. John W., Milwaukee
Tufts, Mrs. Millard, Milwaukee
Ulvin, Mrs. Henry A., Wauwatosa
Van de Erve, Mrs. Walter, Wauwatosa
Walton, Mrs. Wm. B., Milwaukee
Warfield, Mrs. Louis M., Milwaukee
Washburn, Mrs. Robert G., Milwaukee
Washburn, Mrs. William, Milwaukee

Wasielewski, Mrs. Frank S., Milwaukee
Webb, Mrs. Harvey E., Milwaukee
Wieder, Mrs. Lester M., Milwaukee
Wilets, Mrs. Jack B., Milwaukee
Witte, Mrs. Dexter, Milwaukee
Witte, Mrs. Wm. C. F., Milwaukee
Wolter, Mrs. S. H., Milwaukee
Yates, Mrs. John L., Milwaukee
Young, Mrs. Albert F., Wauwatosa
Zivnuska, Mrs. Jaros F., Milwaukee
Zurheide, Mrs. Harry O., Milwaukee

Associate Members

Bereman, Mrs. V. H., Milwaukee
Chandler, Mrs. Ralph, Milwaukee
Conroy, Mrs. A. J., Milwaukee
Dalton, Mrs. Marie, Milwaukee
Fletcher, Miss Kate, Milwaukee
Gaunt, Mrs. P. F., Milwaukee
Hay, Mrs. Thomas H., Milwaukee
Hopkinson, Mrs. Daniel, Milwaukee
Jermain, Mrs. Hubert, Milwaukee
Owens, Mrs. William, Milwaukee
Waegner, Mrs. L. H., Milwaukee
Walsh, Mrs. Frances M., Milwaukee
Willson, Mrs. Charles G., Milwaukee
Wiprud, Mrs. Theodore, Milwaukee

New Members

Ballard, Mrs. Joseph A., Milwaukee
Banyai, Mrs. Andrew L., Wauwatosa
Dempsey, Mrs. George P., So. Milwaukee
Eisenberg, Mrs. Louis A., Milwaukee
Farrell, Mrs. Frank R., Milwaukee
Ford, Mrs. Wm. B., Milwaukee
Gabor, Mrs. Marcell E., Milwaukee
Garens, Mrs. Ralph Wm., Milwaukee
Gingrass, Mrs. Rudolph P., Milwaukee
Grossman, Mrs. Lawrence L., Milwaukee
Guy, Mrs. John E., Milwaukee
Hansen, Mrs. John W., Milwaukee
Hermann, Mrs. Weber C., Milwaukee
Hertel, Mrs. A. Jos., Milwaukee
Hipke, Mrs. Lucius W., Milwaukee
Irwin, Mrs. Robert S., Wauwatosa
Jefferson, Mrs. Roland A., Milwaukee
Kelly, Mrs. George F., Milwaukee
Lobedan, Mrs. Emil T., Milwaukee
Mc Nary, Mrs. John F., Milwaukee
Mc Naughton, Mrs. Walter T., Milwaukee
Malensek, Mrs. Martin C., Milwaukee
Mendeloff, Mrs. Henry, Milwaukee
Merten, Mrs. Alfred, Milwaukee
Molsberry, Mrs. Jasper M., Milwaukee
Morter, Mrs. Clyde W., Milwaukee
Morton, Mrs. Silvanus A., Milwaukee
Nelson, Mrs. Wm., Milwaukee
Niland, Mrs. Paul J., Milwaukee
Oakland, Mrs. Harry G., Milwaukee
Oesterlin, Mrs. Ernest J., Milwaukee
Perlson, Mrs. Philip, Milwaukee
Pfeifer, Mrs. Henry A., Milwaukee
Pleyte, Mrs. Arthur A., Milwaukee
Purtell, Mrs. Paul J., Milwaukee
Rumph, Mrs. Chas. L., So. Milwaukee
Sadoff, Mrs. Harry B., Milwaukee
Schwade, Mrs. Edward D., Milwaukee
Schwartz, Mrs. Abraham B., Milwaukee
Senn, Mrs. Ulrich, Milwaukee
Szlapka, Mrs. T. L., Milwaukee
Tegtmeyer, Mrs. Gamber F., Milwaukee
Thorndike, Mrs. Wm., Milwaukee
Warschauer, Mrs. Bruno, Milwaukee
Wegge, Mrs. Wm. Fred, Milwaukee
Yaffe, Mrs. Aaron, Milwaukee

New Associate Members

Dunker, Mrs. Oscar, Milwaukee
Everts, Mrs. A. E., Milwaukee
Golley, Mrs. F. B., Milwaukee
Greene, Mrs. Hibbard, Milwaukee
Houghton, Mrs. A. B., Milwaukee
Quarles, Mrs. Louis, Milwaukee

OUTAGAMIE

36 Members

Newly organized

Archer, Mrs. Willard E., Dale
Banister, Mrs. Edwin B., Appleton
Benton, Mrs. Jos. L., Appleton
Bolton, Mrs. Ernest L., Appleton
Brooks, Mrs. Everett H., Appleton
Boyd, Mrs. Chas. D., Kaukauna
Bachhuber, Mrs. A. E., Kaukauna
Carlson, Mrs. Guy W., Appleton
Cooney, Mrs. Edward W., Appleton
Dehne, Mrs. Willard O., Appleton
Dohearty, Mrs. Frank P., Appleton
Doyle, Mrs. Jos. H., Little Chute
Flanagan, Mrs. Garret J., Kaukauna
Frawley, Mrs. Wm. J., Appleton
Gallaher, Mrs. David M., Appleton
Hegner, Mrs. Geo. T., Appleton
Krueger, Mrs. Ernest N., Appleton
LaCroix, Mrs. Garfield M., Shiocton
Laird, Mrs. John J., Black Creek
Landis, Mrs. Ralph V., Appleton
Leigh, Mrs. Albert B., Kaukauna
MacLaren, Mrs. John B., Appleton
Marshall, Mrs. Victor F., Appleton
Marshall, Mrs. Wallace, Appleton
McCarty, Mrs. Robert T., Appleton
McGrath, Mrs. Earle F., Appleton
Mielke, Mrs. Edward F., Appleton
Monsted, Mrs. John W., New London
Neidhold, Mrs. Carl D., Appleton
Pardee, Mrs. Chas. A., Appleton
Rector, Mrs. Albert E., Appleton
Reineck, Mrs. Julia, Appleton
Rideout, Mrs. Merton, Hortonville
Ryan, Mrs. Clement E., Appleton
Towne, Mrs. Wm. H., Hortonville
Swanton, Mrs. Milo E., Appleton

POLK

16 Members

Organized July, 1932

Andrews, Mrs. Esther, Frederic
Arveson, Mrs. Raymond G., Frederic
Caldwell, Mrs. Henry C., St. Croix Falls
Campbell, Mrs. Lorne, Clear Lake
Cornwall, Mrs. Wm. B., Amery
Maas, Mrs. David A., Webster
Meilicke, Mrs. Wm. A., Balsam Lake
Nelson, Mrs. Arthur N., Clear Lake
Nicholson, Mrs. James D., Milltown
Noyes, Mrs. George B., Centuria
Riegel, Mrs. J. Arthur, St. Croix Falls
Ries, Mrs. T. O., Luck
Simenstad, Mrs. Lien O., Osceola

New Members

Addington, Mrs. Ercel, Dresser Junction
Johnson, Mrs. Karl J., Osceola
Larson, Mrs. George, Frederic

PORTAGE

26 Members

Organized January, 1933

Benn, Mrs. Herbert P., Stevens Point
Coon, Mrs. John W., Stevens Point
Coon, Mrs. Harold M., Stevens Point
Cowan, Mrs. Wayne F., Stevens Point
Crosby, Mrs. Edward P., Stevens Point
Dunn, Mrs. Austin G., Stevens Point
Kidder, Mrs. Earl E., Stevens Point
Krembs, Mrs. F. R., Stevens Point
Marrs, Mrs. Fred A., Stevens Point
Meyer, Mrs. Marshall W., Almond
Reis, Mrs. George W., Junction City
Rice, Mrs. Daniel S., Stevens Point
Rice, Mrs. Rhody W., Stevens Point
Von Neupert, Mrs. Carl, Stevens Point
Wisiol, Mrs. Erich, Stevens Point

New Members

Baebenroth, Mrs. Harold, Stevens Point
Chase, Mrs. John, Stevens Point
Dieterich, Mrs. Emily, Stevens Point
Gregory, Mrs. Wm. W., Stevens Point
Iber, Mrs. Frank, Stevens Point
Krembs, Mrs. Fred, Stevens Point
Lawrence, Mrs. G. H., Stevens Point
Lindores, Mrs. Lucy, Stevens Point
Rogers, Mrs. E. H., Stevens Point
Rood, Miss Katharine, Stevens Point
Southwick, Miss Louise, Stevens Point

RACINE

48 Members

Organized December, 1932

Atherton, Mrs. C. C., Union Grove
Bennett, Mrs. John Francis, Burlington
Brehm, Mrs. Herbert G., Racine
Brehm, Mrs. Henry J., Racine
Buckley, Mrs. Wm. E., Racine
Chamness, Mrs. Grover C., Racine
Christensen, Mrs. Fredk., Racine
Constantine, Mrs. Charles, Racine
Docter, Mrs. John, Racine
Fazen, Mrs. Louis E., Racine
Hahn, Mrs. Conrad K., Racine
Hemmingsen, Mrs. T. Chas., Racine
Henken, Mrs. Jacob F., Racine
Hogan, Mrs. John H., Racine
Holmes, Mrs. Benj. H., Racine
Jamieson, Mrs. George H., Racine
Jamieson, Mrs. Raymond D., Racine
Keland, Mrs. Harold B., Racine
Kurten, Mrs. Russell M., Racine
Lindner, Mrs. Albert M., Racine
McCracken, Mrs. Richard W., Union Grove
Marek, Mrs. Frank B., Racine
Miller, Mrs. Hubert C., Racine
Nelson, Mrs. Albert L., Racine
Northey, Mrs. Thornton M., Racine
Peehn, Mrs. Fredk. G., Sturtevant
Peterson, Mrs. Ralph O., Racine
Pfeifer, Mrs. Edward C., Racine
Pfeiffer, Mrs. Andrew S., Racine
Pfeiffer, Mrs. Oliver W., Racine
Pope, Mrs. Frank W., Racine
Ross, Mrs. George L., Racine
Roth, Mrs. Walter C., Racine
Schaefer, Mrs. Carl O., Racine
Schneller, Mrs. Edwin J., Racine
Thackeray, Mrs. Robert C., Racine
Tompach, Mrs. Emil L., Racine
Thompson, Mrs. Ira F., Racine
Wagner, Mrs. Nicholas B., Racine
Walters, Mrs. Harry G., Racine

New Members

Browne, Mrs. Charles F., Racine
Faber, Mrs. Samuel J., Racine
Malone, Mrs. Francis A., Waterford
Olsen, Mrs. Chresten, Racine
Schacht, Mrs. Roland J., Racine
Schulz, Mrs. Gordon, Union Grove
Sorenson, Mrs. Soren, Racine
Taylor, Mrs. Edward A., Racine

ROCK

36 Members

Organized February, 1930

Binnewies, Mrs. Frank C., Janesville
Brinckerhoff, Mrs. Frank E., Beloit
Burger, Mrs. Harry E., Beloit
Clark, Mrs. Wm. Thaw, Janesville
Crockett, Mrs. Walter W., Beloit
Edden, Mrs. Ransom W., Janesville
Flarity, Mrs. Thomas, Beloit
Fosse, Mrs. Benjamin, Beloit
Friend, Mrs. L. J., Beloit
Hartman, Mrs. Evert C., Janesville
Helm, Mrs. Harold M., Beloit
Kasten, Mrs. Harry E., Beloit
Keithley, Mrs. John W., Beloit
Koch, Mrs. Vincent, Janesville
Kuegle, Mrs. Fredk. Henry, Janesville
Lapp, Mrs. Harry D., Janesville
Lemmel, Mrs. John T., Beloit
McGuire, Mrs. Wm. H., Janesville
Metcalf, Mrs. Stanley, Janesville
Munn, Mrs. Wayne A., Janesville
Nuzum, Mrs. Thos. O., Janesville
Nuzum, Mrs. Thos. W., Janesville
Ottow, Mrs. Albert F., Beloit
Shearer, Mrs. Harry A., Beloit
Shinnick, Mrs. Thomas, Beloit
Smith, Mrs. Charles E., Beloit
Snodgrass, Mrs. Thomas J., Janesville
Sutherland, Mrs. Fred, Janesville
Van Kirk, Mrs. Frank W., Janesville
Wilson, Mrs. Russell, Beloit

New Members

Fox, Mrs. Paul A., Beloit
Frechette, Mrs. Francis, Janesville
Friske, Mrs. Oscar, Beloit
Thayer, Mrs. Fred A., Beloit
Thomas, Mrs. Wm. Owill, Clinton
Vivian, Mrs. R. S., Beloit

SHEBOYGAN

26 Members

Re-organized June, 1932

Bemis, Mrs. Ira, Adell
Deicher, Mrs. Henry F., Plymouth
Fiedler, Mrs. Otho A., Sheboygan
Ford, Mrs. Walter A., Sheboygan
Gunther, Mrs. Otto, Sheboygan
Gunther, Mrs. T. J., Sheboygan
Guy, Mrs. Emmett F., Oostburg
Hildebrand, Mrs. G. J., Sheboygan
Knauf, Mrs. Arthur, Sheboygan
Knauf, Mrs. Edmund, Sheboygan
Leighton, Mrs. F. A., Sheboygan Falls
Meier, Mrs. William, Sheboygan
Meyer, Mrs. R. C., Plymouth
Nause, Mrs. Fred Jr., Sheboygan
Neumann, Mrs. Wm. H., Sheboygan
Pfeiler, Mrs. Adam, Sheboygan Falls
Radloff, Mrs. Alfred C., Plymouth
Rothenmeier, Mrs. Glenn, Elkhart Lake
Squire, Mrs. Charles, Sheboygan
Sonnenburg, Mrs. Clarence, Sheboygan
Van Zanten, Mrs. Wesley, Sheboygan
Van Zanten, Mrs. William, Sheboygan
Weber, Mrs. Carl, Sheboygan

New Members

Cottingham, Mrs. M. D., Kohler
Stein, Mrs. Clarence C., Kohler
Zohlen, Mrs. John P., Sheboygan

WAUKESHA

19 Members

Organized April, 1933

Barnes, Mrs. Herbert T., Delafield
Davies, Mrs. Richard E., Waukesha
Egloff, Mrs. Leo Wm., Pewaukee
Grover, Mrs. Fred L., Hartland
Hassall, Mrs. James C., Oconomowoc
Hodgson, Mrs. Albert J., Waukesha
Loughnan, Mrs. Andrew J., Oconomowoc
Nixon, Mrs. Henry G. B., Hartland
Noble, Mrs. Jos. B., Waukesha
Oatway, Mrs. Wm. H., Waukesha
Peters, Mrs. Henry A., Oconomowoc
Tibbitts, Mrs. U. J., Waukesha
Voje, Miss Hertha, Oconomowoc
Wilkinson, Miss Helen, Oconomowoc
Wilkinson, Mrs. John D., Oconomowoc
Wilkinson, Mrs. Michael R., Oconomowoc
Wing, Mrs. Walter S., Oconomowoc

New Members

Thompson, Mrs. Rollin D., Statesan
Werra, Mrs. Martin J., Waukesha

WINNEBAGO

33 Members

Organized April, 1932

Bath, Mrs. D. H., Oshkosh
Beglinger, Mrs. Harold, Neenah
Bitter, Mrs. Reuben H., Oshkosh
Canavan, Mrs. John P., Neenah
Combs, Mrs. Clarendon, Oshkosh
Connell, Mrs. Gregory, Oshkosh
Dickelmann, Mrs. L. E., Oshkosh
Forkin, Mrs. George E., Menasha
Greenwood, Mrs. Samuel, Neenah
Helmes, Mrs. Lloyd O., Oshkosh
Hogan, Mrs. John M., Oshkosh
Kleinschmit, Mrs. Henry, Oshkosh
Koehler, Mrs. Alvin G., Oshkosh
Kronzer, Mrs. J. J., Oshkosh
Linn, Mrs. Wilbur N., Oshkosh
Lockhart, Mrs. J. Wm., Oshkosh
Lowe, Mrs. R. C., Neenah
Lynch, Mrs. George V., Oshkosh
Ozanne, Mrs. Irving E., Neenah
Ozanne, Mrs. James T., Oshkosh
Pitz, Mrs. M. N., Neenah
Romberg, Mrs. Henry A., Oshkosh
Sherman, Mrs. Adin S., Oshkosh
Smith, Mrs. T. D., Neenah
Stein, Mrs. John F., Oshkosh
Williamson, Mrs. George, Neenah

New Members

Allen, Mrs. L. P., Oshkosh
Baxter, Mrs. Harold, Neenah
Jensen, Mrs. Antone B., Menasha
Pfefferkorn, Mrs. E. B., Oshkosh
Pratt, Mrs. George, Neenah
Rogers, Mrs. Ronald B., Neenah
Smith, Mrs. Leonard, Oshkosh

NECROLOGY REPORT

The Wisconsin Auxiliary has the sad duty of reporting the deaths of the following physicians' wives since the beginning of the year:

Armitage, Mrs. J. E., Milwaukee
Drew, Mrs. Frank E., Milwaukee
Doerr, Mrs. August, Milwaukee
Hahn, Mrs. Paul R., Racine
Nicely, Mrs. Wm. E., Waukesha
Schram, Mrs. C. F. N., Beloit
Sonnenburg, Mrs. Willard, Sheboygan

News Items and Personals

Superintendents of relief and their case workers are participating this fall in two study groups which present common medical phases found in relief work. The first course was established in Milwaukee County and is entitled "Illness in Relation to Family Life." The second course is being given under the Department of Sociology, University of Wisconsin, for relief workers in the state outside of Milwaukee County.

The University course will include presentations by Dr. R. C. Buerki, Superintendent of Wisconsin General Hospital; Dr. W. T. Clark, Medical Adviser to the State Relief Administrator; Dr. R. H. Stiehm on Tuberculosis; Dr. Charlotte Calvert on Prenatal and Postnatal Care; Dr. H. M. Guilford on Venereal Disease and Dr. Hans Reese on the Chronic-Neurotic Type of Mental Disease.

Lecturers in the Milwaukee course and their subjects follow:

Dr. Louis M. Warfield—Heart Disease and Kidney.

Dr. Hoyt E. Dearholt—Tuberculosis.

Dr. S. H. Lippitt—Contagious and Infectious Diseases; Nutrition.

Dr. Carl Eberbach—Surgical Conditions, Operations.

Dr. Walter P. Blount—Orthopedic Conditions and Deformities.

Dr. James C. Sargent—Venereal Diseases; Urology.

Dr. Edith McCann—Gynecology; Obstetrics.

Dr. Helen Zillmer—Pediatrics.

Dr. John L. Garvey—Epilepsy, Paralysis, Neurological Diseases.

Dr. A. W. Rogers—Adult Mental Conditions.

Dr. R. A. Jefferson—Mental Conditions in Children.

—△—

The village of Weyauwega honored Dr. E. H. Jones on November 4th at a celebration commemorating the fiftieth anniversary of his practice of medicine in that community. The event, which was sponsored by the Lions Club, was held in the local theater and was attended by upwards of six hundred persons. Dr. Jones was presented with many gifts.

—△—

Ripon voters approved a $40,000 bond issue for the building and equipping of a new hospital. In addition to this amount, the city will receive a grant of $17,000 from the federal government, making a total of $57,000 available for the structure.

—△—

The following newly licensed physicians have recently opened offices in the state:

Dr. C. L. Lacke, Madison, has become associated with Dr. M. C. Canan of Madison.

Dr. Paul E. Pifer of Kenosha has taken over the practice of the late Dr. J. A. Lowe of Pleasant Prairie.

—△—

Dr. C. R. Bardeen, dean of the University of Wisconsin Medical School, was named one of five members of the Committee on Educational Policies of the Association of American Medical Colleges.

—△—

A committee to work out plans for the use of the Jennie Bowman $450,000 cancer bequest has been named by the Regents of the University of Wisconsin. Members are President Glenn Frank, Dean Bardeen, and Prof. E. B. Fred, Dean of the Graduate School. The committee, together with Dr. Gunnar Gundersen of La Crosse, Regent, will visit various cancer research institutes in America during the early part of December. Several thousand dollars have now become available through interest and it is the plan to begin some portion of the work early in the new year.

—△—

Dr. Arnold S. Jackson, Madison, addressed the Western Surgical Association at its meeting early in December at St. Louis on the subject of "The End Result of Thyroidectomy for Exophthalmic Goiters; A Study of 436 Cases."

Other Wisconsin physicians who attended are: Dr. Reginald H. Jackson, Madison, who is a member of the Council of the Western Surgical Association; Dr. F. Gregory Connell, Oshkosh; Dr. C. S. Williamson, Green Bay; Dr. Joseph F. Smith, Wausau; Dr. Wm. J. Carson, Milwaukee, and Dr. Erwin R. Schmidt, Madison.

BIRTH

A daughter to Dr. and Mrs. E. L. Bernhart, Milwaukee, on October 13th.

A daughter, Mary Ann, to Dr. and Mrs. C. A. Wood of Waukesha on November 5th.

ENGAGEMENT

The engagement of Dr. S. E. Kohn of Milwaukee and Miss Rita Jane Goldmann, Milwaukee, was announced on October 1st.

DEATHS

Dr. J. E. Johnson, Grantsburg, died of heart disease on November 4th.

He was born in St. Paul, Minnesota, Sept. 2, 1881 and was a graduate of Marquette University School of Medicine in 1914.

He is survived by his widow.

SOCIETY RECORDS

New Members

Barton W. Johnson, St. Agnes Hospital, Fond du Lac.

Horace S. Fuson, 422½ Ballenger St., Eau Claire.

R. S. Baldwin, Marshfield.

W. W. Stiles, Arpin.

J. M. Jekel, 1800 E. Capitol Drive, Milwaukee.

R. K. Lohmiller, 1507 Tower Ave., Superior.

Leon H. Hirsh, 7044 W. Greenfield Ave., West Allis.

Clifford Y. Wiswell, Williams Bay.

Frederick C. Skemp, Fountain City.

Raymond O. Frankow, 161 N. Main St., West Bend.

Porter B. Blanchard, Cedarburg.

E. H. Jones, Weyauwega.

R. S. Elliott, Waupaca.

W. J. Kelly, Potosi.

Change in Address

M. E. Rideout, Glen Flora to Hayward, Wisconsin.

E. H. Lechtenberg, Potosi to 129 S. Beaumont Rd., Prairie du Chien.

Immediate Action on Sickness Insurance May Be Deferred; President Favors Plan But Questions Advisability of Immediate Action

AN INDICATION that President Roosevelt may defer immediate action on the subject of Sickness Insurance in favor of a clear track for Unemployment Insurance and very probably Old Age Pensions, was the upshot of one day hearings conducted by the Committee on Economic Security at Washington during November. Addressing those assembled at the conference the President announced his position favoring unemployment insurance but when he reached the subject of sickness insurance he stated:

> "There is also the problem of economic loss due to sickness—a very serious matter for many families with and without incomes, and therefore an unfair burden upon the medical profession.
>
> "Whether we come to this form of insurance soon or later on I am confident that we can devise a system which will enhance and not hinder the remarkable progress which has been made and is being made in the practice of the professions of medicine and surgery in the United States * * *.
>
> "At this time we are deciding on long-time objectives. We are developing a plan of administration into which can be fitted the various parts of the security program when it is time to do so.
>
> "We cannot work miracles or solve all our problems at once * * *."

DR. BUERKI APPOINTED

Dr. R. C. Buerki, Superintendent of the Wisconsin General Hospital, Madison, and President-elect of the American Hospital Association, was named as one member of the Advisory Committee on Hospitals.

According to the Chicago Tribune Press Service the President in a night conference with a selected group said he was not certain that the time had yet arrived for Federal legislation respecting health insurance.

REPORT ON DECEMBER 1ST

The Cabinet Committee on Economic Security was scheduled to make its report to the President on December 1st. One phase of its report will be on the subject of Sickness Insurance and it is now believed that the Committee may content itself in this particu-

lar field with a recommendation only for further study.

Eleven members of the medical profession were chosen by Secretary of Labor Frances Perkins as constituting the Advisory Medical Committee. The Committee was headed by Dr. Harvey Cushing, Professor of Neurology at Yale. Other members of the Committee were Dr. Stuart R. Roberts, Professor of Clinical Medicine at Emory University of Georgia; Dr. George Crile, of Cleveland; Dr. Thomas Parran, Jr., Commissioner of Health of New York State; Dr. James D. Bruce, of Ann Arbor; Dr. Rexwald Brown, of Santa Barbara, California; Dr. James Alexander Miller, of New York City; Dr. Walter I. Bierring, President of the American Medical Association, Des Moines; Dr. George M. Piersol, Philadelphia, Past-President of the American College of Surgeons; Dr. Robert B. Greenaugh, President, American College of Surgeons, Boston, and Dr. J. Shelton Horsley of Richmond, Va.

The round-table discussion on the subject of Sickness Insurance was under the chairmanship of Livingston Farrand, M. D., President of Cornell University. Discussion leaders selected by the Secretary of Labor were:

1. Dr. Henry A. Luce, Detroit.
2. Dr. Nathan B. VanEtten, New York City.
3. Dr. George E. Follansbee, Cleveland.
4. Michael M. Davis, Julius Rosenwald Fund, Chicago.

The American Medical Association was strongly represented at the Conference.

PRESIDENT WRITES FINNEY

A further indication as to the attitude of the President was contained in a letter written to Dr. John M. T. Finney, President of the Interstate Postgraduate Assembly and read before the Assembly at Baltimore last week. This letter follows:

THE WHITE HOUSE
Washington, November 1, 1934.

My dear Dr. Finney:

Previous arrangements prevent my acceptance of your invitation to be present at the meeting of the International Medical Assembly of the Interstate Postgraduate Medical Association of North America, but I am glad to send my greetings and good wishes to you, and through you, to the Assembly.

During the past summer I had occasion to comment on the splendid progress that is being made in modern medicine today. I said, "By reason of his special opportunities, the physician has had occasion to perform a service in his community far beyond the bounds of his professional duty. His infinitely complex relationships with the people of the community enable him to lead them in standards of ethical right which may profoundly affect human conduct in general. For this reason, the science of medicine comes to concern itself with many things beside the healing of the sick. It has been broadly interpreted as a major factor in the science of human welfare.

"The problems of disease and the circumstances related to it are to modern medicine only the sequel of a long train of social cause and effect. Medicine has taught us how important it is to look beyond the result to the cause, not only of human sickness, but those social disorders out of which individual difficulties necessarily arise."

Looking forward, then, it is to be expected that the Medical Profession as a whole should and will interest itself more fully in the problems of Preventive Medicine. The economic struggle in which the

COSTS MAY DELAY PLAN

As this Journal went to press, it was the concensus of opinion at Washington that President Roosevelt and his financial advisers would be reluctant to introduce into this Congress any reform measure in which government costs would be excessive. While the work of the technical staff and advisory committee of the Committee on Economic Security is clothed in secrecy, it is no secret that other plans in this program call for government participation. Government participation in sickness insurance would be two fold: (a) as a contribution to the entire system, and (b) the government itself as an employer. Were the Committee on Economic Security to suggest a participation plan of financing sickness insurance, the cost to the government would run into millions of dollars each year.

Dr. R. G. Leland and Mr. A. M. Simons, director and assistant of the Bureau of Medical Economics of the American Medical Association, have been added to the technical staff of the advisory committee. Subsequent meetings of the advisory committee are scheduled for late in December or immediately after the first of the year. This in itself indicates that there will be no plan ready for presentation when Congress meets although one might be developed for later in the session.

average man finds himself in his efforts to better his living conditions, includes an obstacle in the problem of providing adequate medical and hospital care for himself and his dependents. This should engage the thought and consideration of every medical man in an effort to bring about a helpful solution.

Organizations such as yours, bringing together men from every state in the Union and from many countries of the world for free and frank interchange of ideas and experiences, are splendid things. We look to modern medicine to keep her standards increasingly high.

Very sincerely yours,
(Signed) FRANKLIN D. ROOSEVELT.

Dr. John M. T. Finney
President, Inter-State Postgraduate
Medical Association of North America
Baltimore, Md.

CABINET COMMITTEE

It is understood that the Medical Advisory Committee had no vote as such in the recommendations of the Cabinet Committee on Economic Security. The Advisory Committee continued in session for two days following the open discussion and may be called into subsequent sessions. The final decision as to what recommendations should be made to the President, however, remained with the Cabinet Committee composed of Secretary of Labor Frances Perkins, Chairman, Federal Relief Administrator Harry L. Hopkins, who has already announced himself as favoring a "bold stroke" for sickness insurance; Secretary of the Treasury Morganthau; Attorney-General Cummings, and Secretary of Agriculture Wallace. The Chicago Tribune correspondent at Washington earlier in the month declared "Miss Perkins in a statement today acknowledged her earlier promise to make no recommendations to Congress affecting medical problems 'without securing the advice and assistance' of leaders in the medical profession, but she did not bind the administration to follow advice if it differed with the opinions of her own colleagues and their experts."

RADIO PROGRAM

Under the general title "Doctors, Dollars and Disease", the National Advisory Council on Radio in Education is presently carrying on a weekly broadcast over the W.A.B.C. Columbia network at 9:30 Central Time every Monday evening. The only Wisconsin station which broadcasts this program is W.I.S.N., Milwaukee.

The program, according to the Journal of the American Medical Association, "calls the roll of the agitators from the Committee on the Costs of Medical Care."

A special program was announced for Sunday, November 18th, at 11:45 A. M. Central Time, for Sir Arthur Newsholme, speaking from London on the subject "Medical Care for All." Newsholme published four volumes on the subject of State Medicine and Sickness Insurance under the auspices of the Milbank Memorial Fund and accompanied its secretary in the brief tour of Russia which resulted in the publication of the volume "Red Medicine". Others on the program are Harry H. Moore, Director of Study of the Committee on the Costs of Medical Care; I. S. Falk and Edgar Sydenstriker, of the Milbank Memorial Fund, who have been loaned to the Committee on Economic Security to conduct its study into sickness insurance; Nathan Sinai, under whose direction the Michigan sickness insurance plan was evolved; Michael M. Davis and C. Rufus Rorem, propagandists of the Julius Rosenwald Fund of Chicago; Dr. Thomas Parran, Jr., Commissioner of Health of New York; Edward A. Filene, Boston, whose 20th Century Fund has been one of the three outstanding propagandists for sickness insurance; William T. Foster, Director of the Pollak Foundation, who, at a recent conference in the East, was outspoken in his condemnation of the profession; Robert Jolly, President of the American Hospital Association, which employs Mr. Rorem of the Rosenwald Fund to promote voluntary hospital insurance; Ray Lyman Wilbur, who signed the majority report of the Committee on the Costs of Medical Care; Paul H. Douglas, Professor of Industrial Relations, University of Chicago; Miss Katherine Tucker, R. N., General Director of the National Organization for Public Health Nursing; Dr. Haven Emerson, New York, another signer of the majority report; Dr. Livingston Farrand, President of Cornell University; Dr. W. P. Bowers, Editor of the New England Journal of Medicine, which has favored the position

of the majority report; C. E. A. Winslow, of Yale University, and others. The sole address on this radio series from organized medicine is by Dr. Nathan B. VanEtten, of New York, who is to speak on December 3rd on "Abuses of Medical Charity."

WISCONSIN FELLOWS PROTEST ACTION

As this Journal goes to press it is understood that an overwhelming percentage of Fellows of the American College of Surgeons in Wisconsin have protested the recent action of the Board of Regents of the College in declaring for the principle of sickness insurance. Fellows from this state point out that the College was not organized for this purpose; that action of its Board was taken without even canvassing the Board of Governors and without any representation or poll of the members, and that the position of the College is in complete contradistinction to the views of the overwhelming majority of members of the College. Attention of officials of the College is called to the seriousness of the erroneous impression conveyed to the public by the action of its Regents and petitions for an immediate correction.

TO PRESS STATE LEGISLATION

The American Association for Social Security, which has already issued a tentative draft of a state proposal for sickness insurance, held a meeting in New York in November to perfect this draft. It is understood that it will present its plan in several state legislatures this winter,—among them Wisconsin.

In a press conference following the one day open hearing at Washington, Secretary of Labor Perkins announced that she was against any delay in instituting legislation for "medical benefits". She stated that it was her belief that the Cabinet Committee which she heads is likely to bring in "real recommendations which can be enacted into law at the next session, if congress desires * * *".

Conferences of advisory committees on hospitalization, dentistry and public health were held during November. It is understood that the Milbank Memorial men employed by the Committee on Economic Security presented their legislative plan for sickness insurance to the advisory committees for comment and suggestions.

Proceedings of House of Delegates; State Medical Society of Wisconsin Ninety-Third Anniversary Meeting

TUESDAY EVENING SESSION

September 11, 1934

The first session of the House of Delegates, Ninety-Third Anniversary Meeting of the State Medical Society of Wisconsin was called to order at seven-fifteen p. m. in the Northland Hotel, Green Bay, Wisconsin, by the Speaker, Dr. R. M. Carter, of Green Bay.

Speaker Carter: The meeting will please come to order. In opening this 1934 meeting of the House of Delegates, State Medical Society of Wisconsin, may I first say it gives me great pleasure, on behalf of the Brown–Kewaunee–Door County Medical Society, to welcome you to Green Bay. We will try to do all in our power to entertain you and your ladies. We hope, when you leave us, you will find your stay here has been both pleasant and profitable.

Before taking up the regular business, a word to the delegates, especially the new ones, in regard to procedure may not be amiss.

You are here not only to determine what is best for your own community but also for the profession of the state as a whole. It thus becomes your duty, to the best of your ability, to represent the true aims of the membership at large, embracing more than 2,100 practicing physicians. Delegates and alternates should keep in mind that the floor is open to them at all times. A full discussion is required if the House is to acquire the best results in the interest of the profession of the state. Because you happen to be a delegate for the first time, do not feel you should remain silent. All delegates are striving to attain the same end and discussion is welcomed.

I would like to announce, however, that to the end no one may monopolize the time of the House, the Speaker will limit each delegate's discussion to five

minutes. A member may continue beyond that time by obtaining the consent of the House. To the alternates, let me say it has been customary to open the floor to you for any discussion you may wish to contribute, even though your delegate is present. You will not vote if your delegate is present at the time the vote is taken. For that reason, it is well for the delegates and alternates to sit together so the alternate may be apprised should the delegate leave the room.

All members of the Society are welcome to attend meetings of this House of Delegates. A member who is not a delegate or alternate may address the House by notifying the Speaker of the House previous to or during the session.

The first order of business is the report of the Credentials Committee, R. W. Hammond, of Manitowoc, Chairman.

Dr. Hammond: Mr. Speaker, the Committee on Credentials is pleased to report registration of forty-six members of the House. No question has been raised relative to the seating of delegates or alternates.

Slips for this purpose having been passed out, I move that the attendance record so compiled constitute the roll of this session.

Secretary Crownhart: A letter has been received from the Waukesha County Medical Society indicating that neither the delegate nor alternate was able to attend and Dr. Hassall was authorized to act as delegate. Also a letter from Barron–Washburn–Sawyer–Burnett County indicates that Dr. Dawson, of Rice Lake, was authorized to act as delegate.

Dr. Hammond: I move the adoption of this report and that these two delegates be seated.

. . . The motion was seconded by Dr. Powers, of Milwaukee, and carried . . .

Speaker Carter: The Speaker will now entertain a motion to approve the minutes of the 1933 meeting of the House of Delegates, as published in the Wisconsin Medical Journal.

Dr. L. Peterson (Sun Prairie): I move that the minutes of the 1933 session of the House of Delegates be approved as published in the Journal.

. . . The motion was seconded by Dr. J. F. Mauermann, of Monroe County, and carried . . .

CONSTITUTIONAL AMENDMENT

Speaker Carter: The Secretary advises that under the order of unfinished business there is pending upon the table a proposed amendment to the Constitution. This amendment proposes to change the election of councilor. At the present time, when the term of a councilor expires, the delegates from that district caucus and nominate a councilor while the House recesses. When the House reconvenes, the name of the member suggested is voted upon and approved by the House. More than one nomination may be received if any delegate fails to concur in the caucus decision.

Under the terms of the amendment proposed by the delegate of Jefferson County, the councilor would be elected at a district meeting. This proposed amendment to the constitution has been published in the August and September issues of the Wisconsin Medical Journal, in accordance with the constitutional provisions, and is now properly before your House for motion.

I shall ask the Secretary to give final reading of the amendment.

Secretary Crownhart: Mr. Speaker, an amendment to the Constitution was presented at the last annual meeting by the delegate from Jefferson County, Dr. Bowen, as follows:

"Amend Article IX (Officers) Section 2, to read:

"1. Repeal all of Section 2 as now constituted.

"2. Enact Section 2 to read: Section 2. The President, President-Elect, Speaker and Vice-Speaker shall be elected by the House of Delegates. The Secretary and Treasurer shall be elected by the Council.

"Councilors shall be elected at a meeting of their respective District Societies. Notice of election shall be incorporated in a mailed notice to members at least seven days before such meeting. Election, where more than one nomination is received, shall be by ballot and a majority of votes cast shall be necessary to elect. Each candidate for councilor must be a resident of the district which it is proposed that he represent, and no person known to have solicited votes for or sought the office of councilor shall be eligible for the current election. Other procedures essential to the election shall be governed by Roberts' Rules of Order.

"The officers, except the councilors, shall be elected annually. The terms of councilors shall be for three years and all officers shall serve until their successors are elected and installed. Terms of councilors shall expire in the following order: Seventh, Eighth, Ninth, Tenth and Thirteenth Districts in 1935; First, Second, Eleventh and Twelfth Districts in 1936; and Third, Fourth, Fifth and Sixth Districts in 1937, and thereafter shall be elected in this order."

This amendment offered in 1933 is to be acted upon in 1934 and shall, upon adoption, be effective on January 1, 1935.

Speaker Carter: Gentlemen, you have heard the reading of the proposed amendment. The question is on the adoption of this amendment. It is an important question and discussion should be perfectly free.

Dr. P. A. Fox (Beloit): It seems to me that our Council is our executive body, and while I approve of nominations coming from the district, I think every doctor in the state should have a voice in the election. I am opposed to the amendment.

Dr. G. F. Adams (Kenosha): It seems to me the amendment follows along the general line of our state legislative bodies. Our state senators are elected from the district and our assemblymen from counties. That works, or seems to, and I can see no objection to this amendment.

Dr. A. E. Rector (Appleton): I think our Society feels that the present status is the proper basis upon which the Council should be elected. It is a small group which has the opportunity of giving consideration of a man's ability for that office.

To cite what might happen. We will say that in our district Oshkosh is fortunate enough to have the district meeting; they put on a nice meeting and entertain the boys, and it is whispered on the outside that Oshkosh would like to have one of their men as councilor. The men are in there as their guests and they are not going to oppose it under those conditions. Oshkosh being central and their members more in predominance than points further on, it would be easy to elect a councilor on that basis.

I think our Society feels that the present basis is the proper one, and we are opposed to the amendment.

Dr. W. Cunningham (Platteville): Under the present scheme, we are fairly well represented by the delegate from each county. Many of the districts do not have district meetings and in those districts where you have a district meeting, as a rule the meeting is in one county. The profession of that county attend the district meeting fairly well. The outlying counties further away do not attend.

It seems to me, from that standpoint, you would have an unfair representation in your district meetings, while with your delegates you have each county equally represented. From that standpoint, it seems to me it would be more favorable to have it as it is.

Speaker Carter: Dr. Bowen is the author of this resolution. I wonder whether he would have something to say.

Dr. H. P. Bowen (Watertown): Mr. Speaker, I think it is rather unfortunate that this comes up at this particular time, due to the fact there seems to be but little enthusiasm for anything just yet.

I am the author of this particular amendment because it happens to be democratic. As Dr. Adams has stated, such a system has worked satisfactorily in our state legislature, outside the field of medicine. It has worked well in the nation, outside of the individuals who still would think it best to elect the United States Senators through their legislative halls at Madison. Those of the old school, I realize, would support that program.

I only regret that we have not more young men in this assembly hall. If we did have, I feel certain they would talk in the same tenor as I am talking to you. But from those who have been here for forty years or more we cannot hope for much in this matter of change or in the adoption of this amendment. There is nothing so painful to the human mind as the birth of a new idea. You can go back to Ike Stephenson and all of that school and you will find the same thing. Delivery of that new idea might be brought about through some narcosis.

I am not asking for anything here that is not plain simple ordinary democracy, and if you deny me that, I still believe in it, and I shall re-introduce the amendment. If my idea is too modern for you, vote it down.

You say you do not have councilor district meetings in some areas in Wisconsin, and for you I am sorry and sympathize with your councilor district. You cite the instance that Oshkosh is a very good entertainer, and they will "hog" it all. If that is the kind of men you have in your councilor district, then probably it is well you continue with the program you have had in the past. But down in the county where I come from, we are one hundred per cent unanimous for the amendment.

This is not an expression of mine. It is an expression of the whole councilor district, without an exception. Then if down in Waukesha, Dodge and Jefferson Counties we represent a democratic body in the state of Wisconsin, we are proud to be isolated from the rest of you and have the amendment voted down. But I assure you it will be presented again to this august body.

In our districts, we know our own men. What do I know about a physician in Superior? "Oh," you say, "what is the difference what you know about him; you will vote for him anyway." Of course, you will. It is ordinary procedure, but I never did like to belong to a machine. I liked always to think and to vote upon the things I knew. We know our physicians in our districts, and up in Superior or Marinette or over in La Crosse, we are not particularly interested but we have faith. We have faith that our councilor district knows its business, and God help it if it does not. Then if it does not, continue on with the old order of things.

I still believe, particularly from the younger element of this assemblage, the new idea will prevail. There is nothing about it which is irrational, nothing selfish, nothing but pure common sense.

Dr. Rector (Appleton): I wish to apologize to the Oshkosh men. I did not intend to cast any slur at them. I did not intend to put them in that light. I referred to them as I might refer to Fond du Lac, Green Bay, or any other place. We are all in the same class and all have good fellows. I do not think the present system is undemocratic. While it is my first session in the House of Delegates, I was elected by my county unanimously and that is democratic. They relied on my judgment in connection with any action to be taken in this House of Delegates. I think that is true of practically any delegate who comes into this hall, and the system is not undemocratic.

These are serious times for our Society. We have to confront certain problems and we should not be too rapid in adopting new propositions which are presented.

I am not opposed to advancement in the introduction of new ideas into the Society, but I am firm for the continuation of studied, cool judgment on the part of our officers.

Dr. E. O. Ravn (Merrill): Our county is very well satisfied with our present councilor. We have no fault to find with him, but I think the amend-

Attendance House of Delegates, Green Bay, 1934

Society	*Delegate*	1	2	3	
Ashland–B–I	C. J. Smiles, Ashland	x	a	a	
	J. W. Prentice, Ashland*	x	a	a	
Barron–W–S–B	D. L. Dawson, Rice Lake	x	x	a	
	R. W. Adams, Chetek*	x	x	x	
Brown–Kewaunee–Door	P. R. Minahan, Green Bay	x	a	x	
	Wenzel Wochos, Kewaunee*	a	x	a	
Calumet	N. J. Knauf, Chilton	x	a	a	
	H. C. Krohn, New Holstein*	a	a	a	
Chippewa	W. C. Henske, Chippewa Falls	x	x	x	
	A. J. Somers, Chippewa Falls*	x	a	a	
Clark	H. H. Christopherson, Colby	a	x	x	
	A. L. Schemmer, Colby*	a	a	a	
Columbia	J. W. MacGregor, Portage	x	x	a	
	H. M. Caldwell, Columbus*	a	a	a	
Crawford	C. A. Armstrong, Prairie du Chien	x	x	x	
	J. J. Kane, Prairie du Chien	a	a	a	
Dane	L. W. Peterson, Sun Prairie	x	x	x	
	Louis Fauerbach, Madison*	a	a	a	
	Joseph Dean, Madison	a	a	a	
	E. Schneiders, Madison*	x	x	x	
	H. Purcell, Madison	x	x	a	
	H. Keenan, Stoughton*	a	a	a	
Dodge	W. G. Riopelle, Beaver Dam	x	x	x	
	A. W. Hammond, Beaver Dam*	a	a	a	
Douglas	C. W. Giesen, Superior	x	x	x	
	C. H. Christiansen, Superior*	x	x	x	
Eau Claire–D–P	R. E. Mitchell, Eau Claire	x	x	x	
	F. E. Butler, Menomonie*	x	x	x	
Fond du Lac	David Twohig, Fond du Lac	x	x	x	
	C. W. Leonard, Fond du Lac*	x	a	x	
Forest	E. G. Ovitz, Laona	x	x	x	
	O. S. Tenley, Wabeno*	a	x	x	
Grant	W. Cunningham, Platteville	x	x	a	
	J. E. Donnell, Cuba City*	a	a	a	
Green	J. F. Mauermann, Monroe	x	x	x	
	W. G. Bear, Monroe*	a	a	a	
Green Lake–Waushara–Adams	A. J. Wiesender, Berlin	x	x	a	
	George Baldwin, Green Lake*	a	a	a	
Iowa	H. D. Ludden, Mineral Point	a	a	a	
	T. A. Hagerup, Dodgeville*	a	a	a	
Jefferson	H. P. Bowen, Watertown	x	x	x	
	W. S. Waite, Watertown*	a	a	x	
Juneau	Brand Starnes, New Lisbon	a	a	a	
	W. T. O'Brien, Mauston*	a	a	a	
Kenosha	G. F. Adams, Kenosha	x	x	x	
	A. F. Ruffalo, Kenosha*	x	x	x	
La Crosse	G. Gundersen, La Crosse	x	x	x	
	R. L. Eagan, La Crosse*	a	a	a	
Lafayette	R. B. Quinn, Darlington	a	a	a	
	M. F. Stuessy, Blanchardville*	x	x	x	
Langlade	J. C. Wright, Antigo	x	x	x	
	J. W. Lambert, Antigo*	x	a	a	(1)
Lincoln	E. O. Ravn, Merrill	x	x	x	
	K. A. Morris, Merrill*	a	a	a	
Manitowoc	R. W. Hammond, Manitowoc	x	x	a	
	L. W. Gregory, Manitowoc*	x	a	a	
Marathon	S. M. B. Smith, Wausau	x	x	x	
	E. E. Flemming, Wausau*	a	a	a	
Marinette–Florence	T. J. Redelings, Marinette	x	x	x	
	J. V. May, Marinette*	a	a	a	
Milwaukee	E. W. Miller, Milwaukee	x	x	a	
	R. E. Fitzgerald, Milwaukee*	x	x	a	
	H. W. Powers, Milwaukee	x	x	x	
	H. C. Schumm, Milwaukee*	a	a	a	
	H. J. Gramling, Milwaukee	x	x	x	
	A. R. Langjahr, Milwaukee*	a	a	a	
	J. C. Sargent, Milwaukee	x	x	x	
	J. W. Smith, Milwaukee*	a	a	a	
	Oscar Lotz, Milwaukee	a	x	x	
	Edward Jackson, Milwaukee*	x	x	x	
	G. W. Neilson, Milwaukee	x	x	x	
	F. D. Murphy, Milwaukee*	a	x	x	

Society	Delegate	1	2	3	
	Millard Tufts, Milwaukee	x	x	x	
	W. A. Ryan, Milwaukee*	x	x	x	
	N. E. McBeath, Milwaukee	x	x	x	
	S. M. Markson, Milwaukee*	a	a	a	(2)
	L. W. Hipke, Milwaukee	x	x	a	
	T. S. O'Malley, Milwaukee*	a	a	a	
	S. H. Lippitt, Milwaukee	x	x	x	
	E. H. Gramling, Milwaukee*	a	a	a	
	R. A. Toepfer, West Allis	a	a	a	
	E. O. Gertenbach, Milwaukee*	a	a	a	
	U. A. Schlueter, Milwaukee	x	x	x	
	W. F. Grotjan, Milwaukee*	a	a	a	
	Wm. M. Jermain, Milwaukee	x	x	x	
	P. E. Oberbreckling, Milwaukee*	a	x	x	
Monroe	G. C. Devine, Ontario	x	x	x	
	A. R. Bell, Tomah*	a	a	a	
Oconto	C. H. Kingsburg, Gillett	a	a	a	
	R. J. Rogers, Oconto*	a	a	a	
Oneida–Vilas	R. A. A. Oldfield, Eagle River	a	a	a	
Outagamie	A. E. Rector, Appleton	x	x	x	
	G. J. Flanagan, Kaukauna*	x	x	a	
Pierce–St. Croix	A. E. McMahon, Glenwood City	x	x	x	
	O. H. Epley, New Richmond*	a	a	a	
Polk	R. G. Arveson, Frederic	x	x	x	
	J. D. Nicholson, Milltown*	a	a	a	
Portage	H. P. Benn, Stevens Point	a	a	a	
	E. E. Kidder, Stevens Point*	x	x	x	
Price–Taylor	E. A. Riley, Park Falls	a	a	a	
	E. B. Elvis, Medford*	a	a	a	
Racine	H. B. Keland, Racine	a	a	a	
	T. C. Hemmingsen, Racine*	x	x	x	
Richland	B. I. Pippin, Richland Center	x	a	a	
	G. H. Benson, Richland Center*	a	a	a	
Rock	P. A. Fox, Beloit	x	x	a	
	W. J. Allen, Beloit*	a	a	a	
Rusk	W. F. O'Connor, Ladysmith	x	x	x	
	J. C. Baker, Hawkins*	x	x	x	
Sauk	H. J. Irwin, Baraboo	x	x	x	
	E. McGrath, Baraboo*	a	a	a	
Shawano	G. R. Stauff, Birnamwood	a	a	a	
	A. J. Gates, Tigerton*	a	a	a	(3)
Sheboygan	A. C. Radloff, Plymouth	x	x	x	
	Arthur Knauf, Sheboygan*	a	a	a	
Trempealeau–J–B	C. F. Peterson, Independence	a	a	a	(2)
	H. A. Jegi, Galesville*	a	a	a	
Vernon	W. M. Trowbridge, Viroqua	a	a	a	(2)
	R. H. Ludden, Viroqua*	a	x	x	
Walworth	S. G. Meany, East Troy	a	a	a	
	J. W. Doughty, Delavan*	a	a	a	
Washington–Ozaukee	H. M. Lynch, West Bend	x	x	a	
	F. W. Lehmann, Hartford*	a	a	a	
Waukesha	J. C. Hassall, Oconomowoc	x	x	a	
	H. T. Barnes, Delafield*	a	a	a	
Waupaca	J. W. Monsted, New London	x	a	a	
	S. Salan, Waupaca*	a	a	a	
Winnebago	J. W. Lockhart, Oshkosh	x	a	x	
	R. B. Rogers, Neenah	x	x	a	
Wood	F. X. Pomainville, Wisconsin Rapids	x	x	x	
	K. H. Doege, Marshfield*	a	x	x	

x—Present.
a—Absent.
*—Alternate.
(1)—Called Home.
(2)—Ill.
(3)—Attendance upon sessions of the State Board of Medical Examiners.

ment is a very excellent one. A few years ago, in one of our northern districts, the councilor was nominated by a majority. A minority report came in for another man. What did I know about either one of them? Yet the minority councilor was elected. I think it is very undemocratic.

Dr. David Twohig (Fond du Lac): I think some of the reasons which have been presented against this amendment should react for its adoption. Some of the men stood up and said they did not have councilor districts large enough to elect a councilor. If that is the kind of councilors we have at the present time, who cannot get out a representative meeting, I think we should change the procedure of electing them.

Dr. Adams: May I ask a question? Supposing

a councilor district does not have a councilor meeting and, of course, fails to nominate a candidate for the office and fails to elect one. What happens?

Secretary Crownhart: The Constitution now provides, Dr. Adams, and would continue to provide that all officers should serve until their successors are elected and installed. In the event a man was not elected, at this time, he would be elected presumably a year later which would mean his term would be shortened by one year and the term of the old councilor would be continued by one year.

Dr. Adams: Supposing the councilor had died, what would happen?

Secretary Crownhart: You have a method of election at the first meeting of the House of Delegates following his death.

Dr. Adams: We will suppose a councilor district does not hold councilor meetings. No one is nominated or elected. What happens? Is that councilor district lacking in all representation?

Secretary Crownhart: It would be until they had a district meeting. We would have to have a district meeting as soon as we could.

Dr. C. A. Armstrong (Prairie du Chien): Coming from one of our councilor districts where we have five compact counties, we have never had any trouble in electing our delegates to the state meeting. Our delegates have never had any trouble in getting a man to assume the position of councilor and I imagine it is so all over the state. I cannot see any reason for this move to simply stir up a family row all over in each councilor district.

As it is now, you are supposed to send men in whom you have confidence. If you do not, you will not send them and if you have confidence in them, certainly as gentlemen and physicians they should be able to select a good man as councilor. Where it is sparsely settled in the northern part of the state, it may be different, but in the southern part of the state it should not be.

What Dr. Cunningham mentioned and what Dr. Rector mentioned occurs not because one county entertains better or anything of that kind. It is simply because you can get together handier in one county than in the other.

For instance, in our district comprised of Grant, Crawford, Richland, Iowa, and Lafayette, Lancaster is the logical point for you to reach. It is about the same distance from the other counties; consequently with Grant County having thirty-eight or forty doctors in the medical society, perhaps as many as two or three of the outside counties combined, it might be inferred they would be mean enough to impose upon your decency.

I do not believe anything of the kind. I believe the members of the State Medical Society are gentlemen and the councilors are gentlemen, and I do not think the election of delegates to come here would be in any way injured if we continued to practice as we have now.

Dr. J. W. Lockhart (Oshkosh): I would like to thank my friend, Dr. Rector, for having such a fine feeling toward Oshkosh. (Laughter)

There is no question but what the office of councilor is a very important office, and it is essential that the councilor should be carefully selected, be a man of good judgment and well acquainted with the affairs all through the state.

The system that we have at the present time has worked satisfactorily and every county is represented by its delegates. There is also an alternate and either the delegate or alternate in any county would be perfectly loyal to the members of the profession in that county.

Another thing is that they can change their delegate or alternate any year they see fit. In view of the fact that the present system has worked ideally for years, it seems to me it would be foolish to try something new, because this system which we have is just as democratic and just as representative as any other one would be. I think we should leave it the way it is and that we should vote down this amendment.

Dr. Cunningham: I did not intend to talk again, but in our own district we have our district meetings right along. But, as Dr. Armstrong has said, we have about forty members in Grant County. Richland County has in the neighborhood of less than twenty. Iowa County has eight or nine. LaFayette County and Crawford County have not any more. We have our meetings, as a rule, in Grant County, and the representation from all the other counties put together would not equal the representation we have from Grant County alone.

If you have your delegate to do the voting and select the councilor, Grant County has but one vote. Crawford County with its smaller number of members has one vote. Richland with its few members has one vote. It seems more fair and just to have those counties have a fair representation even though we have a fewer number of members in them.

Speaker Carter: Is there any further discussion? All in favor of this amendment, as read, will say "Aye"; contrary "No". The Chair is uncertain. All in favor of the amendment will please rise (twelve arose). Contrary-minded will please rise (thirty-five). The amendment is lost.

The next order of business is the reports of Officers and Committees. These reports have been published in the Wisconsin Medical Journal and have been distributed tonight in reprint form. However, I shall call upon the chairmen to summarize briefly or to stress the important points. The first is the Chairman of the Council, Dr. Arthur W. Rogers.

Dr. Rogers: I know of nothing further to add to my report as published in the Journal.

REPORT OF PRESIDENT

Speaker Carter: The report of our President, Dr. Stanley J. Seeger.

Dr. Seeger: Mr. Speaker and Members of the House of Delegates: In June, 1933, I assumed office as President of this Society. The activities of the

organization, since that time, have been directed toward certain objectives, the most important of which are the following:

(1) The establishment of a satisfactory working basis between the State University Medical School and the State Medical Society. In the February issue of the Wisconsin Medical Journal, President Frank presented a statement of the purposes and policies of the State University Hospital as adopted by the Board of Regents. In the same issue, I commented editorially on this statement and also on the general problem of the relationship of the medical profession and the State University Medical School.

A chronological report of the various committee activities and reports from the time of the appointment of the special committee for the purpose of investigating procedures of admittance of patients to the state of Wisconsin General Hospital in April, 1932, was presented by me at the meeting of the Council in January, 1934.

The Council, at that time, ruled that the committee which was to serve as a contact committee with the State University officials was to be designated as The Committee on Coordination of Medical Services. The last meeting of this committee was held on May 12, 1934, and, at that time, various complaints from the medical profession relative to the hospital were considered.

(2) The organization of medical activities under the emergency relief administration. Through the efforts of the Executive Committee of the Council and the Secretary, it was possible to effect a satisfactory relationship with the directors of medical relief in the state. As a result, the medical relief activities were placed under the direction of the county medical societies. The relief director ruled that a local medical advisory committee consisting of a minimum of three physicians be appointed by the local medical societies.

(3) The direction of the C. W. A. project as a health project and the organization of county medical societies for the carrying out of this work. Through the cooperation of Dr. W. A. Werrell and the State Board of Health, a medical project was decided upon as the one to be carried out under the C. W. A., and the direction of the project was placed in the hands of the county medical societies. Fifty-four counties participated in this project. Dr. J. Newton Sisk acted as general medical director of the project under the State Board of Health. His work and the high type of service given by the county medical societies are deserving of the highest commendation.

Through the efforts of Dr. Sisk, as advisor to the State Administrator of C. W. A., free choice of physicians was secured and maintained during the program in Wisconsin.

(4) The establishment of a committee on Child Health and Protection for the coordination of child health activities in the state. Through the activities of this committee, the opportunity to inaugurate child health activities, sponsored by the State Board of Health, was offered to the various county medical societies.

(5) The inauguration of changes in the State Medical Journal both in the scheme of organization and in the physical make-up of the Journal. Certain changes in the State Medical Journal were decided upon, which policies have been outlined by the chairman of the Editorial Board. In addition, regular meetings of the Board have been provided.

(6) The perfection of county medical society organization. A sustained effort has been made to improve the organization of these basic units of the State Society.

(7) A committee on Veterans Relations was established in order to attempt to solve some of the mutual problems of the medical practitioners and the veterans organization. A report of the activities of this committee will be found in the regular committee report.

(8) The establishment of a committee on medical history of which Dr. Gregory Connell is chairman and which Dr. O'Leary intends to continue in an effort to preserve for us some of the interesting historical facts concerning medicine in this state.

In addition to this and as one of the major activities we have made an intensive study of the feasibility of establishing a practical working organization for the extension of the activities of practicing physicians in the field of public health. My suggestions along this line made at the January meeting of the Council were responsible for an all-day session of the Council on Sunday, February 11, at which time several men expert in public health matters were asked to enter into the deliberations. Among them were Dr. Henry Vaughan, of Detroit, and Dr. LeRoy Wilkes, Executive Secretary of the New Jersey State Medical Society. Dr. Olin West and Dr. W. W. Bauer, of the American Medical Association, were also present. In addition, several meetings of the Executive Committee of the Council have been devoted to a consideration of this subject.

One of the assumptions which I put forth as a basis for the investigation of this problem was this: There is a great and undeveloped field of work for the physician in preventive medicine. I believe that the direction of the activity of our membership into this field will help to maintain the position of the physician in the rapidly changing social framework. It is probable, too, that we are standing on the threshold of great advances in this sphere of medical activity. Medical educators have emphasized that the extension of physicians' activities in this direction may be one of the factors in solving the problem of the oversupply of physicians.

Medical educators have failed, however, to give the proper emphasis to this type of work in their training of students for practice. We, in this state, are not unused to having the educators tell us that unless the medical profession does something about the high cost of medical care, some one else will do it for us. It might be well for us to ask the educators

what they have done about this problem and how well they have met it by training men to prevent disease which, in the last analysis, is the only real solution of this difficulty.

A second consideration is the fact that physicians themselves have visualized the need for work in this field through their organizations and through their individual efforts they have been responsible for initiating the development of some of the most important public health and preventive medical activities.

In our own state, we have as example the State Board of Health and the Wisconsin Anti-Tuberculosis Association, the latter having grown out of a committee of the Medical Society of Milwaukee County. Boards of Health requiring police power have received the whole-hearted and continued support of physicians in the carrying out of their basic purposes. The growth of organizations with lay participation designed for preventive work in a special field has taken place outside of the medical profession largely because of lack of proper and efficient organization on our part and also because of lack of proper education of our physicians in the field of preventive medicine.

A third consideration, and one of great importance, is the fact that the medical profession has too consistently played the part of the destructive critic. Our criticism has been leveled at efforts which physicians themselves have initiated or sponsored and have then been abandoned to outside control. The activities of well intentioned, if misguided, laymen and of various governmental agencies have also been objects of attack. It do not mean to imply that criticism has not been warranted. I do state, however, that the destructive critic has been too often the role of organized and individual physicians and that constructive effort has been conspicuous very largely by its absence. We should not tear down things unless we have something better to substitute in their place.

The fourth consideration is that no real effort has been made to explore the possibilities of organizing practicing physicians for public health work and preventive medical activities.

Sporadic efforts have been made by county medical societies with varying success. In Detroit, Dr. Vaughan, who is a far-sighted public health administrator, has enlisted the support and cooperation of the physicians of the community in a most unusual and also most effective manner.

In New Jersey, through the efforts of a trained, full-time worker, the State Society is attempting by a gradual process, to place the public health and preventive medical activities in the hands of physicians through their county medical societies where this work rightfully belongs. It is only through efficient organization that this can be accomplished.

In our own state, several efforts have been made by county societies to render service in the field of preventive medicine and public health. In a few instances, these efforts have indicated the real possibilities of this work. In others, the results have not been entirely to the credit of the physicians of the community. There has been no real effort made to put into the hands of the general practitioner the instrumentalities of organization which are necessary in order to do this work.

My plea has been to investigate the possibilities in this field. I can see the county medical societies, if properly organized, as the hub about which all health activities in their local communities revolve. They can coordinate the activities of the state and local health departments, the lay organizations interested in health movements, and the social service activities such as school health programs. More than this, they can influence medical education in our state so that greater emphasis is placed upon the training of men for this type of practice.

Following the survey made under the C. W. A., the Council decided to take active steps looking to the further participation of physicians, through their county medical societies, in public health activities. The difficulty of financing adequately this undertaking has been given considerable study and the Council, in a resolution which will be presented to you, has recommended a plan for your consideration. The Council wishes you to give serious thought to the various features of the plan proposed.

Speaker Carter: We will now listen to the report of the Secretary and Managing Editor, Mr. Crownhart.

COUNCIL RESOLUTIONS

Secretary Crownhart: Mr. Speaker, when your Secretary made his formal report which was printed in the Journal and distributed in the reprints here tonight, he said, under the title of insurance, he would have a supplementary report to make. Before doing that, I wish to read, for your information, two resolutions which came from the Council with their recommendation to the House of Delegates, which will now go to the Reference Committee on Resolutions, and will be before you for action tomorrow night.

The first is as follows:

"WHEREAS, The program for disease prevention in Wisconsin could be better promoted by closer working relationship between the State Board of Health and the medical profession of the state; and

"WHEREAS, There is need of full-time contact service between the State Board of Health and the medical profession; and

"WHEREAS, The present budget of the State Board of Health does not provide for this service; now therefore be it

"*Resolved*, That the State Medical Society of Wisconsin, in session at Green Bay, Wisconsin, offers to the people of the state its full cooperation with the State Board of Health in its program of disease prevention; and be it further

"*Resolved*, That the State Medical Society of Wisconsin request the coming legislature to provide for

the State Board of Health such funds as may be necessary to establish a contact service between the profession and the Board, to make more effective the cooperation of the profession, and to provide a more active participation of the physician in carrying out the approved health measures of the Board."

The second resolution is as follows:

"WHEREAS, There is not suitable provision for the care and treatment of epileptic cases; and

"WHEREAS, Many other states have made such provisions; therefore be it

"*Resolved*, That the State Medical Society of Wisconsin recommend to its legislative committee that they urge on the Board of Control and the Wisconsin legislature the need of such legislation to the end that special provision be made for the proper care, treatment, and education of epileptics in this state."

REPORT OF THE SECRETARY

The complete report of the Secretary respecting principal activities of the Society was published in the August issue of our Wisconsin Medical Journal. Your Secretary takes this occasion to make a supplementary report on six subjects.

1. Membership

Membership of the Society at this date is 1931 members. While 234 are still in arrears, your Secretary is pleased to call attention to the fact that our membership, at this date, is approximately that total which we attained at the end of October a year ago. In other words, we are very materially (100) ahead of our record of 1933, and it now appears that the total membership for the year will approach, if not exceed, 2100. In that event, our membership will approach that attained during our most prosperous years.

In each year past, your Secretary has been able to report to the membership direct savings to the individual physician in an amount in excess of his dues and directly attributable to the work of the Society. The savings to be reported to the membership, through activities of the Society this year, are so huge that when this report is made the question should never again arise as to the material values to be attained through the payment of dues.

2. Malpractice Insurance

As the membership is possibly aware, the cost of malpractice insurance now takes into consideration that differentiation which exists in fact between the risk of one who is a member and one who is failing to keep abreast with the progress of science. The rate for the latter is being increased throughout the state.

Secondly, while in neighboring states the cost of malpractice insurance has increased on an average of 20% to 35%, your Secretary is happy to report that basic rates of the company doing the great percentage of business still maintain in Wisconsin. This may well be attributed in no small part to the continuous effort of the Committee on Medical Defense and again it represents a direct saving to the membership that even on minimum policies represents the cost of dues.

3. Open Panel

At the invitation of the Secretary, the House has as its guest tonight Mr. Ben Kuechle, of the Employers Mutual. It has been the repeated decision of this House that efforts of the officers should be directed continuously towards securing free choice of physician for the patient among all reputable physicians desirous of attending the patient under the various circumstances.

A year ago, the Employers Mutual opened its panel in the city of Milwaukee to embrace all members of the County Medical Society who desired to care for the accidents arising out of industrial employment. To promote the proper interests and to secure harmony and understanding, the County Medical Society, on its part, established a Grievance Committee to which committee either the physician or insurance carrier might come with complaints and have them settled both fairly and promptly.

As predicted by officers of the Society and as hopefully anticipated by officers of the insurance carrier, this plan has worked well and directly in the interests of the patient. Mr. Kuechle is here tonight to report to you briefly, when we reach the head of "New Business" that his company, carrying more than fifty per cent of the industrial risks of this state, is now ready to replace limited panels with free choice throughout the state.

To secure such free choice among all members who wish to do industrial surgery, it is asked that each Society establish a Grievance Committee similar to that in existence in Milwaukee County. Your Secretary is indeed happy to make this report, and knows that the delegates will hear with interest the exact outline of the Milwaukee plan to be presented by Mr. Kuechle later this evening.

4. Poor Relief

We have here some pamphlets, exclusively tables, that represent the work of your Society over a period of three weeks, plus the work of statisticians in the Relief Department for a similar length of time. In discussing the subject of Poor Relief, which to my mind is of utmost importance, I shall ask you to keep the pamphlets closed and when we reach the pamphlet we will discuss it.

A month ago, I forwarded to each delegate and officer of the Society a copy of my address on "Medical Relief in the Emergency" presented before the Minnesota State Medical Association in July. I shall not take the time here to elaborate in detail upon the work in Wisconsin looking towards just the reasonable perfection of a plan that will bring to the indigent, in fact, some essentials to preserve life.

I do take this occasion to point out that even though the Federal Plan called for maintenance of

a traditional relationship between family physician and patient, it has not been until recent weeks, and then only under the constant pressure of a medical adviser to the relief administrator that we have been able to secure the adoption of this principle in fact. In other words, it was cheaper to hire a county physician than to provide free choice even though the physician, under free choice, received not a fee but rather a medical allowance.

I sense very keenly some of the most unsatisfactory aspects of this system, but which are inevitable in any system where the layman controls the budget that is to provide medical care. Through a system of establishing County Advisory Committees within the medical societies, it is hoped that we will restore to medicine control of the medical aspects of the problem, and where such committees have been well chosen and active, this has been in fact the result.

Upon the invitation of the Secretary, the Medical Advisor to the Relief Administrator is your guest this evening and later, under the order of "New Business" if it is desired to discuss the subject of medical relief in the emergency, your Secretary and Dr. Clark are prepared to give you the data in any detail which you may desire. I wish to point out, however, before passing, that whatever may be the shortcomings of the system in Wisconsin, the actual allowances that have accrued to physicians and that are accruing each and every day, exceed by wide margins those allowances in other states of which we are acquainted, and in the instance of one neighboring state, the allowances in Wisconsin exceed those of our neighbor by exactly five times.

Dr. Clark has been doing a difficult work under difficult conditions and for compensation that represents but the cost of his travel. The Secretary makes public acknowledgment of the fact that regardless of whatever he has not secured, a large part of that which you now have is due to his self-sacrificing efforts.

. . . Secretary Crownhart outlined the tables in the pamphlet . . . (Copies may be obtained from the Secretary.)

I would call your attention to the fact, that while the Committee on the Costs of Medical Care discovered that about thirty-three per cent of the dollar spent to regain health went to the physician, when you come to the distribution of medical costs under the relief system, you will notice the physician is receiving 57.23% of the relief dollar spent to regain health for the relief clients.

In the second place, you will note that for the first seven months the medical cost is in the neighborhood of $216,000 to the medical profession of this state, essentially to the membership of this Society who have participated in the free choice of physician arrangement. I want to assure you this is a total not exactly accurate for the reason it is based on seven months period during which many a county was going off the county plan and on the free choice basis.

I would say the total of the year on the basis beginning July 1 last and carrying it forward and projecting into the future will represent in the neighborhood of $750,000 a year, if not more than that, and possibly close to one million.

I call your attention to this further fact, that while relief budgets are exceedingly high in their total, twenty-one to twenty-two million dollars for the state of Wisconsin, the fact of the matter is the state is not contributing in Wisconsin, at the present time, to this relief problem.

In varying percentages, the federal government is giving aid, relief district by relief district and county by county. In no instances of which I am aware is that aid under fifty per cent. Possibly an average would be close to seventy per cent. The rest of the fund is being raised locally.

If all these totals, as I say, are exceedingly high, the fact of the matter is that the average for the state as a whole to support a family of four, all its needs, is about thirty dollars a month. So when we get down to the individual case, because there are so many of them, we find that these grand totals fritter down to a very small sum indeed, with which the relief authorities have to work.

I mention this only so you may bear it in mind in judging the adequacy of medical allowances. While some states report that their allowance is seventy or sixty per cent of the normal fee schedule and Wisconsin reports fifty per cent and they say, "You were not on the job," our experience is that it is more important to perfect and maintain a working agreement and understanding with the relief authorities.

If you do not get authorization to take care of the case, it does not make a bit of difference what the percentage is. In Wisconsin, we find by our totals you are getting authorization and that the medical allowance, small as it is, is being paid in a total that is not approached in other neighboring states under almost identical and similar circumstances.

5. Public Health Participation

You have heard your President outline to you on this and other occasions the work in the field of public health which demands the attention of the physician in so-called private practice and which may be accomplished by such physician with joint profit to the public and the physician.

As in all other fields of organization effort, if this project meets with your approval, it will require the services of a well-equipped physician to present to the membership in the several component societies concrete plans for translating into action on a broad scale the project here so ably presented in its broad aspects. Such organization effort, in turn, requires of funds.

Your Council has given hours of consideration to this subject matter and today determined to recommend to your body that it authorize the formation of an auxiliary unit of interested laity whose

interest, influence and membership fees will combine to be of material assistance to the organized profession in making actually effective this public health project.

Recognizing that medical direction is now and will be in the future essential, your Council has formulated a resolution for your consideration, which I shall now read:

"WHEREAS, It is the considered opinion of the Council and officers of the State Medical Society of Wisconsin that a more active participation of the membership of the Society in the field of disease prevention will be to the outstanding and mutual advantage of the people of this state and the physicians who serve them; and

"WHEREAS, The accomplishment of this project requires not only the determination of the organized profession but, as important, the cooperation of interested and influential laymen throughout the state; therefore

"It is the recommendation of the Council that the House give its most serious consideration to the following suggested resolution:

"*Resolved*, That the House of Delegates in the interest of promoting disease prevention in this state, does hereby authorize the Council to create a liaison body of laymen whose function it shall be to work with the organized profession in furthering the application of well-known principles of preventive medicine throughout this state.

"For the purpose of perfecting such an organization, the Council is authorized to proceed as, in its judgment it may seem wise, having in mind the following recommendation of this House:

"1. That the Council of the State Medical Society of Wisconsin remain in perpetuity the governing body of the liaison association.

"2. That officers of the liaison group shall be selected by the Council.

"3. That the membership fee of the group shall be that as determined by the Council, as well as its Constitution, By-Laws, and specific objectives.

"4. The Council is authorized by this House to appropriate from the general fund or surplus of the Society such an amount as in its judgment shall be considered necessary in bringing about the establishment of the original membership to the liaison group.

"5. Membership within the group shall at all times depend upon election by the Council."

Mr. Speaker, I assume that, under the rules of the House, this resolution will be referred to the Committee on Resolutions, together with the resolutions already presented and those which may be presented later.

6. Social Security

Viewing medicine in the field of its broad public service, little has been said of the tremendous accomplishments that it has made in the immediate years past to cut the costs of illness. It was this Society that caused the creation of our State Board of Health a little over fifty years ago. In the short period of time, 1909 to 1932, just twenty-three years, there has been a 95% decrease in the deaths from typhoid fever in Wisconsin; and 89% decrease in the deaths from diphtheria; a 58% decrease in the deaths from tuberculosis; and 89% decrease in the deaths from scarlet fever, and a 58% decrease in infant mortality.

In this same short period of years, the average length of stay of patients in hospitals has been cut in two. What other group of men anywhere can point to any accomplishment in any period of but twenty-three years that has been so literally life-giving and life-preserving as the work of medicine or that has done so much to cut the costs of illness and far too early deaths?

Gentlemen, for these several years, it has been my privilege constantly to seek and to read no small part of that which has been written advocating the establishment of an institution of social medicine as a means of bringing a fuller measure of life itself to the great masses of our people.

No one can disagree with major premises of those who advocate this system of social insurance.

We know full well that poverty can lead to illness.

Who, better than the physician, knows that loss of income due to illness may be, and all too frequently is, a cause of a future draped with debt and sometimes almost devoid of hope for security in old age.

But who, more than the physician living in the service of a profession, has ever attempted to translate ideals into personal action to alleviate this condition.

And, of whom did the Federal Relief Administrator speak, when reviewing what had been given the unemployed in the years of 1929–1930–1931–1932 and 1933 in the field of medical care? From the fullness of his experience and knowledge he said freely, "It is a grand story, the work the physicians did for the unemployed."

I say that every man who is seeking to make a living for himself and his family agrees with the premise that social security makes for happiness and human welfare so far as it does not destroy initiative. Physicians are not a race apart, themselves free from fear of debt or leaving estates that will fail by a wide margin to care for loved ones. They sense the dangers as perhaps only one other profession—that of law—can sense them. They sense them not alone in their own fight to live but in daily seeing the results of only partial success or even failure in the lives of others.

But with all their daily contact with human suffering they shrink from applying social remedies that in the hands of politicians and in their inevitable growth would gnaw as a cancer at the very heart of a profession until that profession was reduced to to static state of pill dispensers ever more involved in the red taped autocracy of a bureaucracy.

We live at a time when our government is attempting a dual task of giving relief and making

reforms in hopes that such reforms may prevent the necessity of similar relief measures in the generation to follow. In some ways, the program can be likened to a doctor giving many drugs in the same dose, hoping that not one but the combination will effect the cure.

But the physician would view that prescription as useless were the previously known effect of one drug not only to offset the advantage of the other but to cause further pain to the patient. So here does the physician say that the combination of physician and bureaucratic control present exactly that situation wherein the social result will be detrimental rather than an advantage in the commendable effort to bring social security to the patient, represented by the great mass of our people.

There are those, I know, who in the smugness of position or wealth challenge the motives of physicians. They boldly call you "money hungry". Some such there may be and if there are, so are they to be found in every walk of life. But I need not tell you that the true interest of every physician lies in giving the best possible service to his patient. And, by the same token, if social medicine were to the advantage of our people, it would be to the financial advantage of the physician.

There is no cause for the physician to fight social medicine if it would help him to serve his people well. He fights against its institution because he knows full well, whatever may be the conditions in the old countries, in this country as it is now constituted and as it promises to be constituted in the many years to follow, the institution of social medicine would glorify the self-seeking politician-administrators into whose outstretched hands the system would ultimately, if not immediately, fall.

Were this its only evil, the good still might offset the bad, but the concomitants of distribution by budget are minimum standards of service that become with great rapidity the standards for the maximum; with social control comes the pitiable belief of the subscribers that when they have paid for the state service they have purchased the ultimate, when in fact they have purchased a maximum.

Of far greater importance, overshadowing every other consideration, is the fact that the true physician cannot be content to treat his patient within the limits of mimeographed or printed instructions that are themselves necessitated by the limits of the budget.

The statistician, with his work sheets of neatly printed figures, can show to his satisfaction that if the sickness of A, B, C total $100 on the average per year out of a population of 100 then one dollar per capita will purchase the needed care for A, B and C without straining any one's pocketbook. But in their concentration on figures they forget that when you and I pay for something it is because we expect to have it and so the spreading of costs that would in fact care for A, B and C perfectly well is an incentive for D, E and F to ask for the same service and six must share the service that three deserve.

Insurance is not a method of getting something for nothing. It is an individual purchase. In this instance, it will represent the application of the principle of collective bargaining to medicine. It seeks to commercialize a profession through the furnishing of benefits in kind because they are cheaper to purchase and because they are bought and paid for in wholesale lots.

I know that health insurance has been likened to fire insurance, to tornado insurance and to accident insurance. The former, however, pay in terms of cash and the value of the policy is something easily ascertained by the purchaser. Health insurance does not pay in cash but pays in medical services.

I have been in such close contact with legislative halls during the past fifteen years that I know that there is a wide variance between the ideal and the law that is actually passed by practical politicians.

The Four Horsemen of social insecurity have been termed Accidents, Illness, Old Age and Unemployment. In Wisconsin, the compensation act is presumed to cover the field of accidents. We are on the threshold of the general application of an existing law for old age pensions and unemployment insurance is a fact. Are we now to add to these three a plan for health insurance?

I would not take of your time here this evening unless I felt it would serve a purpose. I represent this subject on this occasion because I feel that proposals for a system of social medicine are imminent in our own legislature.

You and I do not sit in legislative seats and utter the vote that will determine the fate of those proposals. But your friend and my friend does sit in that seat at Washington and at Madison. Do they know this subject as you alone can know it? With the rare exception of the physician legislator, they do not and cannot unless you tell them. You who sit here tonight are the delegates from each of the county medical societies of this state. Before you adjourn sine die on Thursday morning, I ask you to say to your officers that they are wrong in the way they understand and interpret your conclusions on this subject and instruct them as to your views, or if your officers understand you rightly, I ask you to resolve that you will carry the message to the first meeting of your fellow members, that you will carry the message that now is the time for each physician to see his legislator and explain the whole problem that he may not vote on this question without knowing the full implications of his vote.

With that knowledge that you alone can give in a friendly chat, I do not fear the result. Without that knowledge from you, the family physician, he is more prone to make a mistake than the layman in the streets, for the legislator is subject to a lobby that presently seeks to apply a sovereign cure because they have heard it spoken of well elsewhere.

Summary

In his printed report and in this supplement, your Secretary has endeavored to give delegates and mem-

bers as complete a picture as possible of the work and activities of their organization.

Your officers have had certain activities suggested by the membership in which they could not participate without your specific instructions. It has been suggested, for instance, that to perfect security for the physician we should endorse state aid for hospitals, compulsory automobile insurance, and various pre-payment of hospital and medical expense plans. This we may not do without advocating in whole or in part the identical principle upon which advocates for health insurance press their claims.

The risk of obtaining the one and forfeiting our defense to the other is not to be minimized nor is it a risk that should be assumed by your officers without the specific approval of this House granted with full appreciation of the dangers involved. In so far as the delegates feel that changes of their policy are now indicated, an open and free discussion is urged under the proper order at this and subsequent sessions to the end that your Society and its officers may at all times truly represent the ideals and desires of that great group which comprises the mass of this membership—the family physicians of this state.

Speaker Carter: The next report is that of the Treasurer, Dr. Rock Sleyster.

TREASURER'S REPORT

as of September 1, 1934

	General Fund	Medical Defense Fund
Balance January 1, 1934	$652.13	$86.79
Receipts, Interest on Bonds	952.50	430.00
Receipts, dues, etc., Jan. 1, 1934 to Aug. 31, 1934	23,399.96	1,708.00
	$25,004.59	$2,224.79
Disbursements Jan. 1, 1934 to Aug. 31, 1934	17,567.34	1,083.56
	$7,437.25	$1,141.23

Summary of Funds

General Fund:		
Bank Balance Sept. 1, 1934	$7,437.25	
Investment Securities listed below	25,000.00	$32,437.25
Medical Defense Fund:		
Bank Balance, Sept. 1, 1934	1,141.23	
Investment Securities listed below	11,000.00	12,141.23
		$44,578.48

Investment Securities

General Fund:				
Northern States Power Co.	1941	5%	$4,000.00	
American Tel. & Tel. Co.	1936	4%	4,000.00	
Wis. Public Service	1942	5%	3,000.00	
T. M. E. R. & L. Co.	1961	5%	2,000.00	
Milwaukee Gas Lt. Co.	1967	4½%	2,000.00	
Canadian Natl. Ry. Co.	1969	5%	2,000.00	
City of Milwaukee	1936–1937	4½%	3,000.00	
Ironwood & Bessemer Ry. & Lt. Co.	1936	5%	1,000.00	
Beloit Water, Gas & Elec. Co.	1937	5%	1,000.00	
Wis. Power Lt. & Heat Co.	1946	5%	1,000.00	
St. Joseph's Congregation, Racine	1941	5%	1,000.00	
N. Y. State Elec. & Gas Corp.	1980	4½%	1,000.00	$25,000.00
Medical Defense Fund:				
Commonwealth Edison Co.	1957	4½%	2,000.00	
Bell Telephone Co. of Canada	1955	5%	$2,000.00	
Pacific Tel. & Tel. Co.	1937	5%	1,000.00	
North American Co.	1961	5%	2,000.00	
Wis. Gas & Elec. Co.	1952	5%	1,000.00	
Milwaukee Co. Sewer	1944	4½%	1,000.00	
U. S. Liberty Loan—4th	1934	4¼%	2,000.00	$11,000.00
Total Bonds				$36,000.00

Analysis Medical Defense Fund

Bank Balance Jan. 1, 1934	$86.79	
Receipts, dues	1,708.00	
Receipts, interest on bonds	430.00	$2,224.79
Paid to Attorneys	996.56	
Paid to Refunds	12.00	
Paid to Dr. E. L. Tharinger	75.00	1,083.56
Bank Balance Med. Defense Fund Sept. 1, 1934		$1,141.23

Regarding your investment securities, I think everybody is interested in this subject nowadays, and I shall ask you to remember this investment period extended over a period of something like twelve years, with bonds being bought at different times. We have, at present, bonds at par value of $25,000 in the general fund; bonds at par value of $11,000 in the Medical Defense Fund, a total of $36,000. Your auditors, Haskell & Sells, reported after their audit of the Treasurer's books on the first of January a market value of approximately $32,000. Last Friday, I submitted the same list of bonds to the First Wisconsin Company asking appraisal in accordance with the present market value. They show a market value of the securities as of last Friday of $36,053.80, with a par value of $36,000. The Treasurer only wishes he invested his own personal funds as wisely.

Speaker Carter: The next report is that of the Committee on Necrology.

Mr. Crownhart: The report of the Committee on Necrology, made by the Council to its Secretary, has been printed in the Journal. Since that time, the following physicians have died:

Dr. O. J. Gutsch, Sheboygan
Dr. Charles H. Jahn, North Milwaukee
Dr. Eugene Krohn, Black River Falls
Dr. S. A. Krumme, Fond du Lac
Dr. H. H. Milbee, Marshfield
Dr. F. A. Winneman, Merrill

Speaker Carter: Gentlemen, the full report of the Necrology Committee is before you for your approval.

Dr. J. C. Sargent (Milwaukee): I move the report be adopted by a rising vote.

. . . The motion was seconded by Dr. Jermain of Milwaukee, and carried and the House of Delegates paused in its deliberations to pay silent tribute to the deceased members of the Society . . .

Speaker Carter: I shall ask Dr. Gundersen to take the chair during presentation of the next report.

. . . Vice-Speaker Gundersen in the chair . . .

Vice-Speaker Gundersen: We will next have the report of the Committee on Public Policy by Dr. Carter.

. . . Dr. Carter presented the following report:

COMMITTEE ON PUBLIC POLICY

To the 1934 House of Delegates:

During the last twelve months, the Wisconsin legislature met in special session to consider the subject of liquor and alcohol licensing and taxation.

Your Committee was apprehensive that the legislature might establish a permit fee basis for physicians who used alcohol either for the purpose of sterilizing instruments or in some form as a stimulant in emergency cases. As a matter of fact, all of the many bills that were introduced into the legislature failed to carry an exemption from a permit and tax system.

The Committee finally resorted to a personal letter addressed to each member of the legislature and as result an exemption was granted to physicians. Physicians were not exempted, however, from the ordinary tax upon alcohol in any form, such as paid by any consumer, with the exception of hospitals. While Senator Mehigan of Milwaukee proposed such a measure, it did not receive favorable consideration in the Senate. The Committee is of the opinion, however, that the tax involved is exceedingly small for the average physician and while exemption will be asked in a subsequent session as a matter of principle, in practice the amount is insignificant compared to the victory secured by reason of an exemption from the permit system.

On January next, the Wisconsin legislature again convenes for its biennial session. With this in mind, your committee held a long meeting recently to discuss legislative subjects. It will be recalled that at the last session of the legislature Senator Polakowski, of Milwaukee, introduced a bill calling for the establishment of a system of state medicine which was based on a combination of all the bad features of the French, German, and English methods.

It is altogether probable that similarly ill-advised legislation will again be presented at the coming session. Unless the committee receives instructions to the contrary from your House, it will adopt the ten points announced by the House of Delegates of the American Medical Association at the Cleveland session as its measuring stick in determining its position upon all legislation in this field.

Having in mind the unsettled conditions of the times, however, your Committee is of the opinion that there will be many measures introduced from various sources that will be of vital concern to the joint interest of the profession and public health.

While we are fully conscious that there are many subjects upon which we might propose legislation that would be wholly in the public interest, we are also of the opinion that our program at this particular session should be as concise as possible. Your Committee has considered such subjects as: The illegal use of the title "Doctor"; certain abuses under the Workmen's Compensation Act; pre-payment plans for hospital insurance, a lien law for automobile accident cases; preferences in settling estates; state aid for local hospitals; the composition of the State Board of Medical Examiners; tax on alcohol; and several like subjects. It is of the opinion that most of these subjects may best be handled outside of recourse to legislative halls. Its program for suggested legislation in the name of the Society is, therefore, confined to the following proposals:

1. Re-establishment of the full appropriation of $5,000 a year for the investigator under the State Board of Health, whose work it is to weed out the major forms of quackery in Wisconsin. His present economy budget appropriation of $2,000 annually has been found insufficient for efficient work, and assuming the approval of the House of Delegates, your Committee shall recommend an increase to $4,000 a year.

2. Your Committee called attention to the fact that under the present system for the employment of county nurses the work of such nurses is wholly under the guidance of local non-medical committees. Your Committee is of the conviction that such a system, by experience, has been shown to be fallacious and not in the interest of the public health or of promoting that relationship so essential to efficient effort on the part of the county nurse. Assuming approval by the House of Delegates, your Committee recommends that the work of the County Nurse be supervised by a committee of physicians selected from a list submitted by the County Medical Society for such purpose.

3. Cognizant of the fact that the Legislature has twice refused to enact a measure sponsored by this Society calling for the establishment of a Medical Grievance Committee, your Committee is of the opinion that this measure nevertheless should be re-introduced. Such a Committee would consist of the Attorney General or his deputy, the Secretary of the State Board of Health, and the Secretary of the State Board of Medical Examiners. Its purpose would be to counsel and warn members of the profession who adopted courses of action that failed to comply with the high ideals of medicine and served as a positive menace to the public. We are firmly of the opinion that some such official body should exist to the end that dangerous methods might be corrected before tragedy ensues, and assuming approval of the House, we shall re-introduce this measure.

4. It has been brought to the attention of your Committee that when one is arraigned on the charge of practicing a healing art without a proper license, proof of the fact that the individual is not licensed rests with the state. This involves bringing to each individual trial the Secretary of the proper examining board with his records. This seems to your Committee to be a wholly unnecessary expense to the state and involves much travel on the part of parties who are already giving liberally of their time in the state service.

Assuming approval of the House, it is our intent to introduce a measure that will place upon the individual the burden of proof to show that he holds a license. This he may do readily and easily if he does in fact hold a license, so that no real burden

is placed upon the individual and the cause of justice will be expedited thereby.

5. It has been brought to the attention of your Committee that under present statutes the salary of deputy state health officers is limited by law to $3,000. Recognizing the high service of men already employed, your Committee is distinctly of the opinion that such a limitation, having in mind the extensive travel which is required and for which the state has distinct limits of reimbursement, is not a limit that will be conducive to securing proper public service in the future, assuming permission of this House, your Committee actively will promote any measure introduced by the State Board of Health looking towards a correction of this situation.

Your Committee recognizes that this report is of necessity a brief one but assures members of the House that the Secretary will answer in detail any questions that they may raise as to other subjects. This appears to your Committee as being a more feasible manner of handling the large field of studies than to discuss in any detail each such study.

Respectfully submitted,

RALPH M. CARTER,
Chairman.

Vice-Speaker Gundersen: This report will be referred to the Reference Committee on Reports of Standing Committees.

. . . Speaker Carter resumed the chair . . .

Speaker Carter: The next Committee is that on Health and Public Instruction.

Dr. Blumenthal: We have nothing to add to the report as published in the Journal.

Speaker Carter: The Committee on Medical Education and Hospitals, Dr. Bardeen, Chairman (not present).

Speaker Carter: A. J. Patek, Chairman of the Committee on Medical Defense (the committee had nothing to add to the printed report).

Is Dr. H. P. Greeley, Chairman of the Editorial Board, present? (not present)

Does the Committee on Cancer have a further report to make?

Dr. W. D. Stovall: Mr. Speaker, I have nothing to add to the report as published, but, with your indulgence, I would like to emphasize that report and say I hope every member of the Society, and particularly the House of Delegates, will read it, and when they read it they will bear in mind it was written to emphasize the importance of persistently pursuing a definite administrative policy in order to accomplish concrete results.

I should like also to take this opportunity to call to the attention of every member of this Society that he has an obligation now to live up to the law which was enacted when the legislature required the reporting of all malignant diseases; that is malignant tumors.

May I, therefore, ask for your support in this matter and I hope in the years to come that the Committee on Cancer may be able to do something concrete for every county medical society in the state, and I do hope that every county medical society in the state will organize according to the plans which have been published in the medical journal. I thank you very much.

Speaker Carter: The next report is that of the Committee on Veterans Relations, Dr. C. A. Dawson, of River Falls, Chairman. (Not present)

The Committee on Scientific Work, Dr. Arnold S. Jackson, Chairman.

Dr. Jackson: Mr. Chairman, in talking to some of the members today, I feel they still are not familiar with the work of the Speakers' Bureau. Now that we have the present program practically out of the way, I ask that when they go back they acquaint their Secretary of the County Society with this Speakers' Bureau, started about two years ago, with the idea of providing better programs for the county medical societies.

We have a list now of about eighty or ninety members who have volunteered to go without expense, a distance of seventy-five miles from their homes to speak to county societies.

There are a number of good men in the state who are not on the Speakers' Bureau. The committee would like to have their names. Undoubtedly the Committee will reorganize the Speakers' Bureau this year, and any member here tonight who has made a special study of any subject and wishes to present that subject to any county medical society is invited to do so. The Speakers' Bureau will be glad to have his name. Please acquaint your Secretary with this work. A list of speakers may be obtained from Mr. Crownhart's office.

NOMINATING COMMITTEE

Speaker Carter: These reports will be referred to the respective reference committees of the House. The reports of the Chairman of the Council, the President, Secretary–Managing Editor and Treasurer will be referred to the Committee on Reports of Officers. The other reports, with the exception of that on Necrology, will be referred to the Reference Committee on Standing Committees.

The House will now proceed to the election of a Nominating Committee. In accordance with precedent, I shall ask the Secretary to read the names of the societies of the various districts. The delegates from each district will rise, and at the conclusion of the reading, will nominate one of their members as a member of the Nominating Committee.

At the conclusion of nominations, I shall entertain a motion to make these nominees the choice of the House.

Secretary Crownhart: Will the delegates of the First District please rise and among themselves nominate a member for the Nominating Committee? Dodge, Jefferson and Waukesha Counties.

Dr. W. G. Riopelle (Beaver Dam): I nominate Dr. Bowen, of Watertown.

Secretary Crownhart: Will the delegates of the Second District please rise and nominate one of their

members? Kenosha, Racine, and Walworth Counties.

Dr. T. C. Hemmingsen (Racine): I nominate Dr. Adams of Kenosha.

Secretary Crownhart: The Third District. Dane Columbia, Green, Rock and Sauk Counties.

Dr. Mauermann: I nominate Dr. L. W. Peterson, of Sun Prairie.

Secretary Crownhart: The delegates of the Fourth District. Crawford, Grant, Iowa, LaFayette and Richland Counties.

Dr. Cunningham: I nominate Dr. Armstrong, of Prairie du Chien.

Secretary Crownhart: The delegates of the Fifth District. Calumet, Manitowoc, Washington–Ozaukee and Sheboygan Counties.

Dr. Lynch (West Bend): I nominate Dr. Radloff of Plymouth.

Secretary Crownhart: The delegates of the Sixth District. Brown–Kewaunee–Door, Outagamie, Fond du Lac and Winnebago Counties.

Dr. Lockhart (Oshkosh): I nominate Dr. Twohig of Fond du Lac.

Secretary Crownhart: The delegates of the Seventh District. Juneau, La Crosse, Monroe, Trempealeau–Jackson–Buffalo and Vernon Counties.

Dr. Gundersen (La Crosse): I nominate Dr. Devine of Ontario.

Secretary Crownhart: The delegates of the Eighth District. Marinette–Florence, Oconto and Shawano County Societies.

. . . Dr. T. J. Redelings was the only delegate present and was made a member of the Nominating Committee . . .

Secretary Crownhart: Ninth District. Clark, Green Lake–Waushara–Adams, Lincoln, Marathon, Portage, Waupaca and Wood Counties.

Dr. Ravn (Merrill): I nominate Dr. S. M. B. Smith, of Wausau.

Secretary Crownhart: Tenth District. Barron–Washburn–Sawyer–Burnett, Chippewa, Rusk, Eau Claire–Dunn–Pepin, Polk and Pierce–St. Croix County Societies.

Dr. Henske (Chippewa Falls): I nominate Dr. A. E. McMahon, of Glenwood City.

Secretary Crownhart: Eleventh District. Ashland–Bayfield–Iron and Douglas County Societies.

Dr. C. J. Smiles (Ashland): I nominate Dr. Giesen of Superior.

Secretary Crownhart: Twelfth District. The Medical Society of Milwaukee County.

Dr. Sargent: Under the constitution of our County Medical Society, the delegates of Milwaukee County caucused and chose Dr. Henry J. Gramling, of Milwaukee.

Secretary Crownhart: Thirteenth District. Forest, Price–Taylor, Langlade, and Oneida–Vilas County Societies.

Dr. Wright (Antigo): I nominate Dr. E. G. Ovitz, of Laona.

Speaker Carter: If these be the choice of the individual districts, a motion is in order to constitute them the choice of the House as the Committee on Nominations.

Secretary Crownhart: The nominees as made by the delegates themselves from the districts are as follows:

H. P. Bowen, Watertown
George F. Adams, Kenosha
L. W. Peterson, Sun Prairie
C. A. Armstrong, Prairie du Chien
A. C. Radloff, Plymouth
D. J. Twohig, Fond du Lac
G. C. Devine, Ontario
T. J. Redelings, Marinette
S. M. B. Smith, Wausau
A. E. McMahon, Glenwood City
C. W. Giesen, Superior
H. J. Gramling, Milwaukee
E. G. Ovitz, Laona

Speaker Carter: Do I hear a motion to declare these nominees the choice of the House for the Nominating Committee?

Dr. Mauermann: I so move.

. . . The motion was seconded by Dr. Schneiders and carried . . .

COUNCILOR ELECTION

Speaker Carter: The next order of business is the election of councilors. In accordance with precedent, the councilors are elected by the House as a whole after the nominations have been made by the delegates of the districts affected. The Secretary will read the roll of counties in each district, and the delegates from each of the four districts will have five minutes in which to caucus. Upon call to order, the nominations will be heard.

Recess

Secretary Crownhart: The terms of the following councilors expire.

Third District to succeed Dr. C. A. Harper, of Madison.

Dr. Peterson (Sun Prairie): Delegates from the Third District nominate Dr. Joseph Dean, Madison; Dr. Harper expressing the desire to retire.

Speaker Carter: Are there any further nominations? If not, I declare the nominations closed.

Dr. H. Purcell (Madison): I move that the Secretary cast the unanimous ballot for the election of Dr. Joseph Dean, of Madison, as Councilor of the Third District.

. . . The motion was seconded by Dr. O'Connor and carried and the Secretary cast the unanimous ballot for Dr. Dean . . .

Secretary Crownhart: The Secretary casts the unanimous ballot of the House for Dr. Joseph Dean, of Madison, as Councilor of the Third District.

Speaker Carter: Nominations are in order for the Fourth District to succeed Dr. Wilson Cunningham.

Dr. Armstrong: The Fourth District unanimously re-nominates Dr. Wilson Cunningham. I move his election.

Speaker Carter: Dr. Wilson Cunningham, of Platteville, has been nominated to succeed himself. Are there any other nominations? If not, I shall entertain a motion to declare the nominations closed.

Dr. Armstrong: I move the nominations be closed and that the Secretary be instructed to cast the unanimous ballot of this House of Delegates for Dr. Wilson Cunningham, of Platteville, as Councilor of the Fourth District.

. . . The motion was seconded by Dr. Lippitt, of Milwaukee, and carried . . .

Secretary Crownhart: The Secretary casts the unanimous ballot of this House for Dr. Wilson Cunningham, of Platteville, as Councilor of the Fourth District to succeed himself.

Speaker Carter: Nominations are in order for the Fifth District.

Dr. Lynch: The members of the district present regret that Dr. Heidner refuses to accept the renomination, and the delegates unanimously nominate Dr. C. M. Gleason, of Manitowoc.

Speaker Carter: Dr. C. M. Gleason, of Manitowoc is nominated to succeed Dr. Heidner, of West Bend. Are there any further nominations? If not, I shall entertain a motion to declare the nominations closed and that the Secretary be instructed to cast the unanimous ballot of the House for Dr. C. M. Gleason of Manitowoc.

Dr. Knauf: I move the nominations be closed and the Secretary be instructed to cast the unanimous ballot of this House of Delegates for Dr. Gleason as Councilor of the Fifth District.

. . . The motion was seconded by Dr. Mauermann and carried . . .

Secretary Crownhart: Mr. Speaker, I cast the unanimous ballot of this House for Dr. C. M. Gleason as Councilor of the Fifth District.

Speaker Carter: Nominations are in order for a Councilor to succeed Dr. S. E. Gavin, of Fond du Lac, for the Sixth District.

Dr. Rector (Appleton): Mr. Speaker, the Sixth District nominates Dr. Gavin to succeed himself as Councilor of the Sixth District.

Speaker Carter: Dr. Gavin, of Fond du Lac, has been nominated to succeed himself. Are there any further nominations?

Dr. Rector: I move the nominations be closed and the Secretary cast the unanimous ballot of this House of Delegates for Dr. Gavin as Councilor of the Sixth District to succeed himself.

. . . The motion was seconded by Dr. Twohig of Fond du Lac and carried . . .

Secretary Crownhart: Mr. Speaker, I cast the unanimous ballot of this House of Delegates for Dr. S. E. Gavin as Councilor of the Sixth District to succeed himself.

Speaker Carter: Under the Constitution, the committee appointments of the President-Elect must be confirmed by the House. Your Speaker has the pleasure of presenting to you your President-Elect, Dr. Thomas J. O'Leary. We will be happy to hear from him both as to his committee appointments and his suggestions and recommendations for the future conduct of our Society. (The members of the House of Delegates arose and applauded)

PRESIDENT'S APPOINTMENTS

President-Elect O'Leary: Mr. Speaker, Gentlemen of the House of Delegates: I am deeply appreciative of the honor, I might say the signal honor, of being elected your future President. Your placing me in this position, I interpret as a vote of confidence and a willingness to cooperate. Therefore, I feel that the coming year will be quite satisfactory from my standpoint. It was suggested that I give some recommendations, new ideas or what not, but I do not have any.

I think this body now is top-heavy with problems, and if they find a solution for these many problems there will be plenty of work for the year. I would suggest that the members of the House deliberate on these problems to arrive at a mature conclusion, because as the House goes, so goes the activities of the President.

Looking forward to seeing an interpretation of the many resolutions you have before you, I again thank you for this honor and shall proceed with the committee appointments.

Committee on Scientific Work
John O. Dieterle, Milwaukee

Committee on Public Policy *
Reginald H. Jackson, Madison

Editorial Board
Gregory Connell, Oshkosh

Committtee on Medical Defense
H. P. Bowen, Watertown

Committee on Medical Education and Hospitals
J. W. Prentice, Ashland

Committee on Medical Economics
P. A. Fox, Beloit

Committee on Health and Public Instruction
C. H. Christiansen, Superior

Cancer Committee
W. D. Stovall, Madison
F. Eigenberger, Sheboygan
Karl Doege, Marshfield
F. B. McMahon, Milwaukee

Committee on Coordination of Medical Services
The member on this committee who has retired is your Secretary. Inasmuch as he is a member ex officio, I am taking the liberty to name a member of the Society to this committee.

Dr. F. E. Butler, Menomonie

As I understand, the next two committees retire with the President. The special committeee on Child Health and Protection. There is a possibility there

* Following the Annual Meeting, President O'Leary also named to this Committee Dr. Dexter Witte of Milwaukee. Dr. Witte fills the unexpired term of President-Elect Carter who resigned because of the fact that he becomes a member of the Committee ex officio during the next two years.

may be a field in the near future for this committee, and I am recommending that it be kept alive by renaming the same members which Dr. Seeger appointed to this committee. They had just begun their work when the C. W. A. project superseded. The committee is composed of: Dr. Blumenthal of Milwaukee, Dr. Schwartz of Milwaukee, Dr. Drew of Milwaukee, Dr. Vedder of Marshfield, Dr. Anderson of Eau Claire and Dr. Sincock of Superior.

The other committee is that on Medical Care for Veterans.

On this committee, I re-name Dr. C. A. Dawson of River Falls, Dr. Otho Fiedler of Sheboygan and Dr. E. J. Barrett of Sheboygan.

I also name Dr. F. Gregory Connell on the Committee on Historical Facts which has just been appointed by Dr. Seeger.

Speaker Carter: Gentlemen, you have heard the committee appointments of your President-Elect.

Dr. Peterson (Sun Prairie): I move the committee appointments be confirmed by the House of Delegates.

. . . The motion was seconded by Dr. Mauermann and carried . . .

Speaker Carter: The next order of business is new business. The House is now ready to accept any resolutions. Any resolution presented by a delegate will be referred to the Reference Committee on Resolutions, which committee will render its report tomorrow evening, at which time general discussion on the resolution will be had. Are there any resolutions to be presented?

RESOLUTIONS PRESENTED

Dr. Gramling (Milwaukee): The Medical Society of Milwaukee County, realizing the importance of the State Medical Society of Wisconsin, and being fully aware of the beneficial effects of the convention for practitioners of the community wherein the convention assembles; realizing full well the high caliber of the delegates and of the guests, having great pride and firm conviction in the hospitality of Milwaukee as a convention host, urge and ask that the next convention be held in Milwaukee.

"*Be it resolved*, That the annual convention of the State Medical Society be held for the year 1935 in the city of Milwaukee."

Speaker Carter: Inasmuch as this is a function of the Committee on Nominations, we will deviate from the usual order and, with your approval, submit this resolution to the Committee on Nominations. (consent)

Dr. W. C. Henske (Chippewa Falls): Mr. Speaker and Gentlemen: I am fully cognizant of the fact that the resolution which I am about to present is loaded with dynamite. Seventeen years ago something was started in this state and although everything else in this state has gone forward, that has not,—I have reference to the physician's certificate that you may get when the order of matrimony comes to your office. It is one-sided and the three dollars or two dollars which you may take from this man you do not earn.

I wish to present the following resolution:

"WHEREAS, Section 245.10 of the Statutes of 1933, which is generally known as Chapter 212 of the Laws of 1917, does not make the Wassermann test or any syphilitic test mandatory; and

"WHEREAS, Said Act does not require a physical examination of female parties to marriage contracts; and

"WHEREAS, Said Act does not require that the physician refuse a certificate of physical well being to those applicants who are grossly mentally deficient and easily identifiable as such; and

"WHEREAS, It is obvious that female parties to marriage contracts may possibly be infected with gonococci or syphilis as well as the male; now therefore be it

"*Resolved*, By the 1934 House of Delegates of the State Medical Society of Wisconsin, that the State Medical Society of Wisconsin respectfully petition the Senate and Assembly of the state of Wisconsin to take immediate steps to enact legislation which will:

1. Require a complete physical and mental examination to be made of applicants for a marriage license;

2. An examination of all female persons making application for license to marry in the same manner as males;

3. A test of all persons making application for license to marry for syphilis, such test to be some duly recognized syphilitic test; be it further

"*Resolved*, That properly attested copies of this resolution be sent to the President of the Senate and Assembly respectively."

Speaker Carter: This resolution will be received and referred to the Reference Committee on Resolutions.

Dr. Jermain (Milwaukee): At the suggestion of the Board of Directors of the Milwaukee County Medical Society, I wish to introduce the following:

"WHEREAS, It is the aim of organized medicine to maintain the highest standards in the public health field;

"WHEREAS, The basis of the public health program is the medical profession's knowledge of preventive medicine;

"WHEREAS, Numerous communities in Wisconsin have lay health officers and health boards who have little or no knowledge of scientific medicine; be it

"*Resolved*, That in public interest this House of Delegates recommend to the Committee on Public Policy introduction of legislation in the coming session of the legislature providing that health officers in cities, towns or villages of 5,000 or more must be physicians; and be it further

"*Resolved*, That where there are health boards, at least one member of the board be a physician."

Speaker Carter: This resolution will be referred to the Reference Committee on Resolutions.

Dr. Millard Tufts (Milwaukee): "WHEREAS, Public interest demands adequate protection against violators of the Medical Practice Act;

"WHEREAS, The common usage of the 'doctor' title by quacks and cultists is misleading, dangerous and inimical to public welfare;

"WHEREAS, The activities of quacks and cultists calls for drastic action; be it

"*Resolved*, That the House of Delegates direct its officers to take such action as is necessary to curb the use of 'doctor' title by those who are not entitled to do so under the laws of Wisconsin, and who are now preying upon the public and endangering the health of our citizens."

Dr. L. W. Hipke (Milwaukee): "WHEREAS, It is the purpose of organized medicine to maintain the highest education looking towards the development of more capable practitioners;

"WHEREAS, In recent years, there has been a number of students who are being able to matriculate into medical schools of this country, have obtained medical education abroad.

"WHEREAS, These students, upon completion of their education, have returned to this country to compete with physicians educated here;

"WHEREAS, The medical profession is seriously overcrowded;

"WHEREAS, In most foreign countries a physician must have received his medical education in the country in which he practices; be it

"*Resolved*, That it is recommended by this House of Delegates to the Committee on Public Policy that legislation be introduced in the coming legislature requiring that only physicians who have taken a full course in a recognized medical college in the United States be licensed to practice medicine in Wisconsin."

Dr. Bannen (La Crosse): Mr. Speaker, I do not know whether I have the privilege to introduce a resolution. It has no definite bearing on the practice of medicine in Wisconsin. (consent)

We all remember the splendid hospitality and the facilities afforded the American Medical Association meeting in Milwaukee last year. At Cleveland this year, we heard many comments of the splendid care that was taken of the members attending; the wish was expressed that they could go back there.

To the House of Delegates of the State Medical Society of Wisconsin:

"WHEREAS, The Wisconsin Urological Society and the Milwaukee County Medical Society have extended an invitation to the American Urological Society to hold their annual meeting for 1936 in Milwaukee; therefore be it

"*Resolved*, That the State Medical Society of Wisconsin extend their greetings and concurrences in the invitation to the American Urological Society to accept the invitation to meet in Milwaukee in the year 1936.

Speaker Carter: Are there any further resolutions? If not, these resolutions will be referred to the Reference Committee on Resolutions.

Is there any other new business?

. . . Announcements by the Secretary as to meeting place of committees . . .

OPEN PANEL

Secretary Crownhart: Mr. Speaker, as mentioned in the Secretary's report, under the head of new business, and under the title of "Open Panel", we have with us as our guest this evening Mr. Ben Kuechle of the Employers Mutual. If it meets with the approval of the House, in order that he may explain the offer which he is making in arranging to open the panel in every society in this state for those members who wish to participate in the work, your Secretary would suggest that the House do now hear him for a few minutes.

Speaker Carter: I take great pleasure in introducing Mr. Kuechle.

Mr. Kuechle: I have not much to add to what your Secretary has already told you. After quite a few conferences in Milwaukee, the Employers Mutual, with which I have had the honor of being connected for many years, decided experimentally to open its panel in Milwaukee County.

As you know, in Wisconsin, the law provides that an employee is supposed to have the right to select his own physician from a panel of not less than five names, which is to be submitted to the employee in case of injury by his employer.

The law further provides that this panel must be posted in a prominent place.

Prior to this new arrangement in Milwaukee, our company had always maintained a rather large panel in the city. In fact, I think we had something like sixty or seventy names. I believe this new scheme that we have adopted has worked very satisfactorily. I know we are very well satisfied with it. I think it has created a very pleasant feeling. It has given us a great deal better cooperation than we have ever had before, and I understand from Mr. Wiprud, of Milwaukee, the county society and members in Milwaukee are generally very much pleased with it.

I want to admit that there are still certain defects that will ultimately have to be ironed out, but I believe we have made really splendid progress. In connection with opening a panel, the one important thing that organized medicine has to do, I believe, is to organize among its own membership a grievance committee which will be willing to entertain grievances whether they are real or only imaginary, but, at least, entertain grievances that may be submitted by insurance carriers and employers that they may have against doctors who are treating injured employees.

Outside of that, we have no other requests to make, except the request that we made in letters that we wrote to the doctors in Milwaukee County at the time we informed them of this open panel in that county.

With your permission, I would like to read the letter we wrote to the doctors in Milwaukee on the panel and also a short letter which we wrote to our policyholders informing them of this change and asking their cooperation. I have here a number of the panels we have used in that county.

"Dear Sirs:

"On account of numerous changes in personnel, addresses and telephone numbers of industrial physicians in Milwaukee County, we have again revised our medical panel for that county.

"This revision has been made following several conferences with the directors of the Medical Society of Milwaukee County and the panel now includes all physicians who are members of that Society who have expressed a desire to do industrial work.

"You will find this list classified in two sections, namely, General Practice and Eye, Ear, Nose and Throat. The list is also divided according to the various sections of the county.

"We want you to know that under the Workmen's Compensation Law an employee, in the event of injury, has the privilege of choosing his physician from a panel of not less than five names which must be submitted to him by his employer.

"The law further provides that the employer must post the names and addresses of the physicians on his panel in such a manner as to afford his employees reasonable notice thereof.

"We therefore request that you post the panel which is enclosed with this letter in a prominent place in your plant at once. If you wish to add the names of any additional physicians to the panel, you may feel free to do so.

"We shall also be very glad to send you additional copies of this panel on request, addressed to our Milwaukee County Office at 800 Empire Building."

As far as the rest of the county societies are concerned, I wrote Mr. Crownhart recently that we feel this plan has worked so splendidly in Milwaukee County that our company now is willing to adopt exactly the same practice in every other county in Wisconsin. If you will notify us when you have organized a grievance committee and have your secretary submit to us, at Wausau, Wisconsin, an accredited list of your members, together with their addresses and telephone numbers and their specialty, we will be glad to then publish a new panel for your county. The details of the printing of that panel had probably better be worked out with your individual secretary.

With that idea in mind, we will be glad to have some representative of our claim department meet with your secretary after you have perfected your grievance committee.

I think I ought to tell you this in conclusion. We found in Milwaukee County it would be inadvisable to put on your panel the members of your Society who specialize in such branches as urology, radiology, internal medicine, or specialties of that nature, where those men are not ordinarily called in in connection with the common industrial accidents that we see. Those doctors usually want patients of that type to come into their office. They are not equipped to treat them in the usual manner, do not want to, and naturally their names, under those circumstances, should not be on the panel even though they are members of your Society.

Speaker Carter: I am sure I express the sentiment of the House when I say we appreciate very much what you just said to us.

Dr. W. G. Riopelle (Beaver Dam): We are on the way to establish a system such as Milwaukee has and will soon have a meeting. This matter will be under discussion and probably will be voted upon. There is one question which I would like to ask in case it is voted to have such a system. Is there a way that we can make it compulsory for other insurance companies to adopt the same panel, or must we ask them and they will give us their favorable answer if they so desire.

Mr. Kuechle: I believe the legislature would answer that question for you. I told you what the law was. It is a matter of getting the other companies to agree on the same plan. Personally, I see no reason why they should not do it.

Dr. Riopelle: For example, we have one plant in Dodge County, owned by a certain individual and a few others. A doctor in that neighborhood married a daughter of that man. He is the only man doing work in that plant.

Mr. Kuechle: The law provides that an employee must be given his choice and the panel must be posted. All you have to do, if you have information, is to notify the Industrial Commission that the particular employer is not complying with the law and not posting a panel. I see no reason why that could not be remedied.

As to this family characteristic, we meet that also. When I wrote to the President of the Milwaukee County Society, I told him we wanted organized medicine in Milwaukee to understand we could not control each individual policyholder. That is something outside our control, although in the main they follow our suggestions very well. (Applause).

Secretary Crownhart: Mr. Speaker, actually the House is supposed to set the time and place of the second and third meetings. Because the Secretary has to frame the program in advance, he tries each year to have the meetings at a time when there will be the least amount of conflict. If it meets with your approval, the House of Delegates will convene tomorrow evening at six-thirty p. m. in the Auditorium of the Columbus Club three blocks from this hotel, at which time we will have two hours for discussion and reports of reference committees and resolutions before the President's address, to be followed by the Smoker.

Dr. Sargent: I have in my pocket a telegram from Dr. Hart Stang telling me he is in the hospital in Eau Claire, having recently been operated for gall bladder and appendix. In view of his long loyalty to this Society, I think he would appreciate a

word from the Secretary. I move the Secretary send a wire of condolence to Dr. Stang.

. . . The motion was seconded by Dr. McMahon and carried . . .

Secretary Crownhart: To show you the Secretary is efficient, may I say he was in long distance telephone communication with Dr. Stang at six o'clock this evening. (Laughter)

Speaker Carter: If there is no further business, I shall entertain a motion to adjourn until six-thirty tomorrow evening.

Dr. Peterson (Sun Prairie): I so move.

. . . The motion was seconded and carried and the meeting adjourned at ten-twenty p. m. . . .

Adjournment

WEDNESDAY EVENING SESSION

September 12, 1934

The second session of the House of Delegates was called to order at six-thirty p. m. by the Speaker, Dr. Ralph M. Carter.

Speaker Carter: You will please come to order. The first order of business is the report of the Credentials Committee.

Dr. R. W. Hammond: Your Committee on Credentials is pleased to report the registration of 39 members of the House. No questions have been raised relative to the seating of delegates or alternates.

Slips for this purpose having been passed out, I move that the attendance record so compiled constitute the roll of this session.

I move the adoption of this report.

. . . The motion was seconded by Dr. Peterson, of Sun Prairie, and carried . . .

Speaker Carter: The next order of business is the report of Reference Committees. The first report will be that of the *Reference Committee on Reports of Officers*. Dr. Arveson, Chairman.

Dr. Arveson: To the House of Delegates of the State Medical Society of Wisconsin:

Your Committee has examined the auditors' reports for Mr. George Crownhart, Secretary of the Society and Managing Editor of the Journal, and of Dr. Rock Sleyster, as Treasurer, and finds them, upon comparison, to be correct.

I move the acceptance of this report.

. . . The motion was seconded by Dr. Mauermann, of Monroe, and carried . . .

Dr. Arveson: Your Committee moves the acceptance of the reports of Officers as published in the Journal and the Supplementary report of the Secretary.

. . . The motion was seconded by Dr. Schneiders, and carried . . .

Speaker Carter: The next is the report of the Reference Committee on Standing Committees. Dr. J. F. Mauermann, of Monroe, Chairman.

Dr. Mauermann: The Reference Committee on Reports of Standing Committees of the 1934 House of Delegates has received the reports and recommendations and submits the following report:

Committee on Health and Public Instruction. The Committee moves the adoption of the report of the Committee on Health and Public Instruction.

. . . The motion was seconded by Dr. Lotz, of Milwaukee, and carried . . .

Dr. Mauermann: *Editorial Board.* The Committee moves the adoption of the report of the Editorial Board.

. . . The motion was seconded by Dr. Schneiders and carried . . .

Dr. Mauermann: *Committee on Medical Defense.* The Committee moves the adoption of the report of the Committee on Medical Defense.

. . . The motion was seconded by Dr. Peterson, of Sun Prairie, and carried . . .

Dr. Mauermann: *Cancer Committee.* The committee moves the adoption of the report of the Cancer Committee.

. . . The motion was seconded by Dr. MacGregor, of Portage, and carried . . .

Dr. Mauermann: *Committee on Medical Education and Hospitals.* The committee moves the adoption of the report of the Committee on Medical Education and Hospitals.

. . . The motion was seconded by Dr. Wright, of Antigo, and carried . . .

Dr. Mauermann: *Committee on Scientific Work.* The Committee moves the adoption of the report of the Committee on Scientific Work.

. . . The motion was seconded by Dr. Ovitz of Laona, and carried . . .

Dr. Mauermann: *Veterans Relations Committee.* The committee moves the adoption of the report of the Veterans Relations Committee.

. . . The motion was seconded by Dr. Rector, of Appleton, and carried . . .

Committee on Public Policy. The Committee moves the adoption of the report of the Committee on Public Policy.

. . . The motion was seconded by Dr. Jermain, of Milwaukee, and carried . . .

Dr. Mauermann: The Reference Committee feels that a great amount of foresight and hard work has resulted in the work accomplished by the various committees and feels that they should be commended for their excellent work.

Speaker Carter: The Chair will now entertain a motion to adopt the report of the Reference Committee on Standing Committees in its entirety.

Dr. Adams (Kenosha): I so move.

. . . The motion was seconded by Dr. Schneiders, of Madison, and carried . . .

COUNCIL RESOLUTION

Speaker Carter: The next order of business is the report of the Resolutions Committee, Dr. Gundersen, Chairman.

Dr. Gundersen: The first resolution is one offered by the Council and reads as follows:

"*Resolved*, That the House of Delegates, in the interest of promoting public health in this state, does hereby authorize the Council to create a liaison

body of laymen whose function it shall be to work with the organized profession in furthering the application of well-known principles of preventive medicine throughout this state.

For the purpose of perfecting such an organization, the Council is authorized to proceed as, in its judgment, it may seem wise, having in mind the following recommendations of this House:

"1. That the Council of the State Medical Society of Wisconsin remain in perpetuity the governing body of the liaison association.

"2. That officers of the liaison group shall be selected by the Council.

"3. That the membership fee of the group shall be that as determined by the Council, as well as its Constitution, By-Laws, and specific objective.

"4. The Council is authorized by this House to appropriate from the general fund or surplus of the Society such an amount as in its judgment shall be considered necessary in bringing about the establishment of the original membership of the liaison group.

"5. Membership within the group shall at all times depend upon election by the Council."

It is the recommendation of the Committee on Resolutions that Resolution Number 1 be approved by the House of Delegates. On behalf of the committee, I move the adoption of the resolution.

. . . The motion was seconded by Dr. Rector, of Appleton . . .

Dr. Lotz (Milwaukee): In order to start some discussion, I would like to know what this resolution is about. I plead absolute ignorance. Will somebody please tell us what it is about, or a little more about it?

Secretary Crownhart: Dr. Lotz, accepting the suggestion of the Speaker, the Secretary will answer questions.

This resolution is to bring about advancement of the Society in the field wherein the family physician will participate to a greater extent in public health activities of the state. The resolution provides a means of raising the funds that are deemed essential to an initial direction for this movement, and, in the second place, it will bring about closer cooperation with the laity in the state, in each section of the state, who will aid us in accomplishing the results that can only be accomplished through close cooperation of the family physician, the public health authorities, and the laity.

Perhaps some additional questions will enable the Secretary to amplify on that statement if you desire it, at this time. The President last night stated, in quite complete detail, the aim of the project as a whole. We told you last night that in order to accomplish the project the President had outlined to you, funds were essential; that two ways of securing the funds were before you, one increasing the dues. The other seemed the preferable course, because it accomplished two objectives at the same time, which was creating a liaison body to your Society, whose membership fees would help very materially in financing the work to be accomplished wholly in the public interest. At the same time, it provided an organization of laymen who by bulletin from time to time could be better advised as to the objectives of the profession.

Dr. Butler (Menomonie): I understand the details have not been worked out, but you are asking for approval of this House of Delegates for the principle of the idea. I have enough confidence in President Seeger and the Council to work out the details in the interest of the profession at large. Therefore, I am in favor of this resolution. I hope it will pass.

Dr. McMahon (Glenwood City): Gentlemen, I am also in favor of this resolution because it is going to bring us into closer contact with the laity. I think it is going to prove to be a valuable thing because the people who are elected as members of this organization, this liaison body, will be kept well informed as to what the aims of the profession are in respect to public health and there is no better way of disseminating information among the people than by word of mouth.

Since the membership of this body will be chosen by the Council, we can assume that the people who do become members of this lay organization will be people who are leaders in thought, or outstanding members of their own community. For that reason, I am in favor of the resolution.

Dr. Sargent (Milwaukee): I should like to clear up one point. This will be an organization from the state organization, or will there be responsibility involved upon the county organization?

Secretary Crownhart: Will you state your question again, please?

Dr. Sargent: Is this to be an organization set up entirely under the management and control of the state body or will there be responsibility which will devolve upon the county organization?

Secretary Crownhart: Dr. Sargent, the original organization will be under the supervision of the Council, and the funds so raised will make possible direction within each county, taking them possibly one by one, in the perfection of the goal to be attained. That goal is bringing the profession in that county and the laity in that county and the various interested organizations into a program where the family physician will play the role that everybody, including the state health officer, wishes him to play in the field of prevention of disease.

Initially this will be a state organization under the Council but working back into each county.

Dr. Bowen (Watertown): When I heard of this recommendation last night, I was deeply impressed with it. To my mind, there has been nothing emanating from the Council, in the years in which I have had contact with them, that will do more to bring into the field of medicine that which belongs to medicine than this act of the Council. And in that body I have the utmost confidence that they will put into working action that which I have so long desired.

I have always resented the invasion of the various lay Auxiliaries or some family welfare body promoting that which should rightfully belong to us. But when asked, "Why does not your profession do something about an orthopedic clinic in your city, why does not your profession do something about the children of your community as a whole, as a unit," I had to admit that we had not done it.

I believe it is the intent of the Council that we, as county organizations, will go back and undertake that which rightfully belongs to us. I believe everything pertaining to medicine should be supervised by medicine, and not by individuals of the lay organizations who sometimes endeavor to promote their individual interests.

Let medicine furnish the leadership of medicine in Wisconsin and in every county of Wisconsin. In everything that pertains to medicine let the medical men take the lead and lead the way; in order to do so, because we have been so slow in grasping that which we should have done before, it is necessary that we take into our working organization interested laymen. I do believe the Council will do the proper thing in promoting just the thing that should belong to the medical profession.

In the prevention of disease and all that pertains to medicine let the medical men and women supervise it and let the Council of this organization, with the start they now have, continue. Let us all approve of their continuing on in the thought of the importance of the work they have so nobly begun. I am for the resolution heart and soul, that I some day can go back into my county without seeing this Auxiliary and this little group of women who have not so much to do telling us how to give medical care to our children.

Let the medical profession lead the way. I certainly hope you will adopt the resolution that has been presented.

Dr. Gramling: I just wish to second what has been said here. I really do believe this is a wonderful move, that it will do good in a number of ways.

The one point which has not been stressed is the fact that the counties will be organized in our state. I believe that is a very important thing. It would be a disadvantage if the seventy odd counties we have in this state each had a little different program. Under the program which the Council of the State Medical Society has so brilliantly worked out, every county will be organized along the same line. You then would have a solid front so that the criticism cannot be made that one county is working this way and another county another way.

As the previous speaker stated, there is no better body in the state of Wisconsin than the Council of this great medical organization of our state, and I feel confident, in the spirit we who favor see in this, it will mean increased prestige of the State Medical Society of Wisconsin in these United States.

Dr. Rector (Appleton): I want to compliment the last two speakers on their thought in regard to this health project. Outagamie County is very much interested in this project, so much so that I may say we are now entering upon our third year of our county health organization, which has organized and is working on this basis. We realized many years ago the difficulty through interference from outside busy bodies who were working without proper guidance.

Three years ago, we organized the Outagamie Health Association, and have been functioning satisfactorily to the profession and to the public. We have the support of the Outagamie County Health Committee. We have the support of the county board. We have the support of the citizens who are interested in public health and we have turned the misguided efforts in health work into useful efforts in the promulgation of our public work.

We find those people very satisfactory in carrying on and assisting in this work. They simply need guidance, need something to do. They are sincerely interested, and you can help them and help yourselves and help the public by the adoption of this resolution.

We started out on the basis of the slurs that had been cast in regard to the family physician in this matter and it was a movement on the basis of "back to the family physician".

We have organized in our county for several years now the Public Relations Committee. This work was turned over to the Public Relations Committee and we have completed our county organization and have, I think, something over 150 lay members in our county organization, supporting with their time and supporting with their money.

In addition to that, we have the support of the county board. The county board has voted us as high as $5,000 a year for public health work. They feel, from the record shown in our county in public health matters, that it has been a good investment and even in these times of depression we have not hesitated to go back for money. They have told us we were too modest and that any money which was needed for public health work we could have.

There is another phase to it. In our county medical societies and as individuals in the medical profession we need training in ethics. We need training in public health work. We need training in health examinations, and that is especially true of a good many of the younger men. We have found in conducting our clinics, in the grouping together of different men it has added to the fellowship in our Society and the success of our Society. They realize the other fellow knows a little more than they thought he did; he is a little bit better competitor, if you wish to put it that way, than they figured he was and they are learning something from him.

It has been reflected in my field of work, not being a family physician or classed that way. It has been reflected in the reports that come to my office in the consultation cases sent out to the family physician for a general physical check-up. The reports from these same men now as compared to three years ago show a decided difference.

We are very much interested in the work which is being carried on, and we are willing, I am sure, to change our organization in any way that is needed to conform with the state set-up. In behalf of Outagamie County, I favor the adoption of this resolution.

Dr. Riopelle (Beaver Dam): I wonder if I may express a thought that has not been expressed yet. I shall do so and ask a question. As you know, we have various organizations throughout the state and in the counties. For example, one is the Child Welfare and Protective Association of the state. I have been asked by the state health officer and by Dr. Calvert of Madison to call together the county board committee and various other organizations of Dodge County to organize a unit for the county, to work under and with this Association.

As I said, there are other such organizations, and if we launched this new project it is far superior to what others have. What will be the final outcome of the other organizations as well as ours. Are we going to drive alongside them with a similar object in view, or is it our intention to get them to work with us?

Secretary Crownhart: Dr. Riopelle, that is a difficult question to answer in a minute or two. I would say in almost every organization you can think of in this state and in other states, in the field of public health, as President Seeger so well pointed out last night, they were originally initiated by physicians. Indeed many of them were initiated by State Medical Societies. Then the new organization began to proceed with full speed and the medical society for some reason drifted back and began to consider some other subject. So there have grown up numerous organizations doing numerous things in the field of public health, simply because physicians initiated them and then dropped leadership.

As I understand, Dr. Seeger, and I hope you will amplify my remarks if I am wrong, this is an effort not to start something that will again drop back but in the future, in so far as we can see, it is going to bring the family physician into the picture.

As pointed out the other evening, the amount of work that can be done on a mass basis to promote the public health is very definitely limited. The great field of health promotion in the future is going to be in individual care to the individual. By physicians coming into the picture now and enlisting the support of laymen who are truly interested in this field, as they should be, to accomplish the objective the profession and Health Department sees to be accomplished in the way the Health Department thinks it can best be accomplished; to bring the public gradually, county by county, into closer contact with their family physicians, not alone for immunization but for the future care as the child grows into adult, is our public health objective.

Dr. Rector: Mr. Speaker, may I add to that a bit. Any outside organization with a worthy cause is invited to work with our Health Association and use our organization for this purpose if they are worthy. We have an organization that is able to carry on any campaign in our county.

. . . The question was called for . . .

OTHER RESOLUTIONS

Speaker Carter: Is there any further discussion? We do not want to vote on this question without everybody having an opportunity to say anything that they desire. Are you ready for the question? All in favor of adopting the report of the Resolutions Committee will say "Aye"; contrary "No". The motion is carried unanimously.

Dr. Gundersen: The second resolution was introduced by Dr. Hipke, of Milwaukee:

"WHEREAS, It is the purpose of organized medicine to maintain the highest educational standard looking towards the development of more capable practitioners;

"WHEREAS, In recent years, there have been a number of students who are not being able to matriculate into medical schools of this country, have obtained medical education abroad;

"WHEREAS, These students, upon completion of their education, have returned to this country to compete with physicians educated here;

"WHEREAS, The medical profession is seriously overcrowded;

"WHEREAS, In most foreign countries, a physician must have received his medical education in the country in which he practices; be it

"*Resolved*, That it is recommended by this House of Delegates to the Committee on Public Policy that legislation be introduced in the coming legislature requiring that only physicians who have taken a full course in a recognized medical college in the United States be licensed to practice medicine in Wisconsin."

It is the recommendation of the Committee on Resolutions that this resolution be submitted to the Committee on Public Policy for further study. I move the adoption of this recommendation.

. . . The motion was seconded by Dr. Schneiders, of Madison . . .

Speaker Carter: Does Dr. Hipke desire to make any further comment?

Dr. Hipke: I do not think there are any remarks to make if it is to be referred to another committee.

Secretary Crownhart: Mr. Speaker, I might explain that the objective Dr. Hipke and the Medical Society of Milwaukee County are endeavoring to obtain is to prevent the flooding from Europe into this state its proportion of some 2500 who are presently studying in Europe, not foreign born but American citizens who have been denied, for lack of qualifications, entrance into our schools, or who have been dropped from our schools and have gone abroad to complete an education in medicine that they could not obtain through their credentials in this country.

The resolution, as it is worded, however, involves a bit broader subject than that and after some discussion this morning, as I understand Dr. Gundersen, it was felt best that having a clear understand-

ing of the objective to be attained, it be left with the Committee on Public Policy which handles the matter of legislation, to see how they can go about to secure the end desired. Is that correct, Dr. Hipke?

Dr. Hipke: Yes.

Speaker Carter: Is there any further discussion? Are you ready for the question? All in favor of this motion say "Aye"; contrary "No". The motion is carried. The resolution will be referred to the Committee on Public Policy.

Dr. Gundersen: Resolution Number 3 was introduced by Dr. Bannen, of La Crosse.

"*To the House of Delegates of the Medical Society of Wisconsin:*

"WHEREAS, The Wisconsin Urological Society and the Milwaukee County Medical Society have extended an invitation to the American Urological Society to hold their annual meeting for 1936 in Milwaukee; therefore be it

"*Resolved*, That the Medical Society of the state of Wisconsin extend their greetings and concurrences in the invitation to the American Urological Society to accept the invitation to meet in Milwaukee in the year 1936."

The Committee on Resolutions recommends the approval of this resolution. I move the adoption of the resolution.

. . . The motion was seconded by Dr. Bowen, of Watertown, and carried . . .

Dr. Gundersen: Resolution Number 4. Introduced by the Board of Medical Examiners and the Milwaukee County Medical Society.

"WHEREAS, Public interest demands adequate protection against violators of the Medical Practices Act;

"WHEREAS, The common usage of the 'doctor' title by quacks and cultists is misleading, dangerous and inimical to public welfare;

"WHEREAS, The activities of quacks and cultists calls for drastic action; be it

"*Resolved*, That the House of Delegates direct its officers to take such action as is necessary to curb the use of 'doctor' title by those who are not entitled to do so under the laws of Wisconsin and who are now preying upon the public and endangering the health of our citizens."

The Committee on Resolutions approves the adoption of the resolution. I move its adoption.

. . . The motion was seconded by Dr. Lippitt, of Milwaukee, and carried . . .

Dr. Gundersen: Resolution Number 5 was introduced by Dr. Jermain, of Milwaukee, by the suggestion of the Board of Directors of the Milwaukee County Medical Society.

"WHEREAS, It is the aim of organized medicine to maintain the highest standards in the public health field;

"WHEREAS, The basis of the public health program is the medical profession's knowledge of preventive medicine;

"WHEREAS, Numerous communities in Wisconsin have lay health officers and health boards who have little or no knowledge of scientific medicine; be it

"*Resolved*, That in public interest this House of Delegates recommend to the Committee on Public Policy introduction of legislation in the coming session of the legislature providing that health officers in cities, towns or villages of 5,000 or more must be physicians; and further be it

"*Resolved*, That where there are health boards, at least one member of the board be a physician."

The Committee on Resolutions moves the adoption of this resolution.

. . . The motion was seconded by Dr. McMahon of Glenwood City . . .

Dr. P. A. Fox (Beloit): The wording is either ambiguous or I do not understand it. As I understand, every township has a health board. In many townships, they have no physicians. Does it just include those cities of the population you mentioned?

Dr. Gundersen: Cities of 3,000 or more.

Dr. Fox: It seems a little ambiguous.

Dr. Gramling: The reason 3,000 was specified was because the medical society does not want to dictate to the rest of the state. It should only apply to the suburbs around the city of Milwaukee; that is why the limit was placed on 3,000. If you make it less, you might put a hardship on the towns in the rest of the state. The Milwaukee County Medical Society was interested only in protecting the suburbs of Milwaukee.

Dr. Fox: The last phrase says "Wherever there are health boards, at least one member of the board be a physician." Some townships have no physician.

Dr. Jermain: The last half of that resolution applies to towns, villages and cities of 3,000 similarly as the first paragraph does.

Dr. Fox: I understand that was the meaning, but it seems it was not carried out.

Secretary Crownhart: Dr. Fox, do you wish to move the adoption of an amendment to modify the last phrase by adding "In cities, towns or villages of 3,000 or more?"

Dr. Fox: I would like to add that.

Dr. S. M. B. Smith (Wausau): In our city, we have a lay health officer. We have had a good many health officers since Wausau was organized, and the most effective one we have ever had is the present one, a layman. He devotes his full time to that work, and does it at very much less compensation than any physician could afford to receive. I do not think you could hire a competent physician to go in there and do the work as effectively as he does and be willing to do it for his income.

I would say a great many cities, under the present conditions, are not in position to pay any adequate salary for a physician to take over that work, and I do not believe the average city can hire a doctor and have him do justice to the office unless he devotes his entire time to it. For that reason, I am opposed to the resolution.

Speaker Carter: Gentlemen, the Chair wishes to raise a point of order at this point. Dr. Smith's discussion was out of order in view of the fact that Dr. Fox had proposed an amendment which, however, was not seconded. In order to simplify matters, I wonder whether Dr. Jermain would accept the amendment to the resolution.

Dr. Jermain: I shall accept the amendment and second it.

Speaker Carter: In that case, we will have to vote on the adoption of the amendment.

Secretary Crownhart: The amendment is to add the modifying phrase in referring to adding physician to a health board where it exists, so it will simply specify adding one physician to a health board in cities, towns, or villages of 3,000 or more and will not refer to health boards in townships.

Speaker Carter: The amendment has been proposed and seconded and the vote now is upon the amendment. Are you ready for the question? All in favor of the amendment, as stated, say "Aye"; contrary "No". The amendment is carried and the question now is upon the original resolution as amended.

Dr. Smith's discussion now applies to the original resolution. Are you ready for the question? All in favor say "Aye"; contrary "No". The motion is carried.

Dr. Gunderson: Resolution Number 6 was read by Mr. Crownhart, at the request of the Council, and is as follows:

"WHEREAS, The program for disease prevention in Wisconsin could be better promoted by closer working relationship between the State Board of Health and the medical profession of the state; and

"WHEREAS, There is need of full-time contact service between the State Board of Health and the medical profession; and

"WHEREAS, The present budget of the State Board of Health does not provide for this service; now therefore be it

"*Resolved*, That the State Medical Society of Wisconsin in session, at Green Bay, Wisconsin, September 12, 1934, offers to the people of the state its full cooperation with the State Board of Health in its program of disease prevention; and be it further

"*Resolved*, That the State Medical Society of Wisconsin request the coming legislature to provide for the State Board of Health such funds as may be necessary to establish a contact service between the profession and the Board to make more effective the cooperation of the profession, and to provide a more active participation of the physician in carrying out the approved health measures of the Board."

The Committee on Resolutions approves the resolution and moves its adoption.

. . . The motion was seconded by Dr. Lippitt, of Milwaukee, and carried . . .

Dr. Gundersen: The next resolution was also introduced at the request of the Council.

"WHEREAS, There is not suitable provision for the care and treatment of epileptic cases; and

"WHEREAS, Many other states have made such provision; therefore be it

"*Resolved*, That the State Medical Society of Wisconsin recommend to its legislative committee that they urge on the Board of Control and the Wisconsin legislature the need of such legislation, to the end that special provision be made for the proper care, treatment, and education of epileptics in this state."

The Committee on Resolutions approves the resolution and moves its adoption.

. . . The motion was seconded by Dr. Peterson, of Sun Prairie, and carried . . .

Dr. Gundersen: In regard to the next resolution, introduced by Dr. Henske, I plead guilty to not having brought it up at a meeting of the committee as a whole. It slipped my mind or the papers got lost in the shuffle this morning, but I canvassed the men individually, so I have obtained their attitude in respect to it.

"WHEREAS, Section 245.10 of the statutes of 1933, which is generally known as Chapter 212 of the Laws of 1917, does not make the Wassermann test or any syphilitic test mandatory; and

"WHEREAS, Said act does not require a physical examination of female parties to marriage contracts; and

"WHEREAS, Said act does not require that the physician refuse a certificate of physical well being to those applicants who are grossly mentally deficient and easily identifiable as such; and

"WHEREAS, It is obvious that female parties to marriage contracts may possibly be infected with gonococci or syphilis as well as the male; now therefore be it

"*Resolved*, By the 1934 House of Delegates of the State Medical Society of Wisconsin, that the State Medical Society of Wisconsin respectfully petitions the Senate and Assembly of the state of Wisconsin to take immediate steps to enact legislation which will:

1. Require a complete physical and mental examination to be made of applicants for a marriage license.

2. An examination of all female persons making application for license to marry in the same manner as males;

3. A test of all persons making application for license to marry for syphilis, such test to be some duly recognized syphilitic test; be it further

"*Resolved*, That properly attested copies of this resolution be sent to the President of the Senate, Speaker of the Assembly and the Chief Clerk of the Senate and Assembly, respectively."

The Committee on Resolutions recommends the referring of this resolution to the Committee on Public Policy for further study.

. . . The motion was seconded by Dr. Mauermann . . .

Dr. Gundersen: I think most of the members of the State Society are heartily in accord with the

spirit of this resolution. It resolves itself into a method of procedure. If the physicians of the state were to initiate this matter in the legislature, it might fail very rapidly. If some other organization were sponsoring it, however, I believe it would meet with further success, and that is the underlying reason why the Committee on Resolutions feels as it does.

Dr. Powers (Milwaukee): I am very strongly opposed to this resolution. The matter of making a complete mental and physical examination of every applicant for marriage is beyond the power of many physicians.

What is meant by a complete mental examination? A psychometric test? Are you going to take into account the individual's intelligence quotient, his emotional stability, and complete physical test, complete physical examination? That also goes very far afield. I think the thing is impossible of being carried out.

The question of submitting our young men and women to such tests, particularly the young women to Wassermann tests and other tests for syphilis, I think, is not needful. Moreover I think it is somewhat repugnant.

Many of us remember the strife which arose some fifteen or sixteen years ago when this thing was originally started, the question as to clinical and Wassermann tests, at that time, and the great strife that was produced. It became necessary to modify the legislation proposed at that time. My personal feeling is that this resolution will do very much more harm than good. Certainly it would need a great deal of clarification as to what is meant by a mental examination and who shall be prohibited from marrying, what degree of mentality may safely be married and what degree of mentality may not be married.

You have entered upon a very, very large subject there. I urge the rejection of the resolution.

Secretary Crownhart: Are you in favor of the position of the reference committee, which suggests it be referred to the Committee on Public Policy for further study?

Dr. Powers: No, sir, I would prefer it be killed in the House here and now.

Dr. McMahon: In its present form, I presume this resolution should not be passed, but I can see no objection to referring it to the Committee on Public Policy for further study. We all know that syphilis is a transmissible disease, and if it can be detected in parties to a marriage contract, something can be done to prevent syphilitic children from being born into the world. Perhaps the public is not ready for it, but it does not hurt to keep the thing in mind and let the Committee on Public Policy study it, and if they decide later on, do something about it.

Dr. Riopelle: Until the resolution is taken up by the Committee on Public Policy, I see no need for further discussion on this subject, because after they have thrashed it over, no doubt, they will discuss some of the problems we are discussing tonight. When it comes back to us it may be an entirely different proposition, and then there will be time enough to take account and digest it. I do not see any reason for going on with this discussion.

Speaker Carter: The question before the House is whether or not this resolution will be referred to the Committee on Public Policy. If you should vote it down, then Dr. Powers' motion is in order. At the present time, the question is whether it shall be referred to the Committee on Public Policy. Are you ready for the question? All in favor say "Aye"; contrary "No". It is carried.

Dr. Gundersen: The last resolution is as follows:

"*Resolved*, That the House of Delegates extend to members of Brown–Kewaunee–Door County Medical Society, its Auxiliary, to the committees and to Dr. E. G. Nadeau, general chairman of arrangements, its sincere appreciation for the splendid arrangements perfected for the 1934 meeting of the Society."

The Committee on Resolutions moves the adoption of this resolution.

. . . The motion was seconded by Dr. Redelings and carried unanimously . . .

Dr. Gundersen: The Committee on Resolutions has one further function, namely, that of a recommendation in respect to dues for 1935.

It is the recommendation of the Committee that the dues for 1935 be set at twelve dollars, it being the sense of the committee that in case of an emergency in which it becomes necessary to expend additional funds to carry on work relative to guiding recommendations respecting socialization of medicine that the Council be authorized to call a special meeting of the House of Delegates for the purpose of raising adequate funds to meet the emergency.

I move the adoption of this recommendation.

. . . The motion was seconded by Dr. Schneiders, of Madison, and carried . . .

Dr. Mauermann: I would like to ask a question in this connection. In case it becomes necessary to raise the dues, when will the county secretaries be notified? A good many of the members in the county pay their dues the first of the year. We cannot levy a second assessment and notify them to pay additional dues after they pay their first dues.

Secretary Crownhart: As a matter of policy, the dues have been set at twelve dollars. The committee is simply stating if an emergency arises in relation to projects of health insurance and socialization of medicine and more funds are required than the Council feels are at present available, the Council is authorized to call a special meeting of the House of Delegates, in which case, if the House saw fit, there would be an assessment, but not an increase in dues, as such. You may proceed now to collect dues at twelve dollars for the year 1935.

Dr. Gundersen: I move the adoption of the entire report of the Committee on Resolutions as amended.

. . . The motion was seconded by Dr. Peterson, of Sun Prairie, and carried . . .

Secretary Crownhart: Mr. Speaker, for the in-

formation of the delegates, with reference to the matter of the Committee on Public Policy being instructed to proceed along certain lines to secure legislation looking toward establishing physicians as health officers, in view of the discussion of Dr. Smith, I desire to call attention to the fact that identical legislation was proposed at the last session by the State Board of Health, covering not just cities, towns and villages of 3,000 and more, but every township in the state. At that time, Dr. Harper well pointed out the fact that because a physician was selected as health officer did not necessarily mean he would have to devote full time. It would mean he would be the director of the health service, and if it were desired then to appoint as his assistant laymen in various townships or in a city such as Wausau, where Dr. Smith cites the situation that exists there, that well could be done.

So in fact, Dr. Smith, if the legislation did carry which is proposed here tonight, you would have a physician as your director but you well might continue to have your layman as assistant health officer doing, under medical direction, all the work he is presently doing so well.

. . . Announcements were made relative to the meeting of the House of Delegates on Thursday morning . . .

Secretary Crownhart: Your Secretary desires to make the customary announcement in advance of the meeting tomorrow morning. At that time we will have the report of the Committee on Nominations and in accordance with precedent, nominations from the Committee on Nominations do not preclude additional nominations from the floor.

Last evening, we had as the guest of this House, on invitation from the Secretary, Dr. W. T. Clark, who is acting as Medical Advisor to the State Relief Administration in an effort to help the profession. As your Secretary stated last night, his compensation barely covers his traveling expense.

The Secretary suggested last night if, after you have had the pamphlet and the discussion contained in the Secretary's report, you had any further questions, he knew that Dr. Clark would be glad to answer them. Speaking for himself, the Secretary will also, to the best of his ability, try to answer them.

Dr. Clark is present this evening, and if any member has a question which he feels is pertinent, or applicable to the state as a whole and not a single situation which may be local, I know he will be happy to answer it and to have the information you may give him that he may carry it back and apply it in his work.

Dr. Rector: In view of the fact that some of the men have not had the opportunity to be in touch with Dr. Clark's work, and knowing the effective manner in which he works in groups in local communities, I think it would be well for him to discuss some of his problems.

MEDICAL RELIEF

Dr. Clark: Mr. Speaker and Gentlemen: I have a report here which I received September 7 from Miss Foltz, corresponding secretary for Mr. Briggs, director of relief, giving the counties or groups which have submitted schedules and whose schedules have been accepted. These number eighteen and do not interest us particularly now. There are twenty-seven other counties which have sent in allowance schedules that have been returned for some correction. Those are undoubtedly of minor importance and will undoubtedly be settled within a short time.

There are also eighteen counties from which no schedule has been submitted. I am going to read the names of those counties or relief units (some of them are cities) in order that the delegates here representing those relief units may be kind enough to take back to their advisory committees and their relief directors the word that we should like very much to have them go into session; that is the medical advisory committee, the director of relief, and the relief committee of the county board, if that is your relief committee in your unit, and decide upon an allowance schedule. After deciding upon such fee schedule, submit it to Mr. Briggs, of Madison, for his approval. When that is approved, you will be, in effect, under the recently issued bulletin.

Those relief units to which I refer are Adams, Brown, Columbia, Door, Eau Claire, Grant, Jackson, La Crosse, Marathon, Marinette, Menasha City, Monroe, Oneida, Hobart Indians, Outagamie, Sawyer, Shawano, Sheboygan, and Wood.

There has been, I think, some misunderstanding in regard to the technique of coming under this supplemental bulletin. I think many of these counties are in the clear in this matter, have had an advisory committee, free choice of physician and an allowance schedule and have thought that was all there was to it,—that they were complying.

It is necessary for you to get together with your relief unit committee, director of relief and resubmit your old schedule for approval. In some cases, the physicians have sent in their schedule direct without conferring with the relief organization, and in some cases the relief director has sent in a schedule without conference with the physician's advisory committee, and we have complications arising because of that breach of the rules of the game.

I believe that out of the number entitled to it, eighty or ninety per cent of the people of Wisconsin are now receiving medical care under our present set-up of free choice of physician. Many of the units have advisory committees but some of those advisory committees have not functioned to the full. Some of them have not acted as consultants for their relief directors. Some of them have not audited the medical bills and any lapse in any of those functions, I think, is at least a deterrent to the full application of the regulations.

I wrote to Harry Hopkins, Federal Relief Administrator, in regard to the interpretation of the word "Physician" under FERA Number 7. I had already

received a ruling from the attorney general. He said that osteopathic physicians came under the FERA ruling in this state.

Harry Hopkins maintains that FERA Number 7 was a broad statement of policy and was not meant to conflict with the laws of the community; that under our present laws osteopathic physicians are entitled to practice under this act.

If there are any questions in regard to the bulletin, I would be glad to have them. I think these points have been pretty well ironed out in most of the communities. I have tried to cover most of the state and I think I have contacted the advisory committees and directors of relief in practically all of the counties of the state together, at some time or other in the last three or four months.

I believe our present plan is a trend away from state medicine. I have heard it stated that this is state medicine. I would make two basic premises in the discussion of this whole situation. First that the doctor be paid for what he does even though, as at present, it represents the bare cost. Second, that things medical be kept in the hands of the medical profession. Those are my premises. Perhaps you do not agree with them, and yet I think there may be some argument about most of these matters in relationship to medical relief of the indigent at present.

If you will examine the supplementary bulletin Number 7 of Wisconsin, you will find that the control of things medical under this bulletin is placed in the hands of the medical profession through their advisory committee. If they are the right kind of men, they will represent the medical profession and do it justice. There is a possibility that men may be chosen who are not naturally suited for acting in that capacity, and the importance of their position is such that I believe they should be replaced, if they do not come through and discharge their duties to the medical profession, to the patient who is unfortunate enough to be on relief, and to the tax-paying public.

From time to time, as I have been doing this work, I have made a few notes of things that have occurred to me that perhaps have come up in a year and one-half of our operation previously, and were re-emphasized or came to me for the first time while doing this.

I may be imposing upon your time, but I feel this is one of the most important subjects that has come to the medical profession, the Society as a whole, and if you will bear with me, I will run over those rather disconnected notes rapidly. They may answer some of the questions in your mind and if they do not I shall be glad to have additional questions, and if time permits, we will take them up.

The human medical mind is unable to comprehend the changes going on in this rapidly changing world. It takes all our energy to learn medicine and keep up with the advances. There is little left over for consideration of our economic problems.

Medicine owes much to basic sciences. We are getting the best brains in the country. We perhaps will have to develop a specialty of medical economics. Medicine is a mendicant at the hands of benevolent big business and government. Business has to build its own factories out of its earnings. We are unable to do so. In giving hospitals and clinics, they retain administrative control of them and gain control of the physicians who work in them, which condition in itself takes control of things medical out of the hands of the medical profession, where it rightfully belongs. We have lay superintendents of hospitals and lay boards of trustees which, in many instances, do not leave the medical end in control of the physician and often seek to and do control the medical profession. We must develop a leadership personnel trained and capable of taking over these problems.

We, as physicians, in our medical meetings such as this, have considered purely our scientific problems, and we have not paid much attention to our economic situation until it has been forced upon us. We, of course, owe much to basic sciences. Nicholas Murray Butler, in an address some years ago before a group of educators, said that medicine was getting the best brains in the country. In the previous ten-year period it had been confined more largely to engineering or law.

We must cooperate with all agencies interested, but we must be capable of assuming leadership in our own affairs. We must discharge this obligation fairly and impartially and to that end we need discipline in the medical profession, the beginning of which is being assumed by our advisory committees in this emergency.

As physicians, we have been independent. Our relationship with our patients has been a personal affair between patient and physician. With the coming of the depression and the payment of allowances to physicians from public funds on a much larger scale than hitherto necessary came the demand from public officials charged with the responsibility of disbursing such funds and their proper conservation for the protection of the tax paying public and the unborn generations who will have the burden of paying off the billions of dollars of public debt which we today are piling up, that we set our allowances in some kind of a mould, that is, standardize them in so far as possible.

They were dealing on an allowance basis for the individual physician with a commodity which was new to them, for heretofore they had been paying salaries to city or county physicians to provide all of the medical care for the indigent. They were accustomed to furnishing so many groceries or so much coal, which could be more or less accurately measured by them, but when it came to saying, "We will pay so much per visit," or "so much per operation," immediately the suspicion arose that the physicians would begin to pad their visits, do unnecessary operations and make complicated obstetrical deliveries by putting on forceps in order to get the extra fee.

To say their suspicions were unjustified is to belie

the facts, as just those things happened among a very small percentage of chiseling physicians and those exceptions to the rule of fair play and honesty of a large majority of the medical profession were the ones who militated against an earlier equitable solution of this problem.

They are the cases that have given the medical profession a black eye and have been held up to those of us on the firing line, by relief and public officials as the reason why the medical profession could not be trusted. Nor is that danger past. In fact, its acuteness is being re-emphasized in the new medical set-up which is going into effect with the acceptance of the plan offered by the Supplement just issued to FERA Number 7, especially in those cities and counties offered free choice of physicians for the first time.

The salvation of the good name of the medical profession rests heavily upon the shoulders of the local medical advisory committees to exact whatever discipline may be required on any local chiseler to keep him in line and thus protect the interests of that overwhelming majority of the profession who have and will continue to play fairly with their relief authorities in seeing that those in need of relief receive good medical care in this so-called depression, for which they are in no wise to blame.

We need more than ever the confidence of the public officials. Most committees have secured it through fair dealing in the past and where it does not now exist it must be obtained.

We are the greatest profession in the world today, and I will defend that statement against all comers, but we have many of the faults common to the human race. As a professional unit, we have an outstanding responsibility to society as a whole which is trying to solve one of the great problems of present history and seeking to adjust itself to conditions precipitated by our very rapid advances in science and industry, which entail readjustments in our thinking and social structure which are at present taxing our human intelligence, in its present state of development, to the utmost.

The forward strides of science are so rapid that there is a lag between the latest knowledge in any field and its application, because of the time necessary to educate the public to its acceptance. Apparently this is a necessary delay in the present state of development of the human race, and the social structure which has been built up and under which we are living. We are, at present, stumbling along, feeling our way, making some advance, I am sure, and it seems that the fundamental idea which will solve our problems is somewhere just beyond our grasp. When it comes to some one, it will be so simple we will wonder no one comprehended it before.

I think we have every reason to be optimistic about our outlook. But the lesson for the medical profession in our present dilemma should be a realization of the necessity of establishing a unity of action under a leadership, local, state, and national, which will be willing to give sufficient time and effort to the careful study of our present problems and sufficient intelligence and vision to guide us aright in our rather perilous journey into the future, a sea of as yet uncharted courses wherein there are rocks that may not loom above the surface, but, nevertheless, have the power to wreck our ship.

There has never been a time when the human race, the nations of the world, and our profession in particular needed intelligent, careful, thoughtful common sense leadership as it does today. Therein lies a challenge to all of us, to bring forth the best, the most substantial traits which we possess and apply them to our future problems which are just being opened up by our present situation.

This is not the goal of our endeavors, but simply the starting point for a wide variety of projects that need our immediate attention.

I think your discussion of problems here tonight emphasizes that. I would re-emphasize again the importance of the medical advisory committee in this whole plan, and charge them with the responsibility of keeping the good name of the medical profession unblemished. It is a difficult responsibility. It is a thankless one, I think, and yet somebody has to carry that load and I am sure that the medical profession will accept that responsibility and come through.

Dr. Lynch: Is the rule still in effect that a man eligible to do the work must be a member of the State Society?

Dr. Clark: That never was in effect, because this is a federal set-up and Mr. Briggs is dispensing federal funds. There are no state funds of any importance being dispensed in this connection, and even in connection with the state proposition, if the physician is licensed to practice by the laws of the state, the government could not very well throw him out because he did not belong to the medical society.

Secretary Crownhart: Dr. Clark, as I understand, if any society has any individual problems which may arise from time to time in the future, which through their advisory committee they are unable to handle to their satisfaction at home, they can reach you by addressing a letter to Dr. W. T. Clark, Janesville, Wisconsin, and you will be happy to take it up with the relief director.

Dr. Clark: If you will let me know your problems, I shall be happy to do what I can to straighten them out.

As George Crownhart said last night, I think the state of Wisconsin is fortunate in the attitude of their director of relief and most of the other officials in regard to things medical. If you figure it out, we are getting about the same percentage of gross that the grocer and coal dealer are getting. The five-year committee, I think, established the fact on the average the physician's overhead was about forty-three per cent of his gross.

We are getting about fifty per cent of our minimum fees and that will give us on the average ten per cent over our overhead. That is about what the grocer and coal dealer are getting. So I think we are faring about as well as other classes of society.

One man said, in a local meeting, not long ago, he felt the big thing this had done for us was to make the medical profession class conscious. By that he meant that we were coming to some solidarity of action, which is quite essential.

If we have differences of opinion in these matters or in other matters, as a profession, I think we would do well to settle them in our own discussions and present a united front to the public officials.

This depression has put us in a new light and Appleton has been leading the way, I think, for us in some of the things you have been discussing. We have had the same experience. We fought to get approval of our plans from our public officials, and when we showed them we were trying to be on the square with them we had no further argument. We battled for months with them in the first place and then sat down in an hour and adopted this plan without any difficulty.

I think it has been good training for us. One man rather high in relief work said to me a while ago he thought much of our social unrest today was due to dishonesty, due to unfairness of one class against another, and he was talking particularly about employer and labor. But we can apply such examples, I think, to our own problems and establish the confidence of the public in the medical profession.

There were a few chiselers in this state, and I presume that is true of every state, who were shining exceptions, who were constantly held up to me when I started. I finally told them I was all caught up in listening to the exceptions, that from now on I was listening to accounts of the ninety-nine per cent going straight and carrying the burden with any other class of society, but I did not care to hear about the chiseler exception.

The discipline should be in the hands of the profession. It is not the responsibility of some girl director to discipline some medical man for padding his bills. Your advisory committee can contact him and show him the errors of his ways.

Secretary Crownhart: We have communications from the convention committees of the Association of Commerce of Waukesha and Wisconsin Rapids, extending very cordial invitations to hold subsequent meetings of the society in those cities. Under the rule of this House, such invitations go to the Council before they are submitted to the House in order to ascertain whether such cities have the accommodations necessary for the holding of this meeting, which now has become very large.

Mr. Speaker, I also have a telegram from Battle Creek, Michigan.

"The Michigan Medical Society convened in 114th annual meeting send fraternal greetings and good wishes to the Wisconsin Society. We are guided by your constructive enactments.

"F. C. Warnshuis,
Secretary."

Speaker Carter: Is there any further business to come before this session?

Dr. Mauermann: I move we adjourn.

. . . The motion was seconded by Dr. Schneiders and the meeting adjourned at nine p. m. . . .

Adjournment

THURSDAY MORNING SESSION

September 13, 1934

The third session was called to order at eight-thirty a. m. by the Speaker, Dr. R. M. Carter.

Speaker Carter: The meeting will please come to order.

Secretary Crownhart: In the absence of the Chairman of the Committee on Credentials, your Secretary reports that thirty-four accredited delegates have registered. Slips have been passed out to secure the roll, and if it meets with your approval, I think the Chair might entertain a motion to consider attendance slips as constituting the roll of the House.

Dr. Gramling: I so move.

. . . The motion was seconded by Dr. Neilson, of Milwaukee, and carried . . .

ELECTIONS

Speaker Carter: Mr. Secretary, have you the report of the Nominating Committee?

Secretary Crownhart: To the 1934 session of the House of Delegates:

A report signed by all thirteen members of the Committee on Nominations.

Your Committee on Nominations reports that it has met and nominates as follows:

President-Elect, Stephen E. Gavin, Fond du Lac.

Speaker of the House of Delegates to succeed Dr. Ralph M. Carter, of Green Bay, Gunnar Gundersen, La Crosse.

Vice-Speaker of the House to succeed Dr. Gunnar Gundersen, of La Crosse, James Sargent, of Milwaukee.

Delegates to the American Medical Association. To succeed J. Gurney Taylor, of Milwaukee, J. Gurney Taylor to succeed himself.

W. E. Bannen, of La Crosse, to succeed himself.

Alternate delegates to the American Medical Association.

To succeed F. Gregory Connell, of Oshkosh, Ralph M. Carter, Green Bay.

To succeed T. W. Nuzum, of Janesville, Stanley J. Seeger, of Milwaukee.

Place of 1935 annual meeting: Milwaukee.

Speaker Carter: You have heard the report of the Committee on Nominations. Stephen E. Gavin for President-Elect. Are there additional nominations?

Dr. E. O. Ravn (Merrill): I nominate Ralph M. Carter, of Green Bay, for the office of President-Elect.

. . . Vice-Speaker Gundersen in the chair . . .

Speaker Carter: I deeply appreciate the honor of being nominated as President-Elect of the State Medical Society of Wisconsin. I think it is an honor which any one might well covet, and I am no different than anybody else. At the same time, it seems to

me this is rather a critical period in medical affairs, and that all cause of any possible dissension should be removed. I am willing to sacrifice any personal ambition I may have for the good of the Society. For that reason, and for that reason alone, in order not to introduce any cause for possible dissension, I would like to ask permission to withdraw my name at this time. I appreciate the honor, but I do not care to introduce any cause of dissension. I thank you.

Dr. Redelings: Mr. Speaker, I thoroughly appreciate the attitude of Dr. Carter in the position he has taken. It is a noble one.

I wish to announce, at this time, that Dr. Carter's name was before the Nominating Committee. I affirm without reservation that it was by accident that the nomination of Dr. Carter did not carry. There was a division in the number of votes for President-Elect and we finally declared the nomination unanimous. I was sport enough to join in making this nomination unanimous.

Dr. Carter has been a worker in this Society for a good many years. He has been before our scientific sessions and has been a most excellent Speaker of the House for two years. It seems to me a promotion and advancement is a proper courtesy to him at this time.

I am for Dr. Carter, was for him yesterday evening, notwithstanding the greatest admiration for the man whose name has been presented by the Nominating Committee, and which I thought would go over this morning without a dissenting vote.

Dr. Gramling (Milwaukee): Gentlemen of the House of Delegates, I think Dr. Carter has taken a stand for which I admire him greatly. The Nominating Committee which you have chosen met in the corner over here. The name of Dr. Carter was voted upon. The Doctor said it was by mistake that Dr. Gavin was nominated. I ask the members who served on this committee whether that was a mistake? I think the Doctor was for it and made it unanimous. Every Nominating Committee has done that, once a majority of votes was cast for a single man.

Secretary Crownhart: Mr. Speaker, much as I regret to do so, I must, as Secretary, raise a point of order. The constitution provides that no two candidates for President-Elect shall be from the same district. You have a nomination of a man for President-Elect from the district. It would appear to be impossible to entertain a second nomination from that district.

"Section 1. House of Delegates. At its first meeting at the annual session shall elect a committee on nominations consisting of one delegate from each councilor district. The Committee on Nominations shall report the result of its deliberations to the House of Delegates in the form of a ticket. No two candidates for President-Elect shall be from the same district."

Dr. Lotz: Then this should hold, Mr. Crownhart, —that means the report of the Nominating Committee.

Secretary Crownhart: It says further, "Nothing in this chapter shall prevent additional nominations being made from the floor of the House."

Dr. Lotz: That does not say you cannot have other nominations from the floor. It does infer that the Nominating Committee cannot nominate two men from the same district.

Secretary Crownhart: It was always the understanding of the Secretary, and he is perfectly willing to be corrected, that the purpose of this provision was to provide against any feeling in a meeting within a given district.

Dr. Redelings: May I arise to ask your pardon for using the word "mistake" . . . There were some deliberations which I do not care to repeat here and I stand pat on my position. The normal procedure would have been to advance the Speaker of the House.

Dr. Gramling: I do not know to what Dr. Redelings refers which he says he does not care to repeat to this body. If he has anything to reveal, now is the time to do so. The nominations were made and the discussion was pro and con. Ballot was taken. There were thirteen votes cast, of which Dr. Gavin had eight and Dr. Carter had five, which was a beautiful representation. The Nominating Committee felt, as has been the custom, that the nomination should be made unanimous. Dr. Redelings seconded the motion to make the nomination unanimous.

I believe there is no one in this room who wants to say one single word against Dr. Carter, because I believe he is as worthy a man as there is in the State Medical Society, but the committee has spoken.

The State Medical Society is not going to disband. It is your privilege to vote down the Nominating Committee, but you would be establishing a precedent where the men you really want would not want to be nominated by the Nominating Committee. I, personally, would never accept anything like that if I thought I was recommended by the Nominating Committee, that my name was put before the House of Delegates and voted down. That is a position in which I do not believe any of you would want to be put. That is why I ask this House of Delegates to make the nomination of Dr. Gavin unanimous.

Vice-Speaker Gundersen: Are there any other nominations?

Dr. Lotz: I do not know anything about this, but I would like to second the nomination of Dr. Carter, simply because I know Dr. Carter has been so very active in the Society for years; he has been on clinic programs, has been active in the organization, and I would like to see Dr. Carter receive the honor that is due him.

Dr. Ravn: I think the Constitution specifies that nominations may be made from the floor, so no politics can be played and certain men put into office. I do not know Dr. Gavin. He may be an excellent man, and I think he is. I have seen Dr. Carter for a number of years and know him by reputation. He

is capable and has served as Speaker of the House. I think it is only fair he should be promoted.

Dr. Adams (Kenosha): In the early deliberations of this House, when we were voting to change the Constitution, we heard more or less about democracy. In connection with Dr. Gramling's remarks, it seems to me his argument is at fault if we are going to follow democratic ideals. Because the Nominating Committee brought in a report, he objects because it is not a nice thing to do to turn down the report of the Nominating Committee. I was on that Nominating Committee and I did not vote to make the nomination of Dr. Gavin unanimous.

Dr. Gramling: I would like to have the record read. There was no dissenting vote. I made the motion to make it unanimous and heard no dissenting vote. The Doctor said he did not vote. The vote was on record, and I would like to have the Secretary read the vote. He says this was not a unanimous vote, which is not true. I did not hear Dr. Adams say "No". I said it was unanimous and I stand by that statement, that it was unanimous.

Dr. Adams: I rise to a point of personal privilege. I know how I voted and how I did not vote. Never mind what the gentleman says. I did not vote to make the nomination unanimous. I failed to vote at all on that motion.

Vice-Speaker Gundersen: Are there any further nominations for the office of President-Elect?

Dr. Bowen: I rise for information in connection with the point raised by Mr. Crownhart about two candidates from the same district. Is that a fact? Are they from the same district?

Vice-Speaker Gundersen: In regard to this matter, the Chair will rule that the section which says no two candidates will be from the same district and each candidate for councilor must be a resident of the district from which he is nominated, refers to nominations from the Nominating Committee only. That the subsequent Section 4 nullified this as it refers to nominees from the same district. So I believe a nomination from the floor, even though it be from the same district, as in this case, is in order.

Dr. Bowen: May we have the first section and the following section read?

Secretary Crownhart: I shall read the entire Chapter IV, Election of Officers.

. . . The Chapter was read by the Secretary . . .

Vice Speaker Gundersen: If there are no further nominations, I shall entertain a motion that the nominations be closed and we proceed with the balloting.

Dr. Schneiders: I so move.

. . . The motion was seconded by Dr. Lotz and carried . . .

Vice-Speaker Gundersen: I shall appoint Dr. Sargent, Dr. Schneiders and Dr. Redelings as tellers.

Secretary Crownhart: Will the tellers come forward, stand and face the House while the Secretary reads the roll, and as the names of those entitled to vote are read, will you please raise your hand? (Roll call was taken) That is the voting body of the House and the alternates, unless they are recorded, will not vote. There are forty-five delegates and alternates now present and entitled to vote. Should the entire vote exceed forty-five, a new vote must be taken.

. . . Ballot was taken and tallied . . .

Secretary Crownhart: Forty-five delegates entitled to vote; forty-five votes cast, of which Dr. Carter, of Green Bay, received twenty-eight; Dr. Gavin received seventeen.

Dr. Ryan (Milwaukee): I move the election of Dr. Carter be made unanimous.

. . . The motion was seconded by Dr. Jackson, of Milwaukee, and carried . . .

Vice-Speaker Gundersen: The election of Dr. Carter has been made unanimous.

Vice-Speaker: I shall appoint the following as a committee of three to advise Dr. Carter: Dr. Powers, Dr. Adams, and Dr. Sargent.

The next order of business is the election of a Speaker.

(Dr. Gundersen left the chair.)

Dr. Redelings: It gives me great pleasure to nominate Dr. Gavin as Speaker of the House. I have the highest regard for Dr. Gavin and am sorry this apparent disturbance arose at this time. I would like to see him honored by making him Speaker of the House.

Secretary Crownhart: You have before you the report of the Nominating Committee nominating Dr. Gunnar Gundersen, of La Crosse, as Speaker of the House. Dr. Gavin, of Fond du Lac, has been nominated. Your Secretary was presiding, presuming there would be no further nominations. He now asks you to choose from among yourselves one to preside during these nominations.

. . . Dr. Redelings was nominated by the House of Delegates to preside . . .

Dr. Gramling: It seems to me that because the House voted down a man whom the Nominating Committee recommended, this man would not want to oppose, as Speaker of the House of Delegates, the man whom the Nominating Committee has suggested for Speaker. I believe if Dr. Gavin were in the room he would not want to come in and oppose Dr. Gundersen. I think the nomination of Dr. Gunnar Gundersen should stand, and I ask the House to consider the nomination of Dr. Gundersen.

Dr. Armstrong (Prairie du Chien): I am not for Dr. Gunnar Gundersen because he is from the west portion of the state, but I do not think it is fair for this one district to have both these offices, when there are a number of good men in the Society. I do not think we should turn down a good man like Dr. Gunnar Gundersen because of this misunderstanding which has arisen.

Chairman Redelings: I think I spoke hastily, but I spoke from the bottom of my heart. I had in mind to extend an added courtesy to Dr. Gavin, for whom I have the highest regard as a man, as a physician, as a Councilor, as member and officer of this Society. If it is acceptable to the House, I shall with-

draw my nomination. I think Dr. Gavin will understand. (Applause)

Are there any other nominations?

Dr. Schneiders (Madison): I move the nominations be closed, and that the Secretary be instructed to cast the unanimous ballot of this House for Dr. Gundersen as Speaker of the House of Delegates.

. . . The motion was seconded by Dr. Jackson, of Milwaukee, and carried . . .

Secretary Crownhart: Mr. Speaker, I am happy to cast the unanimous ballot of this House of Delegates for Dr. Gunnar Gundersen, of La Crosse, as Speaker of the House of Delegates.

. . . Dr. Gundersen resumed the chair . . .

Speaker Gundersen: The next order of business is the election of a Vice-Speaker.

Secretary Crownhart: The Nominating Committee has placed in nomination the name of Dr. James Sargent, of Milwaukee.

Speaker Gundersen: Are there any further nominations?

Dr. Schneiders: I move the nominations be closed and the Secretary be instructed to cast the unanimous ballot of the House for Dr. Sargent.

. . . The motion was seconded by Dr. Powers, of Milwaukee, and carried . . .

Secretary Crownhart: I am happy to cast the unanimous ballot of this House for Dr. James Sargent, of Milwaukee, as Vice-Speaker of the House of Delegates.

Speaker Gundersen: The next order of business is the election of a delegate to the American Medical Association to succeed Dr. J. Gurney Taylor of Milwaukee. Dr. Taylor has been nominated by the Nominating Committee to succeed himself as delegate.

Dr. Jermain (Milwaukee): I move the nominations be closed and the Secretary be instructed to cast the unanimous ballot of this Society for Dr. Taylor of Milwaukee as delegate to the American Medical Association.

. . . The motion was seconded by Dr. Lippitt, of Milwaukee, and carried . . .

Secretary Crownhart: The Secretary is happy to cast the ballot of the House accordingly.

Speaker Gundersen: The next order of business is to elect a delegate to succeed Dr. W. E. Bannen of La Crosse. Dr. Bannen has been nominated by the Nominating Committee.

Dr. Mauermann: I move the nominations be closed and the Secretary be instructed to cast the unanimous ballot for Dr. Bannen.

. . . The motion was seconded by Dr. Powers, of Milwaukee, and carried . . .

Secretary Crownhart: The Secretary is happy to cast the ballot of the House accordingly.

Speaker Gundersen: The next order of business is the election of an alternate to succeed Dr. F. Gregory Connell. Dr. Ralph M. Carter has been nominated by the Nominating Committee.

Dr. Peterson (Sun Prairie): I nominate Dr. Stephen E. Gavin as alternate to the American Medical Association.

Dr. Redelings: I am pleased to second that nomination.

Speaker Gundersen: Dr. Gavin has been nominated. Are there any further nominations?

Dr. Schneiders: I move the nominations be closed.

. . . The motion was seconded by Dr. Powers, of Milwaukee and carried . . .

Secretary Crownhart: We will proceed with the voting.

Dr. Sargent: As I understand, the alternate delegates to the American Medical Association are specific. One alternate is assigned for one delegate. May I ask what the Chair proposes in the way of a vote? Does he propose to take the two highest of the three names?

Secretary Crownhart: We have two names for one position as alternate delegate. The nominees are Dr. Ralph M. Carter of Green Bay and Dr. Stephen E. Gavin, of Fond du Lac.

. . . Vote was taken . . .

Secretary Crownhart: There were forty-four votes cast. Dr. Gavin received forty and Dr. Carter four.

Speaker Gundersen: The Chair declares Dr. Gavin elected.

Dr. Schneiders: I move that the Secretary cast the unanimous ballot in favor of Dr. Gavin.

. . . The motion was seconded by Dr. Ovitz, and carried . . .

Secretary Crownhart: The Secretary is happy to cast such a ballot.

Speaker Gundersen: The next order of business is the election of an alternate to the American Medical Association to succeed Dr. Nuzum, of Janesville. Dr. Seeger has been nominated.

Dr. Peterson: I move the nominations be closed and the Secretary cast the unanimous ballot of this House of Delegates for Dr. Seeger.

. . . The motion was seconded by Dr. Powers and carried . . .

Secretary Crownhart: The Secretary is happy to cast the ballot accordingly.

Speaker Gundersen: The next order of business is selection of the 1935 meeting place.

The Committee on Nominations has recommended that Milwaukee be selected as the meeting place for 1935.

Dr. Mauermann: I move that the invitation of the city of Milwaukee be accepted.

. . . The motion was seconded by Dr. Schneiders, of Madison, and carried . . .

Speaker Gundersen: That clears the business on the Secretary's desk. Will the committee now escort Dr. Carter to the platform?

. . . Dr. Carter was escorted to the platform, with applause from the audience . . .

President-Elect Carter: Gentlemen, I want to say this comes as a pleasant and overwhelming surprise to me. I meant what I said on the floor a few minutes ago, but that is water over the dam. I wish to

thank you and shall do all in my power to promote the best interests of this Society, and trust I shall have the cooperation and support of every member. (Applause)

Speaker Gundersen: Is there any further business to come before this meeting?

MEDICAL ECONOMICS ESSAY

Dr. Schneiders (Madison): I do not know whether this suggestion comes under the head of new business, but the thought came to me, in view of the fact we are all confronted with the difficulties pertaining to the economic phase of the practice of medicine, that the House of Delegates might recommend or pass a resolution empowering the State Medical Society to offer an award to be paid to the doctor who is a bona fide member of this Society, who would submit to the Council a paper on the economic phase of medicine.

Let these papers be submitted and let the individual who submits the best paper pertaining to the economic phase of medicine receive recognition, whatever we decide should be that recognition, and let that paper be read in the general assembly, occupying one of the positions of honor in that general assembly at the next meeting of the State Medical Society.

I believe we are not paying enough attention to the economic phase of the practice of medicine.

I move the adoption of that recommendation.

. . . The motion was seconded by Dr. Peterson, of Sun Prairie . . .

Secretary Crownhart: Do you wish to specify the amount, Dr. Schneiders?

Dr. Schneiders: I think that should be left to the judgment of the Council.

Secretary Crownhart: The motion is, Mr. Speaker, that the Council offer a prize for competition among members of this Society for papers on the subject of the economic phase of the practice of medicine. The exact subject may be worded a little differently but that conveys the thought.

Dr. Schneiders: That the Council be the body to decide which paper should receive first prize.

Secretary Crownhart: The Council to decide the winner of the contest. The papers worthy of such award to be printed in the Journal.

Dr. Schneiders: The paper so presented to be read before the general assembly, and it be one of the papers of honor at the general assembly.

. . . The motion was carried . . .

Speaker Gundersen: Is there any further business to come before the meeting?

Dr. Adams: I move the meeting adjourn.

. . . The motion was seconded and carried and the meeting adjourned at ten a. m. . . .

Adjournment Sine Die

Minutes of the Council

Northland Hotel, Green Bay

1ST SESSION—TUESDAY, SEPT. 11, 1934

1. Roll Call. The Council was called to order by the Chairman at 10:00 A. M. Roll call showed the following present: Councilors Beebe, Blumenthal, Cunningham, Duer, Gavin, Harper, Heidner, Johnson, Pope, Rogers, Schiek and Smith; President Seeger, President-Elect O'Leary, Treasurer Sleyster, Speaker Carter and the Secretary. A telegram was read by the Secretary explaining that Councilor Stang was in an Eau Claire hospital following an operation.

2. **Approval of Minutes.** It was moved by Blumenthal–Smith that the minutes of the last meeting as published in the Wisconsin Medical Journal be approved. Carried.

3. **Honorary Membership.** Upon recommendation of the La Crosse County Medical Society it was moved by Gavin–Johnson that Dr. Daniel S. MacArthur, La Crosse, be elected to honorary membership. It was cited that Dr. MacArthur was born in 1859, graduated from Rush in 1884, has been a member of the La Crosse County Medical Society continuously since 1884, is presently retired from practice and has been elected an honorary member of the County Medical Society. Motion carried unanimously.

4. **Care of Epileptic Children.** At the last meeting of the Council it considered the recommendation of Dr. C. A. Dawson, Chairman of the Committee on Veterans' Relations, River Falls, that the State Medical Society advocate the erection of a State School for Epileptic Children. The Council referred this suggestion to the Milwaukee Neuro-Psychiatric Society (whose membership is state-wide), with the request that they consider the subject matter and report their findings and recommendations to the Council. The report of the Society follows:

"August 9, 1934.

"The Council of the State Medical Society

"Madison, Wisconsin

"Gentlemen:

"Pursuant to the request of your executive committee, we, the undersigned, were appointed a committee of the Milwaukee Neuro-Psychiatric Society to study the question of schools for epileptics in this state, with instructions to report to you direct.

"This question opens a wide field, including that of colonization of epileptics and of the present methods of caring for the mentally deficient. There are so many points of contact between the two classes that it is practically impossible to consider either group separately.

"At present there are sixty-five (65) state schools for mentally defectives and eleven (11)

state schools and colonies for epileptics in the United States. The former with a total population of 65,944 and 10,060 in the latter. The former as a rule accept both; mentally defectives and epileptics.

"According to available statistics there are six cities that have special classes for epileptics with a very small attendance.

"In Milwaukee mentally normal epileptic children who have attacks so frequently that they cannot attend the regular schools are taught at their homes by home teachers under the direction of the school board.

"A questionnaire was sent out to each one of the eleven colonies for epileptics and one to Woodward, Iowa, where they have an institution with two divisions: one for epileptics and the other for feebleminded, under one management. We received replies from nine institutions.

"These replies appear to indicate that thought on education of epileptics has not yet crystallized to the point that any one system of education appears to be generally acceptable or feasible in the different states and that therefore it appears advisable for this state to develop its own general plan on which it is to proceed.

"From our studies and from the statistics available it would appear that special state schools for teaching mentally normal epileptic children only, will not be a success, at least for a long time to come.

"With the ever increasing demands being made upon the public treasury for the care of various classes it is impossible to ignore this phase of the question; in other words whatever plan is suggested must be practical and economical.

"Over forty years ago one of us, (Dr. W. F. Wegge), at the suggestion of the then Board of Control made a study of the subject and as a result a bill was presented before the legislature having for its purpose provision for the feebleminded and epileptics. The bill was passed by the legislature but was vetoed by the then governor.

"The plan then suggested to the Board of Control was briefly about as follows: A large tract of land (over 1,000 acres) was to be purchased. On this tract of land and at its center was to be placed the administration group with such other buildings as might be required for hospital and purely custodial care for feebleminded and epileptics requiring such special care.

"At one extremity of the tract was to be placed the group for the feebleminded and at the other the colony for epileptics, having due regard for the segregation of the sexes in all three groups of buildings, all to be under one management.

"The thought behind this plan was to provide both classes with adequate facilities; keep them separated as far as required and economy of administration.

"There were a number of other considerations, among them that, inasmuch as a state with a growing population such as this, other like institutions would be required in the course of time; and all should be placed as accessibly as possible to the homes of the prospective inmates from different sections of the state.

"With reference to educational facilities to be supplied, the Iowa plan, which provides school facilities for both classes together at its institution at Woodward might be adopted; or a separate school for each class could be provided if deemed advisable.

"It is suggested that the institution at Union Grove, which is comparatively small, might be enlarged by increasing the size of the tract of land and the colony for epileptics on the cottage plan be placed on one end of the tract.

Respectfully submitted,
WM. F. WEGGE, M. D., *Chairman*,
H. W. POWERS, M. D.,
R. A. JEFFERSON, M. D.,
MICHAEL KASAK, M. D.,
JOHN L. GARVEY, M. D."

WFW/LP

It was moved by Harper–Heidner that the following resolution be adopted and referred to the House of Delegates:

WHEREAS, There is no suitable provision for the care and treatment of epileptic cases in this state, and

WHEREAS, Many other states have made such provisions;

Therefore, be it resolved, That the Council recommend to the Committee on Public Policy that they urge on the Board of Control and Legislature the need of legislation to the end that special provision be made for the proper care, treatment, and education of epileptics in this state.

Motion carried.

5. **Annual Audit.** The Audit Committee of the Council (Councilors Smith, Blumenthal and Pope) reported that they had reviewed the audits of Mr. Crownhart as Secretary and as Managing Editor, and of Dr. Rock Sleyster as Treasurer. It reported its unanimous recommendation that these audits for the calendar year of 1933 be accepted by the Council. It was moved by Gavin–Cunningham that the report of the Audit Committee and the audits be so accepted. Carried.

6. **Inter-Professional Relationship.** The Secretary reported that Professor Ralph W. Clark, of the University of Wisconsin, Secretary of the Wisconsin Pharmaceutical Association and Chairman of a Committee of the Association on Inter-Professional Relationship, requested the appointment of a similar committee from the State Medical Society. It was moved by Blumenthal–Cunningham that the subject

matter be referred to the Committee on Public Policy but that no action respecting policy be adopted without approval of the Council. Carried.

7. **Committee on Mental Hygiene.** A communication was read from the Board of Directors of the Medical Society of Milwaukee County reporting that they had formulated a Committee on Mental Hygiene and suggesting that inasmuch as the work of the Committee and its interests were state-wide rather than local, the Council make this Committee its own to represent the State organization rather than but one of its fifty-one component societies. The Secretary reported that the composition of the Milwaukee Committee was Dr. A. I. Rosenberger, Chairman; Dr. Rock Sleyster, Dr. John L. Garvey, Dr. H. W. Powers, and Dr. R. A. Jefferson. He further stated that the purpose of the Committee is "to determine the status of the mental hygiene program in Wisconsin as well as the facilities now available for care of mental patients in state and county institutions", and to make recommendations concerning any legislation proposed on this subject. It was moved by Pope–Blumenthal that the Council designate this Committee as the Committee of the Council and that it be requested to make a preliminary report to the Council at its January meeting. Carried.

8. **Sickness Insurance.** The Secretary made a statement concerning the present status of proposals concerned with the subject of sickness insurance.

9. **Telegram to Dr. Stang.** It was moved by Smith–Harper that the Secretary forward at once a wire to Councilor Stang expressing the sympathy of the Council in his illness and their sincere wishes that his recovery may be speedy. Carried.

10. **Disease Prevention Program.** President Seeger and the Secretary reported in detail to the Council on the present status of the project looking towards a more active participation of the profession in public health effort. At the conclusion of the 30-minute report the Secretary presented the following tentative resolution:

"WHEREAS, It is the considered opinion of the Council and officers of the State Medical Society of Wisconsin that a more active participation of the membership of the Society in the field of disease prevention will be to the outstanding and mutual advantage of the people of this state and the physicians who serve them; and

"WHEREAS, The accomplishment of this project requires not only the determination of the organized profession but, as important, the cooperation of interested and influential laymen throughout the state; therefore

"It is the recommendation of the Council that the House give its most serious consideration to the following suggested resolution:

"*Resolved*, That the House of Delegates in the interest of promoting public health in this state, does hereby authorize the Council to create a liaison body of laymen whose function it shall be to work with the organized profession in furthering the application of well-known principles of preventive medicine throughout the state.

"For the purpose of perfecting such an organization, the Council is authorized to proceed as, in its judgment it may seem wise, having in mind the following recommendation of this House:

"1. That the Council of the State Medical Society of Wisconsin remain in perpetuity the governing body of the liaison association.

"2. That officers of the liaison group shall be selected by the Council.

"3. That the membership fee of the group shall be that as determined by the Council, as well as its Constitution, By-Laws, and specific objectives.

"4. The Council is authorized by this House to appropriate from the general fund or surplus of the Society such an amount as in its judgment shall be considered necessary in bringing about the establishment of the original membership to the liaison group.

"5. Membership within the group shall at all times depend upon election by the Council."

Following a discussion in which all present participated it was moved by Duer–Cunningham that the Secretary report the resolution to the House of Delegates with the full approval and recommendation of the Council. Carried unanimously.

11. **Advertising for the Journal.** At the request of the Editorial Board the Council considered the question of accepting liquor advertising in the Wisconsin Medical Journal. The Secretary reported that a mail ballot failed to provide a sufficient number of votes to determine the question. After general discussion it was moved by Cunningham–Beebe that the question be laid on the table. Carried.

12. **State Board of Control.** The Secretary reported that Dr. George F. Adams, Kenosha, delegate of the Kenosha County Medical Society, recommends to the Council that in the name of the Society it offer its services and advice to the Governor in reorganizing Wisconsin's service under the State Board of Control. Following an extended discussion it was moved by Cunningham–Blumenthal that the subject matter be laid on the table. Carried.

13. **Public Health Program Contacts.** Treasurer Sleyster presented the following resolution for consideration of the Council:

"WHEREAS, The program for disease prevention in Wisconsin could be better promoted by closer working relationship between the State Board of Health and the medical profession of the state; and

"WHEREAS, There is need of full-time contact service between the State Board of Health and the medical profession; and

"WHEREAS, The present budget of the State Board of Health does not provide for this service; now therefore be it

"*Resolved*, That the State Medical Society of Wisconsin, in session at Green Bay, Wisconsin, offers to the people of the state its full cooperation with the State Board of Health in its program of disease prevention; and be it further

"*Resolved*, That the State Medical Society of Wisconsin request the coming legislature to provide for the State Board of Health such funds as may be necessary to establish a contact service between the profession and the Board, to make more effective the cooperation of the profession, and to provide a more active participation of the physician in carrying out the approved health measures of the board."

It was moved by Cunningham–Schiek that the resolution be referred to the House of Delegates with the approval and recommendation of the Council.

Luncheon Recess

14. **Appeal from Decision of Editorial Board.** The Council re-convened at 2:00 P. M. to hear an appeal from the decision of the Editorial Board in which the constitutional penalty was invoked against two members for causing a paper presented before the Annual Meeting of the State Medical Society to be published in a journal other than the Wisconsin Medical Journal. It was pointed out that the penalty was forfeiture of the right to appear on any Annual Meeting program for a period of five years. Miss Galvin, stenotype reporter of Chicago, was present to take a complete stenotype report of the proceedings concerning this and following appeals.

The Council withheld decision in order to hear additional witnesses.

15. **Second Appeal.** The Council next considered an appeal from a decision of a constituent County Medical Society, holding that members on a hospital staff within their jurisdiction had not violated the principles of medical ethics in adopting a resolution and subsequently a new by-law which provided that no member of the staff might attend cases in any other hospital unless it were one receiving the approval of the American College of Surgeons. After a long hearing, the Council withheld decision in order to hear additional witnesses.

16. **Third Appeal.** The Council heard an appeal concerning one whose application for membership in a constituent medical society had been rejected. After examining all documents in the case and hearing statements from the Councilor from the district involved, it was the decision of the Council that the action of the County Society be sustained and the appeal dismissed for lack of jurisdiction. Carried unanimously.

2D SESSION OF THE COUNCIL

Northland Hotel, Green Bay

Sept. 12, 1934

1. **Roll Call.** The Council was called to order at 12:00 noon, Wednesday, Sept. 12, by Chairman Rogers. Roll call disclosed the following present: Councilors Beebe, Blumenthal, Cunningham, Duer, Gavin, Johnson, Pope, Rogers, Schiek; President Seeger, President-Elect O'Leary, Treasurer Sleyster, Speaker Carter, Vice-Speaker Gundersen, the Secretary, and retiring Councilors Harper and Heidner. The Secretary explained that he had been in communication with Dr. Stang at Eau Claire and had ascertained that he was making fine recovery; that Councilor Smith was absent from the day's session by reason of a death in the family.

2. **Appeal from Editorial Board.** The Council proceeded to hear, with the stenotype reporter present, an additional witness concerning the appeal from the Editorial Board.

It was the unanimous decision of the Council that the action of the Board be sustained.

3. **Appeal on Hospital Ruling.** The Council had as its guest the chairman of the executive staff of the hospital concerned in its second appeal of Tuesday. It was moved by Cunningham–Heidner that the Secretary advise the County Medical Society concerned that Section 7 of the hospital contract with staff physicians in its present form does not conform to the principles of medical ethics of the American Medical Association in that it denies to staff members the right to give first aid to patients in need of first aid no matter where they may be situated at the time such service is required. Second, it was the suggestion and request of the Council that the County Society concerned secure a modification of the section to permit of such first aid treatment. Carried unanimously.

The Council adjourned at 5:00 P. M.

3D SESSION OF THE COUNCIL

Northland Hotel, Green Bay

Sept. 13, 1934

1. **Roll Call.** The Council was called to order at 12:00 noon by Chairman Rogers and the roll call disclosed the following present: Councilors Beebe, Blumenthal, Cunningham, Duer, Gavin, Johnson, Pope, Rogers, Schiek, Smith and Gleason; president Seeger, Treasurer Sleyster, Speaker Carter, the Secretary, and retiring Councilors Harper and Heidner.

2. **Appropriation.** The Secretary reported that the House of Delegates had adopted the resolution of the Council concerning the creation of a liaison organization. It was moved by Cunningham–Pope that the Secretary be authorized to expend up to $500 in order to perfect the procedure of organization. Carried.

3. **State Health Officer.** It was moved by Cunningham–Rogers that the State Health Officer be invited to attend subsequent meetings of the Council. Carried.

4. **Illegal Practice.** A general discussion was had concerning illegal practices under the laws governing who may treat the sick.

The Council adjourned sine die at 3:00 P. M.

J. G. Crownhart,
Secretary of the Council.

Approved:

Arthur W. Rogers, M. D.,
Chairman of the Council.

Officers—Committees, State Medical Society of Wisconsin

Elected by House of Delegates: President, president-elect, speaker, vice-speaker, and councilors. Elected by Council: Secretary and Treasurer. Appointed by president-elect: One member on each standing committee to serve a three-year term.

President:
Thomas J. O'Leary, Superior__Sept., 1935

President-Elect:
Ralph M. Carter, Green Bay__Sept., 1935

Secretary:
J. G. Crownhart, Madison____Jan., 1935

Treasurer:
Rock Sleyster, Wauwatosa____Jan., 1935

Speaker:
Gunnar Gundersen, La Crosse_Sept., 1935

Vice-Speaker:
James C. Sargent, Milwaukee_Sept., 1935

Delegates to American Medical Association:
J. Gurney Taylor, Milwaukee_Sept., 1936
W. E. Bannen, La Crosse_____Sept., 1936
Joseph F. Smith, Wausau____Sept., 1935

Alternate Delegates:
S. J. Seeger, Milwaukee_____Sept., 1936
S. E. Gavin, Fond du Lac_____Sept., 1936
M. D. Bird, Marinette_____Sept., 1935

COUNCILORS

First: Dodge, Jefferson, Waukesha County Societies. *A. W. Rogers,* Oconomowoc, 1936.

Second: Kenosha, Racine, Walworth County Societies. *Frank W. Pope,* Racine, 1936.

Third: Dane, Columbia, Green, Rock, Sauk County Societies. *Joseph Dean,* Madison, 1937.

Fourth: Crawford, Grant, Iowa, Lafayette, Richland County Societies. *W. Cunningham,* Platteville, 1937.

Fifth: Calumet, Manitowoc, Sheboygan, Washington–Ozaukee County Societies. *C. M. Gleason,* Manitowoc, 1937.

Sixth: Brown–Kewaunee–Door, Outagamie, Fond du Lac, Winnebago County Societies. *S. E. Gavin,* Fond du Lac, 1937.

Seventh: Juneau, La Crosse, Monroe, Trempealeau–Jackson–Buffalo, Vernon County Societies. *S. D. Beebe,* Sparta, 1935.

Eighth: Marinette–Florence, Oconto, Shawano County Societies. *G. R. Duer,* Marinette, 1935.

Ninth: Clark, Green Lake–Waushara–Adams, Lincoln, Marathon, Portage, Waupaca, Wood County Societies. *Joseph F. Smith,* Wausau, 1935.

Tenth: Barron–Washburn–Sawyer–Burnett, Polk, Chippewa, Eau Claire, Dunn–Pepin, Pierce–St. Croix, Rusk County Societies. *H. M. Stang,* Eau Claire, 1935.

Eleventh: Ashland–Bayfield–Iron, Douglas County Societies. *F. G. Johnson,* Iron

Twelfth: Medical Society of Milwaukee County. *R. W. Blumenthal,* Milwaukee, 1936.

Thirteenth: Forest, Oneida–Vilas, Langlade, Price–Taylor County Societies. *I. E. Schiek,* Rhinelander, 1935.

STANDING COMMITTEES

1. *The Committee on Scientific Work:*
   John O. Dieterle, Chm., Milwaukee, 1937
   Arnold S. Jackson, Madison, 1936
   Wenzel Wochos, Kewaunee, 1935

2. *The Committee on Public Policy:*
   R. H. Jackson, Chm., Madison, 1937
   S. E. Gavin, Fond du Lac, 1935
   Dexter H. Witte, Milwaukee, 1937
   President, President-Elect, Secretary, ex officio

3. *The Editorial Board:*
   G. H. Ewell, Chm., Madison, 1935
   Oscar Lotz, Milwaukee, 1936
   F. Gregory Connell, Oshkosh, 1937

4. *The Committee on Medical Defense:*
   H. P. Bowen, Chm., Watertown, 1937
   A. J. Patek, Milwaukee, Secretary
   E. G. Ovitz, Laona, 1935

5. *The Committee on Medical Education and Hospitals:*
   J. W. Prentice, Chm., Ashland, 1937
   F. D. Murphy, Milwaukee, 1936
   C. R. Bardeen, Madison, 1935

6. *The Committee on Medical Economics:*
   P. A. Fox, Chm., Beloit, 1937
   R. G. Arveson, Frederic, 1936
   W. G. Riopelle, Beaver Dam, 1935
7. *The Committee on Health and Public Instruction:*
   C. H. Christiansen, Chm., Superior, 1937
   R. W. Blumenthal, Milwaukee, 1936
   W. G. Sexton, Marshfield, 1935
8. *The Committee on Necrology:*
   Councilors and Secretary
9. *The Cancer Committee:*
   W. D. Stovall, Chm., Madison, 1937
   D. L. Dawson, Rice Lake, 1935
   R. L. MacCornack, Whitehall, 1935
   C. G. Richards, Kenosha, 1935
   F. Eigenberger, Sheboygan, 1937
   F. Gregory Connell, Oshkosh, 1936
   W. E. Ground, Superior, 1936
   Paul Doege, Marshfield, 1937
   F. B. McMahon, Milwaukee, 1937
   G. R. Duer, Marinette, 1936
   J. F. Wilkinson, Oconomowoc, 1936
   G. Benson, Richland Center, 1935
   G. E. Moore, Antigo, 1935
10. *The Committee on Coordination of Medical Services:*
    F. E. Butler, Chm., Menomonie, 1937
    S. E. Gavin, Fond du Lac, 1936
    J. F. Smith, Wausau, 1935
    President
    The Secretary, ex officio

SPECIAL COMMITTEES

11. *The Special Committee on Child Health and Protection:*
    R. W. Blumenthal, Chm., Milwaukee
    A. B. Schwartz, Milwaukee
    F. E. Drew, Milwaukee
    J. B. Vedder, Marshfield
    F. G. Anderson, Eau Claire
    H. A. Sincock, Superior
    President and Secretary, ex officio
12. *The Committee on Medical Care for Veterans:*
    C. A. Dawson, River Falls
    Otho A. Fiedler, Sheboygan
    E. J. Barrett, Sheboygan
13. *The Committee on Medical History:*
    F. Gregory Connell, Chm., Oshkosh

COMMITTEES OF COUNCIL

14. *The Committee on Mental Hygiene:*
    A. I. Rosenberger, Chm., Milwaukee
    Rock Sleyster, Wauwatosa
    John L. Garvey, Milwaukee
    H. W. Powers, Milwaukee
    R. A. Jefferson, Milwaukee
15. *The Executive Committee of the Council:*
    President
    Chairman of the Council
    Treasurer
    Secretary
    S. E. Gavin, Fond du Lac
    R. W. Blumenthal, Milwaukee
16. *The Advisory Committee to the Woman's Auxiliary:*
    A. W. Rogers, Oconomowoc, 1937
    Rock Sleyster, Wauwatosa, 1936
    C. A. Harper, Madison, 1935
    President and Secretary, ex officio
17. *The Contact Committee for Wisconsin Anti-Tuberculosis Association:*
    J. F. Wilkinson, Chm., Oconomowoc, 1935
    H. M. Stang, Eau Claire, 1935
    Wilson Cunningham, Platteville, 1935

Increased Membership Reported for State Medical Society; 2,100 Reached in 1934

Abbotsford:
Shields, G. G.

Ableman:
McGonigle, B. E.

Abrams:
Faulds, R. C.

Adams:
Shapiro, Harry

Adell:
Bemis, Ira M.

Albany:
Blum, O. S.

Algoma:
Witcpalek, W. W.
Foshion, H. V.

Allenton:
Fisher, R. S.

Alma:
Larson, J. A.

Alma Center:
Griswold, G. W.

Almena:
Arneson, Thomas

Almond:
Meyer, M. W.

Amery:
Cornwall, W. B.

Antigo:
Bloor, E. G.
Donohue, M. J.
Dorzeski, E. F.
Flatley, M. A.
Lambert, J. W.
McKenna, E. A.
Moore, G. E.
Steffen, L. A.
Wright, J. C.
Zellmer, C. E.

Appleton:
Banister, E. B.
Benton, J. L.
Bolton, E. L.
Brooks, E. H.
Carlson, G. W.
Cooney, E. W.
Dehne, W. O.
Dohearty, F. P.
Frawley, W. J.
Gallaher, D. M.
Harrington, Wm. J.
Hegner, G. T.
Huberty, F. J.
Krueger, E. N.
Landis, R. V.
MacLaren, J. B.
Marshall, V. F.
McCarty, R. T.
McGrath, E. F.
Mielke, E. F.
Mills, N. P.
Neidhold, C. D.
Pardee, C. A.
Rector, A. E.
Reeve, J. S.
Ritchie, G. A.
Ryan, C. E.
Swanton, M. E.

Arcadia:
Comstock, E.
Palmer, J. A.
Skroch, J. P.
Weber, F. T.

Argyle:
Williams, W. B.

Arpin:
Stiles, W. W.

Ashland:
Andrus, A. D.
Dodd, J. M., Jr.
Dodd, J. M., Sr.
Grand, C. A.
Grigsby, R. O.
Hertzman, C. O.
Hosmer, M. S.
Kamm, A. X.
Prentice, J. W.
Smiles, C. J.
Tucker, W. J.
Weeks, F. D.
Young, M. L.

Athens:
Bachhuber, H. M.
Frick, Lewis

Augusta:
Prill, H. F.

Avoca:
Brillman, C. R.

Baldwin:
Kunny, B.
Swenson, G. B.

Balsam Lake:
Meilicke, W. A.

Bangor:
Ruppenthal, K. P.
Ward, M. W.

Baraboo:
Cahoon, Roger
Farnsworth, A. L.
Irwin, H. J.
McGrath, E.
Snyder, A. F.
Tryon, F. E.
Winslow, F. R.

Barron:
Coleman, H. M.
Post, C. C.
Ruethin, K. A.
Schlomovitz, H. H.
Smith, Russell C.

Barton:
Driessel, S. J.

Bayfield:
Robertson, M. J.
Shumate, J. K.

Bear Creek:
Morneau, L. F.

Beaver Dam:
Corso, Xavier
Hammond, A. W.
Hoyer, A. A.
Hoyer, G. H.
O'Hora, C. M.
Riopelle, W. G.
Roberts, R. R.
Rosenheimer, A. M.
Schoen, R. E.
Webb, E. P.
Welsch, J. M.

Belgium:
Huth, Elmore P.

Belleville:
Donlin, W. F.
Kammer, A. G.

Belmont:
Hubenthal, J. C.

Beloit:
Allen, Jessie P.
Allen, W. J.
Baldwin, R. M.
Brinckerhoff, F. E.
Brown, E. B.
Burger, H. E.
Crockett, W. W.
Delaney, H. O.
Flarity, T. H.
Fosse, B. O.
Fox, P. A.
Friend, L. J.
Friske, Oscar W.
Helm, H. M.
John, George W.
Kasten, H. E.
Keithley, J. W.
Lemmel, J. T.
Ottow, A. F.
Raube, H. A.
Shinnick, T. F.
Shearer, H. A.
Smith, C. E.
Thayer, F. A.
Thayer, R. A.
Vivian, R. S.
Wilson, R. F.
Zwaska, A. B.

Benton:
Leitzell, P. W.

Berlin:
Casper, S. L.
Ludwig, E. P.
Scott, B. E.
Wiesender, A. J.

Birchwood:
Ainsworth, H. H.

Birnamwood:
Primakow, Max J.

Black Creek:
Laird, J. J.

Black River Falls:
Krohn, Irwin
Krohn, Robert
Mannis, Harry

Blair:
Richards, R. R.

Blanchardville:
Stuessy, M. F.

Bloomer:
Clauson, C. T.
Fortner, W. H.
Hudek, D. F.
Trankle, H. M.

Bloomington:
Baldwin, F. H.
Glasier, M. B.
Harris, C. F.
McLaughlin, H. J.

Blue Mounds:
Bancroft, H. V.

Blue River:
Randall, M. W.

Bonduel:
Terlinden, J. H.

Boscobel:
Freymiller, E. F.
Hayman, C. S.
Spiegelberg, E. H.
Tuffley, F. S.

Brandon:
Guth, H. K.
Hull, H. H.

Brillion:
McComb, I. N.
Wagner, A. J.

Brodhead:
Darby, G. S.
Mitchell, E. J.
Ross, M. E.
Taylor, A. R.

Brooklyn:
Gray, Rodney J.

Brownsville:
Fuller, J. D.
Raymond, R. G.

Bruce:
Whalen, M. L.

Brule:
Woodford, L. M.

Burlington:
Bennett, J. F.
Fulton, W. A.
Prouty, W. A.

Cable:
Clark, Kate Kelsey

Cadott:
Zenner, C. E.

Cambria:
Ronneburger, E. O.
Williams, W. E.

Cambridge:
Amundson, K. K.
Bilstad, G. E.

Cameron:
Hoffman, E. F.

Campbellsport:
Guenther, O. F.
Hoffmann, L. A.

Casco:
Fencil, Y. J.
Kerscher, E. J.

Cashton:
Cremer, C. H.
Mauel, N. M.

Cassville:
Blackbourn, F. E.

Cato:
Kelley, J. M.

Cedarburg:
Blanchard, P. B.
Hurth, O. J.
Katz, H. M.
Warnshuis, G. J.

Cedar Grove:
Van Altena, L. A.
Voskuil, A.

Centuria:
Noyes, G. B.

Chaseburg:
Remer, W. H.

Chetek:
Adams, R. W.

Chilton:
Goggins, J. W.
Knauf, N. J.
Minahan, J. J.

Chippewa Falls:
Beier, A. L.
Field, Merton
Hatleberg, C. B.
Henske, W. C.
Kelly, J. A.
McCarty, E. O.
McHugh, F. T.
McRae, J. D.
Rodgers, Richard S.
Schwartz, R.
Somers, A. J.
Williams, S. E.

Clear Lake:
Campbell, L. A.
Nelson, A. N.

Cleveland:
Reinert, E. N.

Clinton:
Parker, A. S.
Thomas, W. O.

Clintonville:
Auld, Irving
Finney, W. H.
Miller, E. A.
Murphy, J. H.

Cochrane:
Meili, Emmett A.

Colby:
Christofferson, H. H
Schemmer, A. L.

Coleman:
Graner, L. H.

Colfax:
Cooper, C. A.
Felland, O. M.

Columbus:
Caldwell, H. M.
Cheli, C. F.
Frederick, A. J.
Mudroch, J. A.
Poser, E. M.
Schmeling, A. F.
Watson, E. L.

Coon Valley:
Solberg, A. A.

Cornell:
Foster, J. H. A.

Crandon:
Huth, Edgar W.
Ison, G. W.

Cross Plains:
Froggatt, W. E. L.

Cuba City:
Bair, F. M.
Donnell, J. E.

Cudahy:
Ackerman, J. S.
Fine, J. M.
Krueger, B.
Partridge, C. D.
Smith, H. S.

Cumberland:
Grinde, G. A.
Lund, S. O.
Thompson, R. C.

Dale:
Archer, W. E.

Dallas:
Simonson, S. W.

Darien:
O'Brien, H. N.

Darlington:
Orton, Susanne
Quinn, R. B.

Deerfield:
Hauge, H. L.

De Forest:
Bertrand, J. H.
Lehigh, R. W.

Delafield:
Barnes, H. T.

Delavan:
Bachelle, C. V.
Crowe, N. F.
Doughty, J. W.
Jacobson, T. L.
Kenney, H. J.
Warrick, J. D.
Wright, C. A.

Denmark:
Hager, F. J.
Schilling, H. J.
Vosburgh, W. H.

De Pere:
Kersten, N. M.
Lenfestey, J. P.

DeSoto:
Myrick, A. L.

Dodgeville:
Hagerup, T. A.
Hamilton, D. B.
Morton, H. H.
Reese, William
Walker, H. M.

Dorchester:
Foley, F. P.

Dousman:
Schneider, Hans

Dresser Jct.:
Addington, E. A.

Durand:
Schulberg, P. A.

Eagle River:
Oldfield, R. A. A.

East Troy:
Meany, S. G.
Mullen, R. A.
O'Leary, T. J.

Eau Claire:
Anderson, F. G.
Baird, J. C.
Beebe, G. W.
Cook, F. S.
Derge, H. F.
Falstad, C. H.
Flynn, L. H.
Fuson, H. S.
Haag, A. F.
Hayes, E. P.
Henke, Samuel L.
Hoyme, G.
Kinsman, F. C.
Kohl, Martha
LaBreck, F. A.
Manz, Walton
Mason, E. L.
Midelfart, H. C. U.
Mitchell, R. E.
Payne, A. L.
Scullard, G.
Seemann, W. O.
Spelbring, P. G.
Stang, H. M.
Stoland, I.
Tanner, J. W.
Tupper, E. E.
Werner, Nels
Werner, R. F.
Ziegler, J. E. B.

Eden:
Hardgrove, J. H.

Edgerton:
Cleary, B. L.
Morrison, W. W.
Shearer, A. T.
Shearer, F. E.
Sumner, W. C.

Elcho:
Dailey, P. J.

Eldorado:
Jackson, F. A.

Elkhart Lake:
Rothenmaier, G. L.

Elkhorn:
Herzog, J. V.
Ridgway, E. T.
Sorenson, E. D.

Ellsworth:
Nylander, E. G.

Elmwood:
Breed, A. L.

Elroy:
Ferguson, F. H.
Vogel, C. A.
Vogel, C. C.

Ephraim:
Sneeberger, W. A.

Ettrick:
Rogne, C. O.

Evansville:
Guilfoyle, J. P.
Smith, C. M.

Fairchild:
Gibson, H. V.

Fall Creek:
Zboralski, F. F.

Fall River:
Hunt, F. O.

Fennimore:
Bailey, M. A.
Howell, E. C.
Marsden, T. H.

Fond du Lac:
Alexander, W. S.
Borsack, K. X.
Boudry, M. O.
Boyd, G. T.
Devine, H. A.
Devine, J. C.
Finn, W. C.
Florin, A. C.
Folsom, W. H.
Gardner, L.
Gavin, S. E.
Helz, J. W.
Hutter, A. M.
Johnson, B. W.
Layton, O. M.
Leonard, C. W.
Longley, J. R.
McCabe, P. G.
Meiklejohn, D. V.
Mills, R. G.
Pawsat, E. H.
Pullen, A. J.
Rehorst, J. J.
Sharpe, H. R.
Sharpe, J. J.
Simon, L. J.
Smith, E. V.
Twohig, D. J.
Twohig, H. E.
Twohig, J. E.
Waffle, R. L.
Waldschmidt, W. J.
Walters, D. N.
Werner, H. C.
Wier, J. S.
Wiley, F. S.
Wojta, W. C.
Yockey, J. C.

Footville:
Harvey, J. R.

Forest Jct.:
Wollersheim, P. J.

Forestville:
Hirschboeck, J. G.

Ft. Atkinson:
Caswell, H. O.
Chase, Estelle S.
Franzel, J. E.
Gruesen, Frank A.
Hanson, O. H.
Majerus, P. J.
Morris, R. C.
Venning, J. R.
Young, Will

Fountain City:
Reinhardt, J. P.
Skemp, F. C.

Fox Lake:
Elliott, E. S.

Franksville:
O'Brien, G. M.

Frederic:
Andrews, W. C.
Arveson, R. G.
Diamond, J. A.

Friendship:
Treadwell, G. F.

Galesville:
Alvarez, R. L.
Jegi, H. A.
Younker, F. T.

Gays Mills:
Ackerman, E. T.

Genoa City:
Bill, B. J.
Zietlow, F. R.

Gillett:
Baldwin, L. H.
Berg, W. R.
Kingsbury, C. H.

Gilman:
Hable, A. P.

Glenbeulah:
Hansen, John

Glenwood City:
McMahon, A. E.

Grafton:
Balkwill, C. A.

Granton:
Rath, R. R.
Wink, R. H.

Green Bay:
Atkinson, H. S.
Bartran, W. H.
Buchanan, R. C.
Burdon, T. S.
Burns, Robert
Carter, R. M.
Charbonneau, A.
Chloupek, C. J.
Clifford, P. M.
Colignon, J. C.
Comee, William
Cowles, R. L.
Crikelair, F. L.
Decker, W. J.
Denys, G. F.
DelMarcelle, C. C.
Ford, W. W.
Fuller, M. H.
Gosin, D. F.
Gosin, F. J.
Hagerty, W. T.
Hendrickson, H.

Icks, Karl
Jordon, E. M.
Kelly, W. W.
Killins, W. A.
Kispert, R. W.
Knox, E. S.
Leaper, W. E.
Levitas, I. E.
McCarey, A. J.
McNevins, E. S.
Milson, Lewis
Minahan, J. R.
Minahan, P. R.
Minahan, R. E.
Mueller, W. E.
Nadeau, E. G.
Oliver, T. J.
Olmsted, A. O.
Quigley, L. D.
Robb, J. J.
Rose, Felix
Saunders, O. W.
Schmidt, E. S.
Senn, George
Shewalter, G. M.
Stauff, G. R.
Stiennon, O. A.
Tippet, W. P.
Troup, R. L.
Williamson, C. S.
Wolter, H. A.

Green Lake:
Baldwin, G. E.

Greenleaf:
Titel, E. A.

Gresham:
Litzen, Floyd L.

Hales Corners:
Johnson, A. W.
Pierce, D. F.
Wolf, R. C.

Hartford:
Hoffmann, J. G.
Lehmann, F. W.
Loughlin, T. F.
Monroe, M. E.
Sachse, F. W.

Hartland:
Grover, F. L.
Nixon, H. G. B.

Hawkins:
Baker, J. C.

Hayward:
Callaghan, D. H.
Krueger, E. R.
Rideout, M. E.

Hazel Green:
Fillbach, H. E.

Highland:
Erickson, M. T.

Hilbert:
Slaney, A. F.
Winkler, R. J.

Hillsboro:
Hansberry, P. H.
MacKechnie, R. S.

Hixton:
Petzke, E. A.

Holmen:
Hanson, L. E.

Horicon:
Karsten, J. H.

Hortonville:
Towne, W. H.

Hudson:
Livingstone, J. W.
Newton, J. E.

Hustisford:
Goetsch, O. F.
Panetti, P. A.

Independence:
Peterson, C. F.
Peterson, D. R.
Stack, G. F.

Iola:
Wilker, W. F.

Iron River:
Johnson, F. G.

Jackson:
Froede, Herbert E.

Janesville:
Bartels, G. W.
Baumgartner, M. M.
Binnewies, F. C.
Clark, W. T.
Cunningham, M. A.
Danforth, H. C.
Edden, R. W.
Farnsworth, F. B.
Farnsworth, R. W.
Fifield, G. W.
Frechette, F. M.
Freitag, S. A.
Hartman, E. C.
Hartman, R. C.
Johnson, W. L.
Klein, Theodore
Koch, V. W.
Kuegle, F. H.
Lapp, H. D.
McGuire, W. H.
Metcalf, G. S.
Munn, W. A.
Neupert, C. N.
Nuzum, T. O.
Nuzum, T. W.
Overton, O. V.
Pember, A. H.
Snodgrass, T. J.
Stevens, J. V.
Sutherland, F. E.
VanKirk, F. W.
Waufle, G. C.
Welch, F. B.

Jefferson:
Brewer, J. C.
Busse, A. A.
Garding, C. J.

Johnson Creek:
Wendt, F. A.

Juda:
Gifford, H. B.

Junction City:
Reis, G. W.

Juneau:
Heath, H. J.
Hebenstreit, A. J.

Kaukauna:
Bachhuber, A. E. Jr.
Boyd, C. D.
Flanagan, G. J.
Leigh, Albert
Skibba, J. P.

Kenosha:
Adams, G. F.
Andre, E. F.
Ashley, T. W.
Bennett, L. J.
Bennett, W. H.
Binnie, Helen A.
Bowing, I. E.
Cleary, J. H.
DeFazio, S. F.
Dobbins, Thos.
Gephart, C. H.
Good, Palmer W.
Graves, J. P.
Hastings, J. F.
Hill, B. S.
Keskey, G. I.
Lansdowne, F. B.
Lipman, W. H.
Lokvam, L. H.
Mayfield, A. L.
McCarthy, G. W.
Murphy, S. W.
Pechous, C. E.
Pifer, P. E.
Pirsch, M. V.
Randall, A. J.
Rauch, A. M.
Richards, C. G.
Riordan, J. F.
Ripley, H. M.
Rose, H. L.
Ruffolo, A. F.
Schlapik, A.
Schwartz, G. J.
Sokow, Theodore
Stewart, W. C.
Swarthout, E. F.
Thompson, G.
Ulrich, C. F.
Windesheim, G.

Kewaskum:
Edwards, R. G.
Hausmann, N. E.

Kewaunee:
Dana, D. B.
Dockry, L. E.
Wochos, F. J.
Wochos, W. M.

Kiel:
Knauf, F. P.
Nauth, D. F.

Kimberly:
Maes, C. G.

Knapp:
Sherman, R. V.

Kohler:
Cottingham, M. D.
Stein, C. C.

La Crosse:
Anderson, N. P.
Bannen, W. E.
Callahan, J. L.
Carlsson, E. S.
Douglas, F. A.
Eagan, R. L.
Egan, G. J.
Eidam, L. W.
Evans, J. A.
Flynn, R. E.
Gallagher, E. E.
Garrett-Bangsberg, S.
Gatterdam, P. C.
Gray, R. H.
Gundersen, A.
Gundersen, Alf
Gundersen, G.
Gundersen, S. B.
Harmon, J. C.
Henke, W. A.
Heraty, J. E.
Houck, Mary Piper
Jones, W. J.
Lueck, G. W.
Mast, B. W.
McGarty, M. A.
McLoone, J. E.
Moran, C. J.
Reay, G. D.
Reay, G. R.
Rosholt, J. A.
Roth, F. D.
Roth, J. A.
Simones, V. L.
Sivertson, M.
Skemp, A. A.
Skemp, G. E.
Smedal, E. A.
Smith, D. S.
Smith, E. C.
Swarthout, Edyth C.
Townsend, E. H., Jr.
Welsh, S. M.
Wolf, H. E.

Ladysmith:
Lundmark, L. M.
O'Connor, W. F.
Smith, Woodruff

Lake Geneva:
Downs, V. S.
Jeffers, D. H.
MacDonald, W. H.
Wheeler, Theodora

Lake Mills:
Eck, G. E.
Engsberg, W. A.
Leicht, Phillip
Peterson, M. G.

Lancaster:
Doolittle, S. W.
Fowler, J. H.
Glynn, James D.
Godfrey, Jos.
Godfrey, R. C.
Houghton, E. M.
Kraut, Elgie

Laona:
Busby, E. S.
Ovitz, E. G.

Larsen:
Henrichsen, J. A.

Lena:
Rose, J. F.

Little Chute:
Curtin, D. W.
Doyle, J. H.

Lodi:
Irwin, G. H.

Loganville:
Jewell, E. L.

Lomira:
Kosanke, F. E.

Lone Rock:
Newlove, F. E.

Luck:
Ries, T. O.

Madison:
Aageson, C. W.
Atwood, David
Bardeen, C. R.
Bleckwenn, W. J.
Boner, A. J.
Bowman, F. F.
Boyce, S. R.

Briggs, S. J.
Brindley, B. I.
Brown, E. J.
Bryan, A. W.
Buerki, R. C.
Bunting, C. H.
Burke, C. F.
Burns, R. E.
Caldwell, Ruth
Calvert, Charlotte
Campbell, R. E.
Canan, M. C.
Carns, Marie L.
Carter, H. M.
Chorlog, J. I.
Chorlog, J. K.
Cline, Frances A.
Cole, L. R.
Coluccy, M. J. J.
Cooksey, R. T.
Davis, F. A.
Dean, James P.
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Dimond, W. B.
Eiel, M. O.
Ellis, Ivan G.
Elsom, J. C.
Evans, J. S.
Ewell, G. H.
Fauerbach, L.
Fox, Philip R.
Gale, J. W.
Ganser, W. J.
Geist, F. D.
Gonce, J. E., Jr.
Greeley, H. P.
Greene, H. L.
Guilford, H. M.
Gundersen, C. A. S.
Harper, C. A.
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Harris, J. W.
Henika, G. W.
Hill, N. A.
Hurlbut, J. A.
Hyslop, V. B.
Jackson, Arnold
Jackson, J. A., Jr.
Jackson, R. H.
Johnson, H. Curtis
Juster, E. M.
Kay, H. M.
Keck, E. B.
Krehl, W. H.
Kundert, F. W.
Kurtz, C. M.
Lacke, C. L.
Lee, J. H.
Leonard, T. A. Jr.
Lindsay, W. T.
Littig, L. V.
Lorenz, W. F.
Lyght, C. E.
Marsden, W. H.
Marsh, H. E.
Masten, M. G.
McCarthy, J. J.
McCormick, S. A.
McGary, Lester
McIntosh, R. L.
Meade, F. S.
Meanwell, W. E.
Meyer, O. O.
Middleton, W. S.
Miller, W. J.
Montgomery, R. C.
Mowry, W. A.
Neff, E. E.
Nelson, O. O.
Nesbit, M. E.
Nesbit, W. M.
Newman, Robt.
Noer, R. J.
Paul, Lester W.
Pearson, C. R.
Pessin, S. B.
Pohle, E. A.
Puestow, K. L.
Purcell, H. E.
Quisling, A. A.
Quisling, G. D.
Quisling, R. A.
Quisling, Sverre
Reese, H. H.
Reineking, W. C.
Ritchie, Gorton
Roach, C. E.
Robbins, J. H.
Schmidt, E. R.
Schneiders, E. F.
Schubert, C. K.
Schwittay, A. M.
Sevringhaus, E. L.
Sheldon, W. H.
Shulak, Irving
Sisk, I. R.
Sisk, J. N.
Smith, K. W.
Sprague, L. V.
Stebbins, G. G.
Stebbins, W. W.
Stehr, A. C.
Stiehm, R. H.
Stovall, W. D.
Sullivan, A. G.
Sullivan, E. S.
Supernaw, Jack
Taylor, F. B.
Tenney, H. K.
Thomas, Norman G.
Thornton, M. J.
Tormey, A. R.
Tormey, T. W.
Van Riper, H. Edgar
Van Valzah, R.
Vingom, C. O.
Washburne, A. C.
Waters, Ralph M.
Wear, J. B.
Weiland, H. P.
Welke, E. G.
Werrell, W. A.
Weston, F. L.
Wheeler, Robert
Williams, D. L.
Winn, H. N.
Wirig, M. H.

Maiden Rock:
Hogan, John

Manawa:
Irvine, R. K.
Irvine, W. J.

Manitowoc:
Aldridge, H. W.
Andrews, M. P.
Ball, E. J.
Donohue, W. E.
Gleason, C. M.
Gregory, L. W.
Hammond, F. W.
Hammond, R. W.
Hoffman, G. M.
MacCollum, C. L. R
Meany, J. E.
Rees, Thomas H.
Schneck, Nathan
Shimek, A. J.
Steckbauer, J. W.
Strong, R. G.
Stueck, A. F.
Teitgen, Arthur
Turgasen, F. E.
Wall, Charles E.

Marathon:
Birnbaum, F. A.

Maribel:
May, J. H.

Marinette:
Berglund, S. A.
Bird, M. D.
Boren, C. H.
Boren, J. W.
Duer, G. R.
Jorgenson, H. L.
May, J. V.
Nadeau, A. T.
Pinegar, K. G.
Redelings, T. J.
Schroeder, H. F.
Shaw, Robert W.

Marion:
Mulvaney, F. M.
Van Schaick, R. E.

Markesan:
Blewett, M. T.
Pfisterer, F. W.

Marshfield:
Baldwin, R. S.
Boeckmann, F. A.
Copps, L. A.
Deitchman, M. M.
Doege, K. H.
Doege, P. F.
Hipke, Wm.
McCormick, G. L.
Millard, A. L.
Potter, R. P.
Schwarz, S. G.
Sexton, W. G.
Vedder, H. A.
Vedder, J. B.

Mattoon:
Partridge, O. F.

Mauston:
Hess, J. S., Jr.
Hess, J. S.

Mayville:
Bachhuber, A. E., Sr.
Bachhuber, F. G.

Mazomanie:
Schultz, I.

McFarland:
MacLachlan, W. G.

Medford:
Elvis, E. B.
Nystrum, L. E.
Nystrum, R. C.

Mellen:
Lockhart, C. W.

Melrose:
Lavine, I. H.

Menasha:
Corry, F. M.
Forkin, G. E.
Jensen, A. B.
Jensen, F. G.
O'Brien, P. T.

Mendota.
Green, M. K.
Sauthoff, Aug.

Menomonee Falls:
Burkhardt, E. W.
Domann, W. G.
Schloemer, A. J.

Menomonie:
Blosmo, O. J.
Butler, F. E.
Grannis, I. V.
Halgren, J. A.
Heising, A. F.
Long, D. T.
Lumsden, Wm.
Quilling, P. A.
Steves, B. J.

Merrill:
Akey, Harold M.
Austria, W. F.
Bayer, Lester J.
Bayer, W. H.
Hinckley, H. G.
Kelley, F. L.
Lane, Francis C.
Morris, K. A.
Ravn, Bjarne
Ravn, E. O.

Middleton:
Allen, C. F.

Milltown:
Nicholson, J. D.

Milton:
Crosley, G. E.

Milton Junction:
Coon, G. E.

Milwaukee:
Ackermann, Wm.
Adamkiewicz, J. J.
Allen, L. L.
Altenhofen, A. R.
Ansfield, D. J.
Augur, Alexander
Ausman, D. C.
Aylward, T. J.
Bach, E. C.
Bach, J. A.
Bach, M. J.
Bachus, A. C.
Baer, C. A.
Ballard, James A.
Baranowski, S. A.
Bardenwerper, H. E.
Bardes, Albert
Barnes, J. S.
Barrock, J. J.
Barta, E. F.
Barth, G. P.
Baugh, C. W.
Baum, E. L.
Baumann, A. J.
Baumgart, C. H.
Baumgarten, S.
Beckman, Harry
Beebe, C. S.
Belknap, E. L.
Bell, Peter
Benton, R. W.
Bentzein, E. W.
Bergen, R. D.
Bernhard, L. A.
Bernhart. E. L.
Bickler, E. P.
Biller, J. H.

Biller, S. E.
Birk, B. J.
Blair, J. F.
Blount, W. P.
Blumenthal, R. W.
Bodden, A. M.
Boerner, R. W.
Boley, M. H.
Bork, A. L.
Borman, M. C.
Bornstein, S. L.
Bourne, N. Warren
Brachman, L.
Brah, A. J.
Brehm, P. A.
Brey, P. F.
Brook, J. J.
Brooks, L. M.
Brown, G. V. I.
Brown, S. V. I.
Bruins, Dirk
Brumbaugh, E. V.
Brunkhorst, R. O.
Bruns, D. H.
Brussock, W. A.
Burbach, T. H.
Burnett, C. H.
Bussewitz, M. A.
Byrnes, M. B.
Caffrey, A. J.
Cahana, S.
Callan, P. L.
Cannon, H. J.
Carey, E. J.
Carhart, G. A.
Carl, E. E.
Carson, W. J.
Casper, W. T.
Cavaney, J. J.
Chapman, F. M.
Chapman, V. A.
Churchill, Bernard P.
Clasen, E. A.
Cleary, E. M.
Coffey, C. J.
Colgan, J. J.
Conroy, C. F.
Conway, J. P.
Cook, E. F.
Cook, Harold E.
Corcoran, C. J.
Coventry, W. D.
Cox, J. A.
Cron, R. S.
Crottier, C. J.
Currer, P. M.
Curtin, A. L.
Curtin, J. G.
Cushing-Lippitt, E.
Dallwig, H. C.
Dalton, R. J.
Darling, F. E.
Darling, W. S.
Davelaar, G. W.
Davis, Carl Henry
Dearholt, H. E.
Decker, H. G.
Demeter, N. D.
de Neveu, A. V.
De Nosaquo, N.
De Nosaquo, S.
Derse, Fabian R.
Dieterle, J. O.
Differt, C. C.
Doerr, August
Dorpat, Louis
Dorr, A. M.
Drew, Frank E.
Drexel, A.
Dries, Joseph
Dundon, J. R.
Dunker, G. O.
Dunn, C. F.
Durner, U. J.
Eberbach, C. W.
Echols, C. M.
Egan, W. J.
Eisenberg, E.
Eisenberg, J. J.
Eisenberg, L. A.
Eisenberg, P. J.
Elconin, D. V.
Enright, John A.
Enzer, Norbert
Epperson, P. S.
Epstein, Ely
Ernst, G. R.
Evans, C. A.
Evans, E. P.
Everts, E. L.
Falk, V. S.
Farrell, F. R.
Farrell, H. J.
Fechter, F. J.
Federspiel, M. N.
Fellman, G. H.
Fernan-Nunez, M.
Festerling, E. G.
Fetherston, J. P.
Fidler, Charles
Fitzgerald, Gilbert
Fitzgerald, R. E.
Fitzgibbon, Wm.
Fletcher, E. A.
Foerster, H. R.
Foerster, O. H.
Foley, L. J.
Ford, W. B.
Fortier, C. A. H.
Fox, George W.
Fox, M. J.
Fox, M. S.
Franklin, I.
Franklin, S. N.
Frey, P. G.
Frisch, R. A.
Froehlich, J. A.
Fuerstenau, L. A.
Gabor, M. E.
Gaenslen, F. J.
Gallogly, M. J.
Garens, R. W.
Garvey, J. L.
Gebhard, U. E.
Gendlin, N. A.
Gertenbach, E. O.
Gilchrist, R. T.
Gilmer, L. T.
Gingrass, R. P.
Goldberg, Nathan
Golley, P. M.
Gorder, Arne C.
Gordon, J. S.
Grab, J. A.
Gramling, E. H.
Gramling, H. J.
Gramling, J. J.
Gray, A. W.
Gray, W. K.
Greenberg, A. I.
Greenthal, R. M.
Griffith, J. C.
Grill, John
Grob, A. R. F.
Grosskopf, E.C.
Grossmann, L. L.
Grotjan, W. F.
Grove, W. E.
Gudex, V. A.
Guerin, L. H.
Gumerman, G. J.
Gute, E. B.
Guy, J. E.
Guzzetta, Denis
Guzzetta, M. M.
Habbe, J. E.
Habeck, E. A. W.
Hackett, J. H.
Haessler, Bertha T.
Haessler, F. H.
Hagerman, F. H.
Hake, C. B.
Hall, R. M.
Hankwitz, A. W.
Hankwitz, P. G.
Hannen, P. H.
Hansen, H. T.
Hansen, J. W.
Harder, H.
Hardgrove, T. J.
Hardy, C. F.
Hargarten, L. J.
Harlow, G. A.
Harper, C. W.
Harrington, E. T.
Harrington, T. L.
Haug, J. F.
Haushalter, H. P.
Haushalter, L. E.
Hawkins, H. M.
Healy, R. J. Jr.
Heeb, H. J.
Hefke, Hans W.
Heidner, F. C.
Heifetz, E. C.
Henes, E., Jr.
Heraty, J. A.
Herner, W. L.
Herschensohn, H. L.
Hertel, A. J.
Higgins, S. G.
Hiller, R. I.
Hipke, G. A.
Hipke, L. W.
Hitz, H. B.
Hitz, J. B.
Hoermann, B. A.
Hogue, G. I.
Holbrook, A. T.
Hood, A. J.
Horwitz, J. J.
Houghton, Wm.
Howard, T. J.
Hoyt, Geo. E.
Huber, H. H.
Hughes, J. R.
Hume, W. W.
Huston, John
Jackson, Edw.
Jacobson, E. B.
Jefferson, R. A.
Jekel, J. M.
Jenner, J. A.
Jensen, J. M. L.
Jermain, L. F.
Jermain, W. M.
Jobse, W. P.
Johnson, C. G.
Johnson, F.
Johnson, H. W.
Johnston, T. L.
Joseph, W. A.
Judge, T. A.
Jurss, C. D.
Kahn, Joseph
Kastner, A. L.
Kearns, W. M.
Kelly, G. F.
Kettelhut, E. J.
Kilian, A. D.
Kilkenny, G. S.
King, J. J.
King, J. M.
Kissinger, C. A.
Kissling, A. C.
Klein, J. T.
Kleinboehl, J. W.
Kleinhans, M. A.
Kleis, W. J.
Koch, M. J.
Koehler, J. P.
Kohn, S. E.
Korthals, F. J.
Kovacs, Arthur
Kozina, F. J.
Kretchmar, L. H.
Kristjanson, H. T.
Kritter, F. J.
Kriz, G. A.
Kriz-Hettwer, Rose
Krygier, A. A.
Krzysko, S. L.
Kuhn, H. J.
Kuhn, M. J.
Kult, A. J.
Kusterman, A. F.
Lademan, O. E.
Ladewig, A. W.
Ladewig, H. C.
Lahmann, A. H.
Lambeck, F. J.
Langjahr, A. R.
Lawler, T. S.
LeCron, W. L.
Lee, Paul A.
Leitch, G. W.
Lettenberger, J.
Lewis, Marian
Lieberman, Benj.
Liefert, W. C.
Light, George
Lillie, O. R.
Lippitt, S. H.
Lobedan, E. T.
Long, C. W.
Lotz, Oscar
Loughlin, D. M.
MacInnis, F. E.
MacKedon, W. L.
Mackoy, F. W.
MacRae, M. F.
Madison, F. W.
Madison, J. D.
Maercklein, O. W.
Malnekoff, B. J.
Malone, J. Y.
Margoles, F. C.
Marks, J. B.
Markson, S. M.
Marquardt, C. R.
Martens, W. A.
Martin, H. G.
Matthews, J. B.
McBeath, N. E.
McCabe, John
McCann, Edith

McCormick, T. F.
McDonald, C. F.
McDonald, R. E.
McGovern, J. J.
McKillip, W. J.
McMahon, F. B.
McMahon, H. O.
McMahon, J. P.
McNary, J. F.
McNaughton, W. T.
Megna, Salvatore
Mehigan, D. D.
Melster, W. H.
Mendeloff, H.
Mensing, E. H.
Merten, P. J.
Messmer, C.
Mieding, A. E.
Miller, E. W.
Miller, H. L.
Miner, H. B.
Mishoff, I. D.
Mitchell, S. R.
Mock, F. C.
Mollinger, S. M.
Molsberry, J. M.
Montgomery, A.
Morter, C. W.
Morter, R. E.
Morton, S. A.
Mueller, G. F. C.
Mulsow, J. E.
Munkwitz, F. H.
Murphy, F. D.
Murphy, J. A.
Murphy, W. J.
Natenshon, A. L.
Nebel, Harold
Neilson, G. W.
Nelson, J. D.
Nelson, W. V.
Niland, P. J.
Nolte, L. G.
Nugent, A. C.
Oakland, H. G.
Oberbreckling, P. E.
Oesterlin, E. J.
O'Hara, J. J.
O'Leary, E. B.
Olson, H. J.
O'Malley, T. S.
O'Malley, W. P.
Ozonoff, J. B.
Panetti, E. J.
Paschen, J. G.
Patek, A. J.
Pegram, J. W.
Pendergast, T. J.
Perlson, P. H.
Peterman, M. G.
Pfeffer, E. N.
Pfeifer, H. A.
Pfeil, R. C.
Pink, J. J.
Plahner, S.
Pleyte, A. A.
Podlasky, H. B.
Popp, Albert
Powers, H. W.
Powers, J. W.
Pugh, G. J.
Quade, R. H.
Quick, E. W.
Ragan, W. F.
Raine, Forrester
Raymond, A. J.
Regan, E. D.
Reinke, C. C.
Rettig, E. Henry
Reuter, M. J.
Rheineck, A. F.
Rice, E. M.
Rich, G. J.
Riehl, F. W.
Rikkers, D. F.
Roberts, D. W.
Robinson, H. P.
Rock, J. N.
Roethke, R. W.
Rogers, E. H.
Rogers, M. F.
Rolfs, T. H.
Rosenberger, A. I.
Ross, P. M.
Rueth, J. E.
Ruppenthal, A. J.
Ruschaupt, L. F.
Russell, F. G.
Russell, H. C.
Russell, R. J.
Ryan, W. A.
Sadoff, H. B.
Salinko, S. S.
Sander, O. A.
Sargent, J. C.
Savage, G. T.
Sayle, R. G.
Schade, R. E.
Schaefer, A. A.
Schelble, E. J.
Schiller, L.
Schlaepfer, K.
Schlomovitz, B. H.
Schlomovitz, E. H.
Schlueter, U. A.
Schmidt, H. G.
Schmidt, J. A.
Schmit, Felix
Schmit, Louis
Schneider, C. C.
Schneider, C. R.
Schoen, C. M.
Scholter, E. A. W.
Scholz, G. M.
Schoofs, O. P.
Schowalter, R. P.
Schuenzel, L. G. A.
Schulz, Irwin
Schumacher, H. S.
Schumm, H. C.
Schutte, A. G.
Schwartz, A. B.
Schweitzer, G. J.
Schweitzer, W. A.
Scollard, W. J.
Seeger, S. J.
Seegers, F. W.
Seelman, J. J.
Seiler, Elisabeth
Selle, F. S.
Senn, Ulrich
Sherwood, M. W.
Shutkin, Michael
Shutter, H. W.
Siekert, H. P.
Sifton, H. A.
Silbar, S. J.
Sivyer, A. W.
Slutzky, N.
Smith, E. A.
Smith, J. W.
Smith, L. D.
Smith, S. M.
Smuckler, R. H.
Spilberg, S. B.
Spitz, M. M.
Sproule, R. P.
Squier, T. L.
Stamm, L. P.
Stefanez, J. S.
Stern, W. P.
Stirn, F. J.
Stockinger, R. E.
Stratton, F. A.
Suhr, A. L.
Sullivan, G. A.
Sure, J. H.
Sweemer, W. M.
Sykes, H. D.
Szlapka, T. L.
Tabachnick, H.
Taylor, J. Gurney
Tegtmeyer, G. F.
Tharinger, E. L.
Thill, D. P.
Thill, G. E.
Thompson, E. X.
Thompson, F. A.
Thorndike, W.
Thranow, J. A.
Tillson, E. M.
Tisdale, L. C.
Tolan, T. L.
Truitt, J. W.
Tufts, M.
Turney, C. F.
Ulvin, H.
Urdan, B. E.
Van de Erve, W.
Vander Linde, L. A.
Wagner, P. C.
Waldeck, E. A.
Walker, L. J.
Wallschlaeger, G. G.
Warfield, L. M.
Warner, R. C.
Warschauer, B.
Washburn, R. G.
Washburn, W. H.
Wasielewski, F. S.
Watry, Theodore D.
Webb, H. E.
Weber, A. J.
Wegge, W. F.
Wegmann, N. J.
Weingart, W. F.
Wenn, J. F.
Wenstrand, D. E. W
Westhofen, R. C.
Wetzler, S. H.
Whalen, G. E.
Wieder, L. M.
Wiese, M. E. J.
Wiesen, R. P.
Wilets, J. B.
Witte, D. H.
Witte, W. C. F.
Yaffe, Aaron
Yanke, A. E.
Yates, J. L.
Zillmer, Helen J.
Zimmermann, C.
Zintek, S. S.
Zivnuska, J. F.
Zmyslony, W. P.
Zurheide, H. O.

Mineral Point:
Ludden, H. D.
Ridley, S. R.

Minong:
Hilliard, H. G.

Mishicot:
Skwor, C. J.

Mondovi:
Sharp, D. S.

Monroe:
Baumle, C. E.
Bear, N. E.
Bear, W. G.
Creasy, L. E.
Gnagi, W. B., Jr.
Gnagi, W. B.
Mauermann, J. F.
Moore, L. A.
Ruehlman, D. D.
Schindler, J. A.

Montello:
Federman, E. H.
McNamara, L. V.

Monticello:
Ohlsen, M. P.

Montreal:
Ringo, H. F.

Mosinee:
Butler, E. F.
Nuetzman, A. W.

Mount Calvary:
Baasen, J. M.

Mount Horeb:
Buckner, H. M.
Thompson, A. S.

Mukwonago:
Purdy, F. P.

Muscoda:
Filek, Allan

Neenah:
Brunckhorst, F. O.
Canavan, J. P.
Greenwood, S. D.
Ozanne, I. E.
Pitz, M. N.
Pratt, Geo. N.
Rogers, R. B.
Smith, T. D.
Williamson, G. H.

Neillsville:
Frank, J. H.
Housley, H. W.
Rosekrans, M. C.

Nekoosa:
Backus, O. A.
Pomainville, G. J.
Towne, R. L.

Nelsonville:
Raasoch, H.

New Auburn:
McCormick, H.

Newburg:
Weber, H. F.

New Franken:
Looze, J. A.

New Glarus:
Francois, S. J. A.
McQuillin, E. D.

New Holstein:
Engel, A. C.
Krohn, H. C.

New Lisbon:
Starnes, Brand

New London:
Monsted, J. W., Jr.
Pfeifer, F. J.
Slemmons, T. M.

New Richmond:
Armstrong, J. H.
Epley, O. H.

Newton:
Barnstein, C. H.

Niagara:
De Salvo, Francis
McCormack, Edw.

North Fond du Lac:
Naylen, F. J.

North Lake:
Donnelly, F. J.

Oconomowoc:
Clark, O. C.
Hassall, J. C.
Loughnan, A. J.
Love, G. R.
Nammacher, T. H.
Peters, H. A.
Rogers, A. W.
Stemper, I. G.
Wilkinson, D. C.
Wilkinson, J. D.
Wilkinson, J. F.
Wilkinson, M. R.
Wing, W. S.

Oconto:
Linger, E. A.
Ouellette, C. J.
Rogers, R. J.
Watkins, W. C.

Oconto Falls:
Goggins, R. J.
Krahn, G. W.
Ohswaldt, H. F.

Omro:
Fleury, F. D.
Schoenbechler, L. J.

Ontario:
Devine, G. C.

Oostburg:
Guy, Emmett F.

Oregon:
O'Brien, J. M.

Osceola:
Johnson, K. F.
Simenstad, L. O.

Oshkosh:
Beglinger, H. F.
Bitter, R. H.
Clark, Burton, Jr.
Combs, C. J.
Conley, J. M.
Connell, F. Gregory
Cummings, E. F.
Danforth, Q. H.
Dickelmann, L. E.
Ebert, R. O.
Haines, M. C.
Haubrick, H. J.
Helmes, L. O.
Hogan, J. M.
Hugo, D. G.
Kleinschmit, H. W.
Koehler, A. G.
Kronzer, J. J.
Linn, W. N.
Lockhart, J. W.
Lynch, G. V.
Meilicke, C. A.
Meusel, H. H.
Pfefferkorn, E. B.
Romberg, H. A
Schein, J. E.
Smith, L. M.
Smith, W. M.
Steele, G. A.
Stein, J. F.
Sutherland, J.
Wagner, W. A.
Wheeler, W. P.
Williams, E. B.

Osseo:
Knutson, O.
Leasum, R. N.

Owen:
Dike, B. H.

Oxford:
Ingersoll, R. S.

Palmyra:
Bertolaet, E. E.

Pardeeville:
Chandler, J.
Gillette, H. E.
Radl, Cyril J.

Park Falls:
Leahy, J. D.
Riley, E. A.

Pepin:
Belitz, A. E.
Brookie, R. W.

Peshtigo:
Haasl, H. W.

Pewaukee:
Egloff, L. W.

Phelps:
Lutz, James J.

Phillips:
Norviel, H. B.
Van Hecke, D. S.

Pittsville:
Beyer, Hart
Pomainville, H. G.

Plainfield:
Andrae, R. W.

Platteville:
Andrew, C. H.
Cunningham, Wilson
Schuldt, C. M.

Plymouth:
Brickbauer, A. J.
Deicher, H. F.
Meyer, R. C.
Mueller, J. F.
Radloff, A. C.
Sieker, A. W.

Portage:
Batty, A. J.
Bentley, J. E.
Gorton, F. T.
Henney, C. W.
MacGregor, J. W.
Meacher, B. C.
Schloemilch, A.
Snyder, K. A.
Taylor, W. A.
Tierney, E. F.

Port Washington:
Barr, Arnold
Drissen, W. H.

Potosi:
Kelly, Wm. J.

Pound:
Armstrong, G. E.

Poynette:
Dryer, R. B.
Focke, W. J.

Prairie du Chien:
Armstrong, C. A.
Kane, J. J.
Kleinpell, H. H.
Lechtenberg, E. H.
Satter, O. E.
Shapiro, H. L.
Sullivan, J. M.

Prairie du Sac:
Trautmann, M.

Prescott:
Dill, G. M.
Jones, L. E.

Princeton:
Mueller, G. G.

Pulaski:
Dupont, A. J.

Racine:
Albino, J. M.
Anderson, J.
Brehm, H. G.
Brehm, H. J.
Brehm, T. G.
Browne, C. F.
Buckley, W. E.
Chamness, G. C.
Christensen, F. C.
Constantine, C. E.
Corr, J. T.
Docter, John
Faber, S. J.
Fazen, L. E.
Hahn, C. K.
Hahn, Paul R.
Hanson, W. C.
Hemmingsen, T. C.
Henken, J. F.
Hogan, J. H.
Holmes, B. H.
Howe, H. W.
Jamieson, G. H.
Jamieson, R. D.
Jones, Beatrice O.
Jones, Susan
Keland, H. B.
Kline, C. L.
Konnak, Wm. F.
Kreul, R. W.
Kurten, R. M.
Lifschutz, L. M.
Lindner, A. M.
Marek, F. B.
Meachem, J. G.
Miller, H. C.
Nelson, A. L.
Northey, T. McK.
Peterson, R. O.
Pfeifer, E. C.
Pfeiffer, A. S.
Pfeiffer, O. W.
Pope, F. W.
Ross, G. L.
Roth, W. C.
Schacht, R. J.
Schaefer, C. O.
Schneller, E. J.
Schnetz, L. N.
Thackeray, R. C.
Thompson, I. F.
Tompach, E. L.
Von Buddenbrock, E.
Von Jarchow, B. L.
Wagner, N. B.
Walter, G. W.
Walters, H. G.
Wier, F. A.

Randolph:
Costello, W. H.
Jones, A. W.

Random Lake
Malloy, T. E.

Redgranite:
Dietrich, Carlisle

Reedsburg:
Booher, J. S.

Reedsville:
Cary, E. C.

Reeseville:
Bargholtz, W. E.

Rhinelander:
Bump, W. S.
Frisbie, R. L.
Packard, C. D.
Richards, C. A.
Schiek, I. E.
Weed, L. G.

Rib Lake:
Lapham, E. A.

Rice Lake:
Charron, T. A.
Dawson, D. L.
Knapp, E. J.
Rydell, W. B.
Sattre, O. M.
White, A. S.

Richland Center:
Benson, G. H.
Bowen, Charles
Coumbe, W. R.
Dull, C. F.
Edwards, W. C.
Pippin, B. I.
Sholtes, C. A.

Rio:
Maas, W. C.
Pease, W. A.

Ripon:
Eisele, P. L.
Johnson, J. M.
O'Neal, Orvil
Senn, C. U.

River Falls:
Cairns, Rolla
Davee, Chalmer
Dawson, C. A.
Gendron, A. E.
McJilton, C. E. J.

Rockbridge:
Hines, L. L.

Rosholt:
Dunn, R. H.

St. Cloud:
Werner, C. F.

St. Croix Falls:
Caldwell, H. C.
Riegel, J. A.

St. Nazianz:
Belson, H. J.

Salem:
Fletcher, W. T.

Sauk City:
Bachhuber, H. A.
Hudson, L. A.

Sawyer:
Konop, E. J.

Seymour:
Brusky, Alvin
Holz, A. P.
Sieb, L. H.

Sharon:
De Wire, M. V.
Fishback, C. F.
Hoffman, E.
Treat, C. R.

Shawano:
Cantwell, A. A.
Cantwell, R. C.
Peterson, L. W.
Schroeder, E. L.
Stubenvoll, C. E.

Sheboygan:
Barrett, E. J.
Bock, A. B. C.
Crum, H. V.
De Swarte, L. J.
Eigenberger, F.
Fiedler, Otho A.
Ford, W. A.
Genter, A. E.
Gunther, O. T.
Gunther, T. J.
Gunther, W. H.
Heiden, H. H.
Hildebrand, G. J.
Juckem, G. J.
Junck, J. A.
Knauf, A. J.
Knauf, G. E.
Kraft, Siegfried
Meier, Wm. G., Jr.
Nause, F. A.
Neumann, W. H.
Ryan, E. S.
Sonnenburg, C. N.
Squire, C. A.
Stannard, G. H.
Tasche, C. T.
Tasche, John Jr.
Tasche, J. C.
Tasche, Leslie W.
Van Zanten, Wesley
Van Zanten, Wm.
Wagner, R. F.
Weber, C. J.
Zaegel, R. L.

Sheboygan Falls:
Nichols, R. M.
Pfeiler, A. G.

Shell Lake:
Hering, E. R.

Shiocton:
LaCroix, G. M.

Shullsburg:
Gratiot, M. P.
Hoesley, H. F.

Silver Lake:
Becker, B. A.

Soldiers Grove:
McDowell, A. J.
Peterson, N. A.

Solon Springs:
Wilcox, A. G.

South Milwaukee:
Dempsey, G. P.
Rumph, C. L.
Sanford, J. A.
Schlossmann, B.
Sickels, W. A.

South Wayne:
Springberg, J. C.

Sparta:
Beebe, C. D.
Beebe, C. M.
Beebe, D. C.
Beebe, S. D.
Phalen, C. S.
Scantleton, J. M.
Williams, H. H.

Spencer:
Callahan, H. T.

Spooner:
Lemmer, G. N.

Spring Green:
Nee, Frank
Wahl, C. M.

Stanley:
Graber, R. E.
Overgard, A. W.

Starlake:
Gonzalez Ramirez, L.

Star Prairie:
Perrin, H. E.

Statesan:
Bulley, K. G.
Steinkopff, E. K.
Thompson, R. D.
Yoran, C. M.

Stevens Point:
Benn, H. P.
Coon, H. M.
Cowan, W. F.
Crosby, E. P.
Dunn, A. G.
Gramowski, W. A.
Gregory, W. W.
Hansen, Lester B.
Iber, Frank C.
Kidder, E. E.
Krembs, F. R.
Marrs, F. A.
Miller, S. R.
Rice, M. G.
Rice, R. W.
Sinaiko, A. A.
Southwick, F. A.
von Neupert, C.
Weller, E. A.
Wisiol, Erich

Stoughton:
Keenan, H. A.
Olson, A. L.
Smedal, A. T.

Sturgeon Bay:
Dorchester, D. E.
Egeland, G. R.
Huff, F. C.
Muehlhauser, J. O.

Sturtevant:
Peehn, F. G.

Sullivan:
Notbohm, W. R.

Sun Prairie:
McCabe, James M.
Peterson, L. W.
Wyant, M. E.

Superior:
Baird, John
Christiansen, C. H.
Conklin, G. H.
Ekblad, V. E.
Giesen, C. W.
Goodfellow, J. R.
Ground, W. E.
Hathaway, G. J.
Kyllo, A. L.
Kyllo, J. C.
Lohmiller, R. K.
McGill, J. W.
McGill, P. G.
Meyers, J. M.
Myers, E. A.
O'Leary, T. J.
Orchard, H. J.
Rollefson, C. J.
Sarazin, F. C.
Saunders, George
Schnell, W. H.
Searle, D. R.
Sincock, H. A.
Smith, R. C.
Wall, M. H.
Weisberg, J. H.
Wenzel, Anna M.
Zwickey, W. H.

Suring:
Dougherty, J. S.

Sussex:
Van Valin, E. C.

Taylor:
Crane, M. C.

Theresa:
Langenfeld, P. F.

Thiensville:
Carthaus, A. H. C.
Rock, J. W.
Scholz, H. F.

Thorp:
Kulig, A. H.
Neis, F. P.

Tigerton:
Gates, A. J.

Tomah:
Bell, A. R.
Scheurich, L. G.
Sheehy, T. J.
Vander Kamp, H.
Winter, A. E.

Tomahawk:
Baker, G. R.
Baker, R. G.
Henderson, R. J.
McCormick, W. C.

Turtle Lake:
Tanner, G. F.

Two Rivers:
Gates, Eugene
Martin, R. E.
Moriarty, L. J.
Rau, G. A.
Zlatnik, A. P.

Union Grove:
Atherton, C. C.
McCracken, R. W.
Schulz, Gordon J.

Valders:
Simenson, R. S.

Verona:
Sharpe, H. A.

Vesper:
Whitehorn, E. E.

Veterans' Administration:
Pretts, W. W.
Rhea, C. W.

Viola:
Parke, George

Viroqua:
Ludden, R. H.
Trowbridge, C. H.
Trowbridge, W. M.

Wabeno:
Tenley, Oscar S.

Waldo:
Richards, C. B.

Walworth:
Coon, W. W.
Richardson, W. C.

Warrens:
Bassuener, R. O.

Washburn:
Axley, A. A.

Waterford:
Malone, F. A.
Wigod, David

Waterloo:
Allen, S. C.
Dennis, J. F.
Fiebiger, G. J.

Watertown:
Abelman, T. C. H.
Becker, W. C.
Bowen, E. W.
Bowen, H. P.
Dierker, O. F.
Hahn, A. C.
Nickels, A. C.
Nowack, L. H.
Waite, W. S.
Wallner, A.
Zimmermann, F. H.

Waukesha:
Aplin, F. W.
Campbell, P. E.
Campbell, W. B.
Caples, B. M.
Christiansen, J.
Davies, R. E.
Edmondson C. C.
Gantz, H. A.
Harkness, G.
Hodgson, A. J.
Nicely, W. E.
Noble, J. B.
Oatway, W. H.
Peterson, G. E.
Scheele, F. M.
Tibbitts, U. J.
Waite, R. A.
Werra, M. J.
Williams, A. J.
Wood, C. A.
Woodhead, F. J.

Waunakee:
Shaw, B. W.

Waupaca:
Christofferson, P. J.
Elliott, R. S.
Patterson, L. G.
Salan, Sam
Wood, F. C.

Waupun:
Clark, F. T.
Deerhake, W. A.
Settle, R. O.
Swartz, K. A.

Wausau:
Addleman, I. M.
Boslough, A. W.
Bryant, J. R.
Christensen, H. H.
Doyle, J. N.
Eastman, V. E.
Fehland, H. R.
Fisher, R. F.
Flemming, E. E.
Frawley, R. M.
Freeman, J. M.
Frenzel, W. C.
Frey, F. H.
Green, W. A.
Jones, D. T.
Jones, M. L.
Macaulay, E. M.
Pearson, L. M.
Prehn, F. C.
Reist, P. Z.
Schlegel, H. T.
Smith, Joseph F.
Smith, S. M. B.
Stevens, G. H.
Thielke, G. A.
Trumbo, J. K.
Wahl, H. S.
Wilson, Otis M.
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Wausaukee:
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A. M. A. SCIENTIFIC EXHIBIT

Application blanks are now available for space in the Scientific Exhibit at the Atlantic City Session of the American Medical Association, June 10–14, 1935. The Committee on Scientific Exhibit requires that all applicants fill out the regular application form and requests that this be done as early as convenient. Applications close February 25, 1935.

Persons desiring application blanks should address a request to the Director, Scientific Exhibit, American Medical Association, 535 North Dearborn Street, Chicago, Illinois.

GOITER RESEARCH AWARD

The American Association for the Study of Goiter again offers the Van Meter Prize Award of $300 and two honorable mentions for the best essays on the subject of goiter provided they meet the standards of the award committee. The essays should be based on original research work on the subject of goiter, preferably its basic cause.

Competing manuscripts should be in the hands of the Corresponding Secretary, W. Blair Mosser, M. D., Kane, Pa., not later than April 1st, 1935.

Report of Delegates to American Medical Association, 1934

By W. E. BANNEN, M. D.
La Crosse

THE meeting of the American Medical Association in annual session at Cleveland June 11–15, was one of the most fully attended sessions ever held in this country. The attendance has been exceeded at only three previous meetings, and these were held in larger cities. The total attendance was 6,293. The attendance from Wisconsin was 95; Ohio 2,122; Illinois 433; Michigan 378; and New York 591. The meeting was well cared for as to space. Sections were well cared for, both in rooms for the meetings, and the scientific exhibits. Exhibits were well arranged, and of the usual high standard.

The meeting of the House of Delegates was well attended, and the delegates from Wisconsin were present at all meetings of the House of Delegates. Dr. Gurney Taylor acting as Chairman of the Reference Committee on Reports of Officers. Dr. Joseph Smith served on the Committee of Legislation and Public Relations. The resolutions and business transacted that created the most intense interest, of course, were those concerning the reports of the Economics Committee, and the resolutions introduced in regard to the economic phases of medical practice. The House of Delegates completed its work with sufficient dispatch to enable the delegates to attend the scientific sections, and the public attended the general scientific meetings, as well as members of the medical profession.

Scientific exhibits exceeded in size and scope previous exhibits, were beautifully arranged, and rich in the material exhibited. I think none of the exhibits I have attended were so well arranged, so well illuminated, had so much color, and were of greater general interest.

Technical exhibits were well arranged and the exhibitors expressed themselves as well pleased with the arrangements made for them, and the attendance and interest shown by the physicians.

The physicians of Cleveland and Ohio extended the best of fellowship, and gave cordial welcome to the members of the American Medical Association, although one frequently heard comments and expression of a hope, that Wisconsin and Milwaukee would again soon be the site selected for the American Medical Association session.

Reapportionment of delegates on the basis of one delegate to each 800 members, or fraction thereof, the by-laws specifically provides for a membership in the House of Delegates, not to exceed 175. On the apportionment of one delegate for each 750 members, the membership of 98,041 would give 177 delegates. Therefor, the apportionment was made one delegate to each 775 members, making the membership of the House 172. By this Wisconsin still retains three delegates.

Election of officers was held on Thursday. Dr. James S. McLester of Birmingham, Alabama, and Dr. Hugh S. Cumming of Washington, D. C., were nominated. Of the votes cast Dr. McLester was elected by a majority of 14. The delegates from Ohio followed the precedent established by Wisconsin at Milwaukee, by submitting for Vice-President a name not from their own state. Dr. Reinle of Oakland, California, was nominated by Dr. McClelland of Ohio, and seconded by Dr. Toland of California. Dr. Reinle was elected. Dr. Roger I. Lee of Boston was elected as Trustee to succeed Dr. D. Chester Brown. The House selected Atlantic City for the 1935 session of the American Medical Association.

It was recommended that members of the State Society read carefully the reports of proceedings of the Cleveland Session in the Journal of June 23 and June 30, in which resolutions introduced and discussed are given in detail. The address before the House of Delegates by the President, Dr. Dean Lewis, was largely a discussion of the present economic condition, and its relation to the practice of medicine. He suggested that we should be concerned today with the quality of medical care; that cheap medicine is expensive, and what is often called expensive medicine is really the cheapest. He suggests, because so many men do not attend medical meetings, that the State Societies and County Societies make a greater effort to have postgraduate work brought to the physicians who are unable to do postgraduate work, or those who cannot, or do not, attend medical meetings. He emphasized to preserve the idea that medicine is a profession, not a business, if we are to maintain quality. He discussed the subject of expert testimony and its effect on the profession in general, and advised a reference board to give opinions that would be taken by the Courts in place of the present system of expert testimony.

President-elect, Dr. Walter L. Bierring, discussed the work of the Council on Medical Education, and hopes with the standardization and limitation, that more physicians will not be graduated than society can adequately support. Secondly, he discussed the changing order of medical practice, and the artificial plans, that are proposed to solve these problems. He lauded the work of the Bureau of Medical Economics under the direction of Dr. Leland, and the work they have been doing in collecting data, studying plans, and applying sound economic philosophy in testing these plans. He deplored the discontent springing up in the ranks of organized medicine, that destroys the faith in leadership, when so much is being done for the men in general practice. He reiterated the

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appeal from two Presidents of State Societies, whom he had recently heard saying, "Stand by the American Medical Association, and all will be well."

Both of the addresses were well received, as every member of the House of Delegates was aware that problems of economics were uppermost in the minds of most of the delegates present. It was thought best to have the meeting dealing with economics an executive session, this chiefly due to the report published in the Journal of the Michigan State Medical Society, May 1934, entitled "Mutual Health Service," and the official proceedings of the House of Delegates, State of Michigan, at a special meeting April 12, 1934. This was a rather exhaustive report, about the study made in Michigan, and a plan that was adopted that would be a guide towards a solution of the problems of medical economics. It was expected this would receive a pretty general discussion, but during the executive session the Michigan Plan was practically ignored, and the plans brought in by the Bureau of Economics were adopted. Free discussion was asked and there was considerable discussion, most of it constructive.

One frequently hears the query, "Why cannot the American Medical Association, as the head of organized medicine, propose some definite scheme by which to solve the economic problems in medicine? The very problem presented must be solved by the states under which medical practice acts are carried out, and often this is put up for solution to the county societies. However, let me state a brief history of what has been done along this line by the American Medical Association since 1912 when the British Government instituted Compulsory Health Insurance. This problem has been carefully studied by the American Medical Association, data collected, and various plans carefully analyzed by the Bureau of Economics and special committees appointed in 1916 by the Board of Trustees brought in a report of their investigation on the final action that must be passed through the House of Delegates of the American Medical Association. At this time no form of social insurance, as then existing, was approved by the House of Delegates.

In 1920 the House of Delegates passed a resolution strongly condemning all forms of public health insurance and this was after careful study. In 1921 the American Medical Association, through its House of Delegates, adopted a resolution approving and indorsing therein the prevention of disease, but opposed to State Medicine, excepting cases of delinquents and defectives. In 1922 the American Medical Association, through the House of Delegates, declared opposition to all forms of State Medicine because of culminating harm which becomes possible through such forms of medical care.

The Judicial Council repeatedly brought in resolutions sustaining this point of view. Of these the House of Delegates has accepted and unanimously approved in 1933 at the American Medical Association meeting in Milwaukee the minority report on the Cost of Medical Care. They have presented a critical survey and analysis of sickness insurance, and broadcast this to the medical profession through the bulletins of the American Medical Association in April, 1934, and again in May, 1934, and at the session just passed the House of Delegates, recorded itself in favor of the following set of principles to guide the medical profession in the State and County Associations in meeting the problems of Medical Service throughout the United States. It is believed that by adhering to these ten principles, that the ethics, and the principles advocated by the medical profession will be safeguarded, and that if various forms of socialized medicine and various forms of health insurance are adopted, if adopted in conformity with these principles, the welfare of the public and the physician will be conserved. These ten principles are as follows:

First: All features of medical service in any method of medical practice should be under the control of the medical profession. No other body or individual is legally or educationally equipped to exercise such control.

Second: No third party must be permitted to come between the patient and his physician in any medical relation. All responsibilty for the character of medical service must be borne by the profession.

Third: Patients must have absolute freedom to choose a legally qualified Doctor of Medicine who will serve them from among all those qualified to practice and who are willing to give service.

Fourth: The method of giving the service must retain a permanent, confidential relation between the patient and a "family physician." This relation must be the fundamental and dominating feature of any system.

Fifth: All medical phases of all institutions involved in the medical service should be under professional control, it being understood that hospital service and medical service should be considered separately. These institutions are but expansions of the equipment of the physician. He is the only one whom the laws of all nations recognize as competent to use them in the delivery of service. The medical profession alone can determine the adequacy and character of such institutions. Their value depends on their operation according to medical standards.

Sixth: However the cost of medical service may be distributed, the immediate cost should be borne by the patient, if able to pay, at the time the service is rendered.

Seventh: Medical service must have no connection with any cash benefits.

Eighth: Any form of medical service should include within its scope all qualified physicians of the locality covered by its operation who wish to give service under the conditions established.

Ninth: Systems for the relief of low income classes should be limited strictly to those below the "comfort level" standard of incomes.

Tenth: There should be no restrictions by non-medical groups on treatment or prescribing unless formulated and enforced by the organized medical profession.

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it difficult to keep up with the literature in those medical fields with which he is especially concerned, the book should prove of value in giving an interesting bird's eye view of advances in other fields. For the layman who desires some idea of recent advances in therapy it should likewise prove of interest. The layman, however, lacking the critical judgment of the experienced clinician should remember that what at first appear to be advances in treatment frequently ultimately are disappointing, especially in the form first advocated. Medicine advances through trial and error and basing final acceptance on prolonged experience.—C. R. B.

Tuberculosis in the Child and the Adult. By Francis M. Pottenger, A. M., M. D., clinical professor of medicine (Department of Chest) University of Southern California, the School of Medicine; Medical Director, the Pottenger Sanatorium and Clinic for Diseases of the Chest, Monrovia, California. Price $8.50. C. V. Mosby Co., 3523—25 Pine Blvd., St. Louis, Missouri.

This book has much to commend it. The author has produced a compact volume of the important facts about tuberculosis, old and recent, which will prove engaging to both students and practitioners. The sequence of the subject matter is excellent, beginning with a short resume of past accomplishments in this field. Infection, response to infection, allergy and immunity, primary or childhood tuberculosis, adult tuberculosis, methods of diagnosis, complications, and treatment are developed in the order named.

Especially interesting is the author's discussion of the Visceral Neurology of Pulmonary Tuberculosis, the use of tuberculin as an adjunct in treatment, and the dilution-flotation-picric acid method of examination for the tubercle bacillus. This method makes possible discovery when bacilli are present in numbers as low as 1,000 in the 24 hour total expectoration, thus being as accurate as guinea pig inoculation with the advantage that it may be done in two hours.

The necessity of considering the immuno-biologic reaction as it concerns symptomatology, physical examination, x-ray, tuberculin test, sputum examination, and treatment in each individual case is well emphasized.

The healthy conservatism expressed relative to treatment before compression therapy is considered is timely.

A review does not permit mention of many interesting topics discussed, the limitations of the x-ray in childhood tuberculosis, and the frequency of occurrence of tubercle bacilli in fistula in ano as found by the dilution-flotation-picric methods are given as examples. All students of tuberculosis should find this book of interest and value.—R. H. S.

The Management of Fractures, Dislocations, and Sprains. By John A. Key, B. S. M. D., clinical professor of orthopedic surgery, Washington University School of Medicine, and H. Earle Conwell, M. D. orthopedic surgeon for the Tennessee Coal, Iron and Railroad Co., Birmingham, Ala. Price $15.00. C. V. Mosby Co., 3523 Pine Blvd., St. Louis, Mo.

There are already on the market many good books on the subject of fractures and dislocations with which this new book will have to compete, but because of the experience of the authors, the sound common sense of their opinion, and the complete detail which distinguishes the book, it should have no difficulty in making a respected name for itself.

The book is divided into two parts. Part one concerns itself with principles and general considerations. It will have to be read to be appreciated. The reviewer is in accord with the discussion and such expressed opinions as these, "the frequency with which open operation in simple fractures will be performed will vary inversely with the skill of the surgeon in treating fractures by closed methods" or again "in physiotherapy just as in most other forms of treatment, the therapeutic value of the method is largely dependent upon the skill with which it is administered"—"in a great many instances physiotherapy has been used over periods of many months in futile efforts to restore normal function in joints the mechanics of which have been disorganized as a result of injury."

It is thought that the chapters on the workmen's compensation law and the medicolegal aspect of fracture cases while to the point might profitably be enlarged.

Part two considers diagnosis and treatment of specific injuries. The chapter on fractures of the skull and brain trauma was contributed by the late Dr. Charles Edward Dowman. Dr. J. B. Brown has written the chapter on fractures of the jaws and related bones of the face. In the remaining portion of the book each chapter is introduced by a consideration of the surgical anatomy of the involved area. Manipulative surgical procedures used in reduction are detailed and explicit. Illustrations are numerous and instructive.

The book is well worth reading and would be a valuable addition to any library.—R. E. B.

Surgery of a General Practice. By Arthur E. Hertzler, M. D., Chief Surgeon, Halstead Hospital; professor of surgery, University of Kansas, and Victor E. Chesky, M. D., chief resident surgeon, Halstead Hospital. Price $10.00. C. V. Mosby Co., 3523 Pine Blvd., St. Louis, Mo.

This volume consisting of six hundred pages and over four hundred and fifty illustrations fulfills in every way the intentions of the authors. Its usefulness has been increased many fold by the excellent illustrations. These are of extreme importance because the early stages of malignancy are shown. This will stimulate an earlier and a more efficient treatment on the part of the attending physician because he will recognize the importance of early diagnosis.

The authors in the preface state that malignancy can be treated successfully only when the lesion is

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localized. To wait for metastases to appear spells doom for the patient.

Although we agree with the authors that much of the minor surgery can be done in the office or the home, thereby cutting the cost of medical care, we realize that this practice may become pernicious if carried out by those wholly unprepared to practice any form of surgery. Let us hope that it will stimulate more interest among the members of the profession regarding the importance of early diagnosis and treatment.—J. W. G.

Allergy and Applied Immunology. By Warren T. Vaughan, M. D., Richmond Virginia. 2nd edition. Price $5.00. C. V. Mosby Company, St. Louis, Mo.

The fact that it has been so soon necessary to issue a second edition of this excellent book on "Allergy" is an indication of the growing importance attached by clinicians to the diagnosis and treatment of the various manifestations of human hypersensitivity.

Dr. Vaughan, one of the pioneers and most eminent in his field, has again rendered a real service to the profession and to individuals suffering from atopic conditions in presenting this second edition. The first edition, published in 1931, was notable for its simple, lucid explanation of the phenomena of allergy and for the discussion of its manifestations and the methods of their diagnosis and treatment. The same is true of this enlarged edition in which the subject matter of the first edition has been carefully revised and the recent advances and concepts of sensitivity discussed in greater detail. This edition will be particularly interesting to dermatologists in view of their valuable work in contact dermatitis; also to pediatricians because of their increasing recognition of the importance of allergic study in relation to infant feeding. Obviously pollenosis including hay fever and much bronchial asthma continues to occupy its high position in the field of allergy and the author emphatically stresses the importance of thorough investigation of possible pollen sensitivity in every suspected patient.

There is no better work on allergy, in the opinion of the reviewer, for the general practitioner. The diction is far from technical and the whole subject is handled in a simple and understanding way. The bibliography is exceptionally complete and physicians interested in special phases of sensitivity will appreciate the references. The book is equally valuable for allergic patients who are often desirous of specific information regarding the manifestations of sensitivity which Dr. Vaughn has presented in a sufficiently simple manner to be readily understood by individuals with little or no scientific background.

The suggested "Allergy Questionnaires", specific directions for collecting samples of suspected allergens, directions for keeping food diaries, menus and recipes as set forth in the appendix are of particular help to such patients.

The publishers may be complimented on the fine quality of the paper used and on the clearness of the text, charts and illustrations. W. A. M.

The Sinister Shepherd. A translation of Giralamo Fracastoro's Syphilidis Sive De Morbo Gallico Libri Tres. By William Van Wyck. The Primavera Press, Los Angeles.

While it would seem strange at the present day if scientific papers were presented in verse, Fracastorius had a sound tradition behind him to justify his great medical poem on syphilis. This mode of expression for scientific and philosophical treatises dates back at least to Empedocles, had a brilliant exposition in Lucretius and was the form of the widely disseminated health rules of the school of Salernum. He may also have seen the hexameters of Ulsenius, a more immediate predecessor, upon the same subject that claimed his attention.

Dr. Van Wyck has done a service in presenting a translation of this poem to the medical profession. To most physicians it has been but a poem of unknown content which happened to give a name to the new plague which was ravaging Europe. To a reviewer "fed up" on the heroic couplets of Pope in his youthful days, it seems regrettable that the translator should have chosen that form of verse—yet that is merely personal prejudice. C. H. B.

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FOR SALE—Nelson's loose leaf medical set; Medical Woman's Journal, March 1930 to Sept. 1930 and Dec. 1931; Wisconsin Medical Journal, September 1929, September 1930 to August 1931 and January, 1933; Journal American Medical Association scattered numbers for 1927, 1928, 1930 and 1931; also other medical publications. Address inquiries to Dr. B. E. Reynolds, Lone Rock, Wisconsin. DJF

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All correspondence should be addressed to Kenilworth Sanitarium, Kenilworth, Ill.

UNIVERSITY OF WISCONSIN MEDICAL SCHOOL

Medical Science Course The medical science course covers two years of college work in English, foreign language, physics, chemistry and biology and two years of work in the basal medical sciences, anatomy, histology, neurology, physiology, physiological chemistry, pathology, bacteriology, pharmacology, hygiene and diagnosis. This course leads to the B. S. degree.

Medical Course At least two years of college work, including English, foreign language, physics, chemistry and biology, are required for admission. The course requires at least four years for completion. During the first two of these years the work lies chiefly in the basal medical sciences outlined above. The third year of the course is devoted to didactic and practical instruction in the wards and out-patient department of the Wisconsin General Hospital. The fourth year of the course is devoted to practical instruction under the supervision of preceptors in the Wisconsin General Hospital and in affiliated institutions.

Courses in nursing are offered in the School of Nursing affiliated with the medical school. A residential course of 27 months is offered in the Wisconsin General Hospital to those who have completed a year of specified work in the College of Letters and Science. This course leads to a certificate of graduate nurse. A residential course of 27 months is offered to those who have completed three years of college work in specified subjects either in the College of Letters and Science or in the Department of Home Economics. These courses lead to a certificate of graduate nurse and to a B. S. degree.

Opportunity is offered for graduate work in the preclinical and the clinical medical sciences and in hygiene and public health. For further information address C. R. Bardeen, Dean, Medical School, Madison, Wis.

MARQUETTE SCHOOL OF MEDICINE

Requirements for Admission A minimum of sixty-four semester hours and sixty-four quality points of such college work as would be acceptable to an approved college of liberal arts or a recognized university towards the Bachelor's degree, and must include the following subjects: biology, general chemistry, organic chemistry, English, French or German, physics, other non-science courses.

Instruction The duration of the course leading to the degree of Doctor of Medicine is five years, the fifth year being devoted to hospital internship. The school year begins about the first of October and ends in the early part of June. The aim is constant coordination of the basic sciences with the clinical subjects. In other words, intradepartmental and interdepartmental correlation are emphasized throughout.

Clinical Facilities Milwaukee County General Hospital, Milwaukee County Emergency Hospital and Dispensary, Milwaukee Children's Hospital and Dispensary, Milwaukee County Insane Hospitals, Acute and chronic, St. Joseph's Hospital, South View Hospital for Contagious Diseases, Misericordia Hospital, Muirdale Sanatorium for tuberculosis, Mt. Sinai Hospital Dispensary, Marquette Eye Clinic, Marquette Eye, Ear, Nose and Throat Hospital, Public Health field work.

For further information address:

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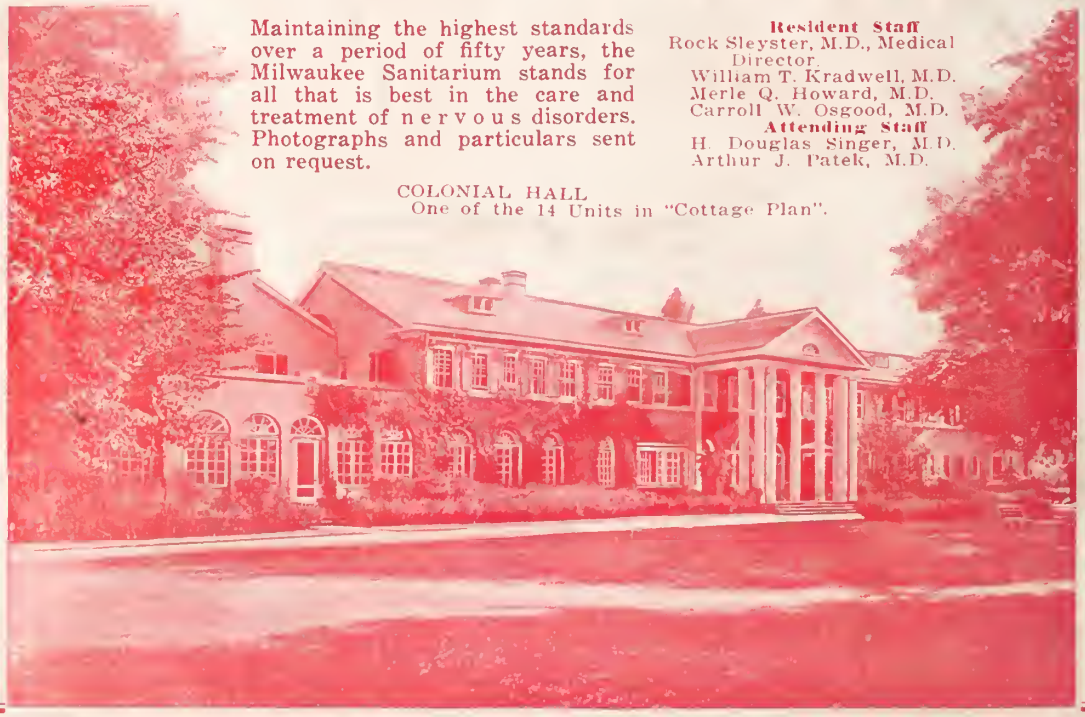

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